

COLOUR 85

CRANFIELD INSTITUTE OF TECHNOLOGY

SCHOOL OF MANAGEMENT

THESIS SUBMITTED FOR PhD in 1981 by JACQUELINE DRAKE

MANAGEMENT DEVELOPMENT: PERCEPTIONS OF CHANGE AND
PROBLEMS OF TRANSFER

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1st September 1981

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ABSTRACT

Transfer of training, the concern of this thesis, is investigated in the context of a joint-venture in management development carried out by the Cranfield School of Management and Cable and Wireless Limited.

Previous work in the field of transfer - theoretical, experimental and empirical - is reviewed and relevant aspects incorporated into the study. The development of the joint-venture itself is explored in three contexts: business, educational and career.

The field study was conducted with the dual objectives of hypothesis testing and hypothesis generation. 181 C & W managers participated in the general management programmes specially-prepared for them at Cranfield. Subsequently a questionnaire was sent to each of them at their place of work to elicit their perceptions of the programmes; the influence of the organisational climate on their transfer efforts; and their transfer performance as it related to specific tasks and to their own end-of-programme resolutions.

Findings suggest that, although the nature of the learning experience and the organisational climate are undoubtedly important determinants of the successful transfer of training, the influence of both are modified substantially by the type of manager. Perceptions are found to vary consistently with type of manager; "type" being defined by programme attended (a surrogate for "level"); Company categorisation of managers; work preferences, as identified by the Myers Briggs Type Indicator; age; professional background; and length of service with the Company.

A model for the transfer of training is proposed, together with a number of practical recommendations for both parties to the joint-venture aimed at enhancing future management development activities.

Availability of this thesis is at the discretion of the Steering Committee of the joint-venture.

ACKNOWLEDGEMENTS

I wish to thank Cable and Wireless Ltd for their co-operation in the production of this thesis; the Cranfield Institute of Technology for a bursary in the academic years 1977 - 1980; the staff of the CIT Computing Centre, the School of Management Library and the MODRC for their patience and support; and my supervisor, Professor C J Margerison, for his guidance and encouragement.

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PREFACE

The concern of this thesis is the transfer of training, a problem that has been highlighted in recent years by the comparatively poor performance of British industry. The thesis does not go into the multitude of factors that may or may not have contributed to that performance. Rather it focusses, by means of a case study, on the detail of transfer.

Management development, in an academic context, is a comparatively new phenomenon in the United Kingdom. Whereas the first business school in the U.S.A. (the Wharton School of Finance and Commerce) opened its doors in Philadelphia in 1881, Britain's first business schools - Manchester and London - took their first students in 1965. Since then management schools and centres have proliferated throughout the country and, together with in-house training, have transformed British management development.

Despite this tremendous expansion there is little firm evidence of the degree of effectiveness of the training provided. Hence, the purpose of this thesis is to explore the effectiveness of one management development programme. The joint-venture between the Management School at Cranfield's Institute of Technology and Cable and Wireless Limited is probably the largest venture of its type ever undertaken in this country. During the first three years 181 managers were released by the Company to attend general management courses lasting either two or five weeks at the Management School. Although the bulk of these managers came from the middle management range, senior managers also took part. As Cable and Wireless is a major international company, managers have been of various types; from Head Office in London, National staff and expatriates working overseas.

Given the size of the venture, the number of managers involved together with the generous co-operation of the Company, there

has been a unique opportunity to analyse the transfer of training in depth.

The thesis is arranged as follows:

Chapter 1 examines the experimental and theoretical work relevant to the transfer of training - of which there is a great deal - and describes the main field studies - of which there are surprisingly few.

Chapter 2 looks at the joint-venture within three contexts: the business context (the changing role of Cable and Wireless in an industry which has one of the most rapidly changing technologies in the world, their need for training to meet not simply the technical aspects but also the organisational challenges); the educational context (the curriculum design, the teaching style and, most importantly, the tailoring of the courses to the specific needs of Cable and Wireless); and the career context (the development of a "Cable and Wireless man", typical career paths in the past and the managers current expectations).

Chapter 3 reviews the methodology of the study. Great emphasis has been placed upon quantitative measures and, because of the problems of dealing with essentially qualitative material, the complexity of these has been considerable.

Chapter 4, 5, 6 and 7 are devoted to an account of the findings that have emerged from testing four null hypotheses: namely that,

1. Participant managers are not significantly different from one another.
2. No manager is significantly more satisfied with his learning experience than any other manager.

3. There is no significant difference between managers' perceptions of aspects of the organisational climate in helping or hindering them to transfer what they have learnt.

4. There is no significant difference in the transfer performance between participant managers.

Finally, in the concluding chapter, the implications of this study for the future conduct of management development programmes is examined.

The data collection for this thesis ended in the summer of 1980. Since then, considerable changes have occurred in the fortunes of the Company, most notably the decision of the British Government to denationalize it. Obviously had managers been aware of this at the time the study was conducted, their views on a number of issues might well have been different. Too much should not be made of this, it is an important contextual factor but it does not effect the main issues of the transfer of training to which this thesis is directed.

CHAPTER 1

THE TRANSFER OF TRAINING: A REVIEW OF THE LITERATURE

The Problem Stated

There are two vital questions facing both management educators and the organisations sponsoring formal management education. These are:

1. To what extent do managers apply what they have learnt in the classroom to the jobs they subsequently do?
2. What are the important factors affecting this process of transfer?

The questions are significant because although improved managerial performance is the outcome hoped for by those investing in management training (Hesseling 1966, Hamblin 1974), it is not always forthcoming (Stiefel 1974).

So important are these questions that one must begin by asking why they have not already been answered. It cannot be denied that many studies have been carried out which bear on them. None, however, are wholly satisfactory.

These studies can be categorised into three types. The first type embraces all evaluation studies of training programmes; their approach has essentially been twofold. Many have relied heavily on examination results (1). Such formal tests are irrelevant to the transfer of training in management education since one is concerned with whether or not a manager performs differently on the job rather than whether or not he can pass exams. Other evaluation studies have adopted a cost-benefit analysis approach (2). Here the important variables have been the costs of training, the costs of unemployment and, most important of all, the post-programme earnings of trainees. Again such studies are irrelevant to problems of transfer in the managerial field since the incomes of managers participating

in the programmes are not likely to be directly affected by their participation. A feature common to both these approaches is that the researchers are not directly concerned with the process of transfer, but only with the inputs and the outputs of the training programme; a classic case of the "black box" paradigm.

The second of the three types of study evinces great interest in the transfer process itself. Most of these studies have been carried out by educationalists and psychologists. They have a long pedigree stretching back over a hundred years. However, they too are not directly relevant to the transfer of training amongst managers for their interest tends to be in transfer from one learning situation to another learning situation rather than from a learning situation to a doing situation. Indicative of this is that they tend to use the terms "transfer of training" and "transfer of learning" interchangeably.

The final type of study - of which five examples will be considered here - certainly focusses on the manager (3). Rather surprisingly, however, these empirical studies draw hardly at all upon the theoretical insight produced by the work of the educationalists and psychologists referred to above: surprisingly, as the underlying principles are common to both. Although the present study cannot claim to have totally integrated these last two approaches, nevertheless an attempt has been made to draw together the important findings of both.

The work of the evaluation researchers will not be pursued further partly because, as indicated above, they tend to ignore the very process in which this study is interested and partly because their examination-based approach confines its subjects to college students, none of whom hold jobs and most of whom never have done; whilst the cost-benefit approach has tended to focus on retraining programmes con-

ducted by U.S. government agencies for the unemployed, under-employed or disadvantaged. Such studies shed little light on the value of management development programmes attended by middle and senior business executives. Nor do they provide useful methodological strategies for replication or comparison.

This chapter, therefore, will focus on the characteristics of the transfer process as revealed by educationalists and psychologists on the one hand and by management scientists on the other.

Part I: The Nature of Transfer - the work of educationalists and psychologists

In 1937 Barlow conducted the first carefully controlled experimental studies on transfer. He defined transfer as "the learning influence of one training activity on a different activity" and hypothesised it to be "a major factor of learning". It is a definition with which this researcher has no quarrel but, rather than see it as a component of learning, she would see it as the reason for learning.

Barlow reported a relatively high level of transfer in all those experiments in which training was devoted to process rather than to content. He held that if specific instruction had been given on "abstracting, analysing and generalising" then transfer would follow regardless of whether the final test was entirely different or very similar to the learning experience. He concluded that successful transfer depended on a number of factors. These were: an ability to define problems clearly and to analyse and compare them carefully; a recognition of the general in the specific and the specific in the general; an understanding of the learning process and a deliberate effort on behalf of the teacher to apply learning methods. Transfer then, was a responsibility to be shared by the teacher and the taught.

A good deal of emphasis is put on these very issues in most post-experience management education programmes. Participants are being taught to transfer in most of the teaching sessions (or learning sessions as Barlow would have preferred them to be called!) regardless of the subject matter being discussed. This is illustrated by the interactive use of the case-study method of teaching and by process-oriented activities such as problem-definition, collaborative decision-making, the public voicing of opinions and inter-personal counselling.

Barlow's investigations marked a watershed in the research into the transfer of training. Before him had gone educationalists like Thorndike, Judd and their contemporaries whose activities had disrupted completely the established school curriculum. After him were to come the behaviouralist psychologists who, dominated by Osgood, integrated transfer into their stimulus - response formulae.

Barlow's predecessors had established important theoretical explanations for transfer. The two most fundamental were the theory of identical elements and the theory of generalisation.

The Theory of Identical Elements

This theory was developed at the turn of the century by Woodward and Thorndike. It challenged the established view that the mental rigours of a classical education and the committing to memory of facts led to a general improvement in the capacity of the mind. It was generally assumed at the time that improvement in one area would lead to substantial improvement in other areas (4). For example, the study of mathematics was believed to lead to successful decision-making (Wormell, 1899, p.78) and the study of Latin was seen as "a means of training the faculties of perception and generalisation" (Morgan, 1894, p.186).

This conventional wisdom was challenged by Woodward and Thorndike's assertion that change brought about by learning in one area, only brought about change in another area, in so far as the two areas had something in common. So, learning Latin helped one spell words which had a Latin root in English or other languages but it could claim nothing more in the way of transfer. In their own words (1901) "that spread of practice (i.e. transfer) occurs only where identical elements are concerned in the influencing and influenced functions".

This theory of identical elements has stood the test of time and Stiefel (1974) applies it to the dilemma faced by the newly-trained manager on his return to work. He maintains that the transfer of new knowledge only occurs "when there is a perceived and actual similarity between the seminar situations and the job to which the participants return".

The identical elements were subsequently divided by Thorndike into identities of substance and identities of procedure. Over half a century later, in the parlance of the 1980s these would be called content and process. In the field of management training they would relate to what to do and how to do it. Bagley (1920) discovered a third identity - that of ideal or aim - which relates largely to shared values and a common belief system. This explains perhaps why Trade Unions will not use business schools for the training of their executives but instead set up their own centres. Implicit in the theory of identical - or shared - elements is that the greater the number of common elements, the greater will be the transfer effect (Sandiford, 1928).

The theory of identical elements inspired a generation of academics to investigate a wide range of situations in which a broad transfer of training had traditionally been

believed to take place. The study of Latin was an obvious target but arithmetic, geometry, science and neatness were also examined for their transfer properties (5). So too, were memory, motor skills and visual perception (6).

The outcome of these many experiments was summarised by Sandiford (1928). He drew three conclusions. First, that the transfer effect of training could be positive, zero or negative, but that it was usually positive. Second, that if positive transfer was considerable then the training materials and testing materials had many common elements. Third, that there was "little ground for the belief that the intellect secures an all-round training from the specific training of any part of it."

The Importance of the Individual in Recognising the Identical Elements

The development of intelligence tests in the 1920s allowed Thorndike to renew his investigations into the transfer of training. He used vast numbers of school children for two complete academic years of study. In 1922-3, some 8,564 school children participated and in 1925-6 an additional 5,000 were used. His conclusion (1927) was that transfer gains from specific subjects, although they varied somewhat, were only small and played a far less important role than the natural intelligence of the individual. The bright children made greater gains than the dull, regardless of the subjects taught. Identical conclusions were drawn by Barlow (1937) and by recent research into comprehensive education in the U.K. (7). Together they suggest that the individual learner may be a more important variable for the successful transfer of training than the nature of what is being taught, both in terms of content and process.

The Theory of Generalisation

The first theory of transfer, that of identical elements,

was well established by 1927 when the second theory was formulated by Judd. This is the theory of generalisation of experience. Judd maintained that "trained intelligence is particular in its content but general in its method". This, he explained, is peculiar to the human race in that the power to generalise is linked very closely to the ability to think in a language. "Words" said Judd "are records of generalisation" and points out that by using words to think through problems one is able to generalise from one situation to another. Management training should then be trying to provide a new language in which managers can identify and think through their problems.

Like Thorndike, Judd thought that the method by which one was taught was more important than what one was taught. "There is no guaranty (sic) in its content that any subject will give general training to the mind. The type of training which pupils receive is determined by the methods of presentation and the degree to which self-activity is induced rather than by content." He asserted that "any subject taught with a view to training pupils in methods of generalisation is highly useful as a source of mental training and that any subject which emphasises particular items of knowledge and does not stimulate generalisation is educationally barren." This rather suggests that the presentation skills of the lecturer are all important. These include his or her ability to encourage the participants not only to ask the questions but also to answer them. It militates against bringing in subject specialists who do not have these skills.

Judd firmly believed that the transfer of training could not take place without generalisation for, he explained, "it is the very nature of generalisation and abstraction that they extend beyond the particular experiences in which they originate".

At first there appears to be conflict between the two theories. One relies on recognising what is exactly the same, the other on extending into the unknown. Their reconciliation as Sandiford (1928) pointed out, results from generalisation only being possible through the identical elements of language. Specific language habits, engendered by the training process, permit links to be made between different situations and so generalisation can be made. The medium, as McLuhan (1967) so vividly showed, is the message. And clever people, as Thorndike found, will make the most effective use of a training experience- especially when it provides them with a short cut to new insights. The managers who are able to manipulate the new language will make the vital connections between theory and practice, between learning and action. So, from Judd's point of view, the transfer of training depended upon the understanding of principles and concepts which were applicable to situations other than those in which they were learned. The suggestion, once again, is that the type of manager may be more important than the content of the training programme that he attends.

The Rhythm of Education

Whitehead, in his important Essays (1932), drew attention to the rhythm of education (p. 47), a concept particularly relevant to the transfer of training. He claims two essentials of education; these are freedom and discipline. Mutually contradictory, they tend not to co-exist but one grows out of the other so that freedom is followed by discipline which in turn is followed by freedom. This cyclical process is apparent in both the long-term development of an individual's life, and in more short-term learning events however long they last and no matter whether they are academic or emotional. Each of the three periods is essential for successful learning. First there is a period of freedom or "romanticism" when interest is excited by early exploration and the enthusiasm engendered to sustain the learner's motivation through the next stage. The second stage is the

period of discipline or "precision" in which the detailed understanding of a subject has to be mastered. Once done, the individual progresses into a third stage: one of freedom or "generalisation" in which he may apply his knowledge to new and different situations. This, in effect, is the essence of "transfer" and whilst the three stages grow out of one another, they can, and should, be guided and nurtured. Formal management training is central to the whole process, falling into the tough second stage of disciplined hard work. The freedom to apply what he has learnt occurs on a manager's return to work.

Forty years on, Revans (1971) presented a similar interpretation of creativity (p. 100) and of learning (p. 145). He further divided Whitehead's first stage to give him a total of four stages: those of magic, imagination, empiricism and design. He applied them to the life time development of an individual, the history of western society and the methods of learning as is shown in Figure 1.1.

Stage	Man	Western Society	Learning
1. Magic	Childhood	the heroic age to the dark ages	inspiration
2. Imagination	Adolescence	the religious age	analogy & authority
3. Empiricism	Maturity	the empirical age	practice
4. Design	Wisdom	the scientific age	insight & systems thinking

Figure 1.1: Revan's four stages of development

Revans explained how managers, being action-oriented, were principally concerned with (α) establishing what should be done, (β) working out how to do it, and (γ) adapting themselves to the new situation so brought about. The three concerns are typified by his three systems, α (alpha), β (beta), and γ (gamma). System β incorporates the complete learning cycle. It starts with a recognition of the need to learn (magic), followed by the research for new knowledge (analogy). Once absorbed, the new knowledge is tested through practical action (empiricism) which is critically evaluated, fed back and consolidated within the memory (scientific method). Both Whitehead and Revans see the ultimate stage of the learning cycle as the generalisation of what has been learnt to other situations. Both recognise that before this can be done some sort of input must be made. For Whitehead it is ideas (p. 18) and principles (p. 42); for Revans it is practical experience (p. 194) and opportunities for action (Revans 1980).

An Experimental Example of the Transfer Process

Perhaps one of the most colourful experiments to test the relationship between knowledge of a principle and practical behaviour in a situation to which the principle applies was also one of the earliest. In 1908 Scholckow & Judd conducted a study in which a group of equally bright schoolboys attempted to hit an underwater target with a dart. The target was placed first at a depth of 12" when the boys were equally unsuccessful and then at a depth of 4" when the boys who had been taught the theory of refraction were significantly more successful than were those who had not. The results led Judd towards his theory of transfer by generalisation. In 1941 Hendrickson and Schroeder replicated the study as far as they were able. They used an airgun and a target placed at a depth of 6" and 2" with two matched experimental groups and a matched control group. One experimental group had been given sight of a written explanation of the theory of refraction, the

other group received extra verbal explanation. The control group, of course, had no explanation at all. Although there were individual differences within groups, the experimental groups, possessing theoretical knowledge, performed better at the practical task than the control group, confirming Scholckow & Judd's (1908) findings that a knowledge of theory facilitates transfer. In addition, the recipients of the extra tuition were the best performers. The implications of this finding for management education are firstly that teachers should adapt theoretical information to the practical needs of the students and secondly that opportunities for asking questions and discussing issues should be built into the teaching style. The assumption that because something is written down it will be understood and applied is clearly ill-founded.

The Transfer of Training as a Function of the Stimulus-Response Relationship

Throughout the 1930s and 1940s, research was undertaken by the "connectionists" on the transfer process as a function of the stimulus-response (S-R) relationship which they believed under-pinned all behaviour. For managers, a problem would provide the stimulus and his solution, the response. The particular solution he chose would depend on the success he had previously enjoyed in using that solution. Successful use would reinforce his decision to choose it again. Repetitive use would associate certain responses with particular stimuli. The great danger with this syndrome lies in the inflexibility that would inevitably develop. The S-R mechanism does not explain how a manager recognises stimuli nor does it explain his choice and use of a response for the first time.

Osgood's Transfer and Retroaction Surface

Transfer, explained by S-R, relies heavily on the concept of identical elements and the associations built up amongst various combinations of those elements. By holding them to be the key to learning, the researchers created for themselves a paradoxical argument. A number of them (8) had proved theoretically that "the greater the similarity, the greater the interference" to learning (9). Yet perfect similarity was known to be the ideal condition for successful transfer and effective learning. In an attempt to explain this contradiction, Osgood reviewed all the empirical work on the variation of stimulus, on the variation of response and on their simultaneous variation (10). His "transfer and retroaction surface" (1949) was the outcome. This is a three-dimensional model which links similarity of stimulus, similarity of response and levels of transfer and retroaction (11). It overcame the paradox by incorporating all possible variables into a single model whilst remaining consistent with all known empirical data. The model is shown in Figure 1.2. It illustrates very well the continuous flow from one state into another. It also predicts the likely degree of transfer or retroaction resulting from different combinations of stimulus and response.

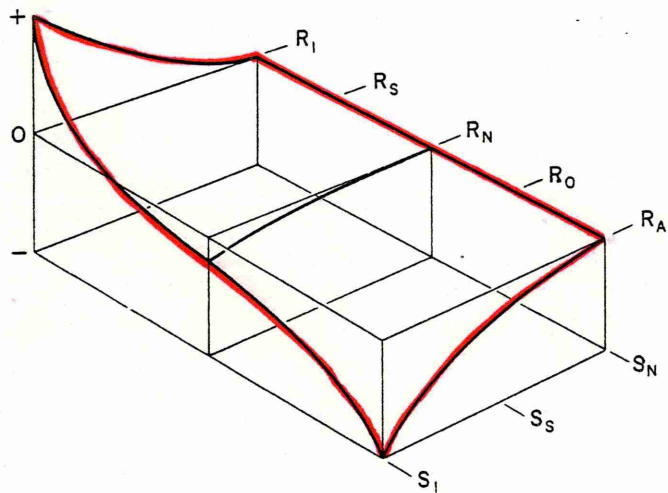
There are three levels of stimulus (identical, similar and neutral) and five levels of response (identical, similar, neutral, opposed and antagonistic). They are plotted against one another on a horizontal grid. The levels of transfer and retroaction are set vertically, at 90° to this grid; positive transfer (learning) and retroactive facilitation (remembering) rising above the grid, negative transfer (mistakes) and retroactive interference (forgetting) plunging below the grid. The "surface" is rather like a blanket pegged down at two corners, stretched up to the top of a mast at the third corner and stretched down

to the bottom of a shaft at the fourth.

Positive transfer
& retroactive
facilitation

Neutral transfer

Negative transfer
& retroactive
interference



R_I = Response Identitical
 R_S = Response Similar
 R_N = Response Neutral
 R_O = Response Opposed
 R_A = Response Antagonistic

S_I = Stimulus Identitical
 S_S = Stimulus Similar
 S_N = Stimulus Neutral

Figure 1.2 : The Osgood Transfer and Retroaction Surface

There are three steps to using the model:

- STEP 1: identify the appropriate levels of stimulus and response;
- STEP 2: locate their intersection on the horizontal grid;
- STEP 3: extend a vertical line to touch the surface at its nearest point.

The direction of the line (up or down) will indicate whether the transfer is positive or negative and the length of the line will indicate the strength of the transfer. The model is based on three empirical "laws" to which Osgood claims "there is no exception."

1. First Law: When the stimuli vary from those previously encountered, but the responses are still the same then positive transfer (learning) and retroactive facilitation (remembering) always takes place. The strength of the outcome increases as the stimuli become more and more like those first encountered.

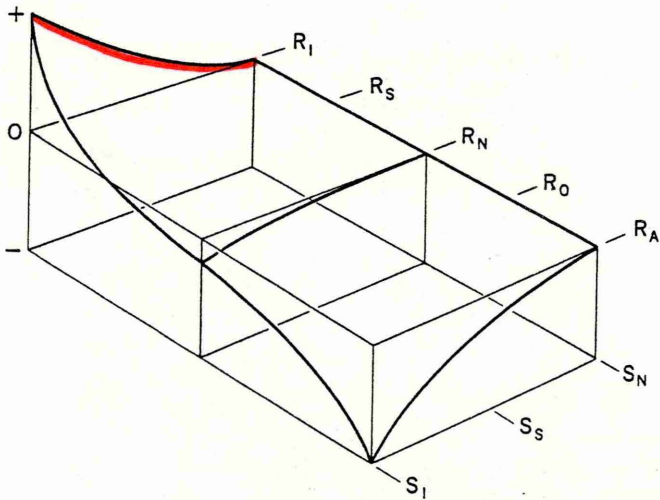


Figure 1.3 : Osgood's First Law

2. Second Law: When the stimuli are the same as those previously encountered but the responses vary, then negative transfer (mistakes) and retroactive facilitation (forgetting) might take place. The likelihood of this diminishes as the responses become more like those first encountered when positive transfer (learning) and retroactive facilitation (remembering) may occur.

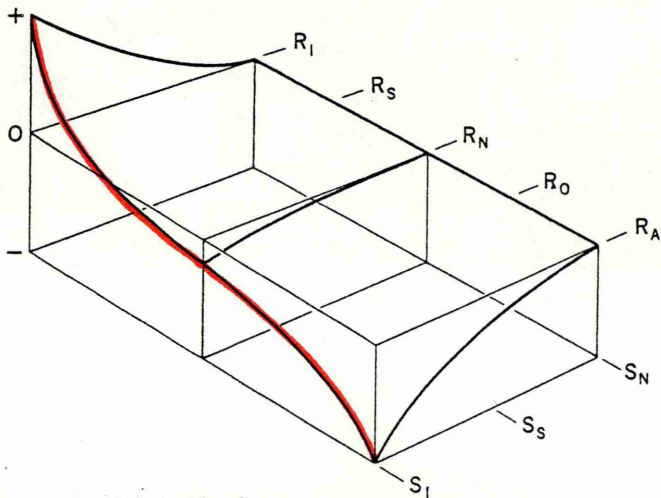


Figure 1.4 : Osgood's Second Law

3. Third Law: When both the stimuli and the responses vary at the same time then negative transfer (mistakes) and retroactive interference (forgetting) always take place. The strength of the outcome increases as the stimuli become more and more like those first encountered.

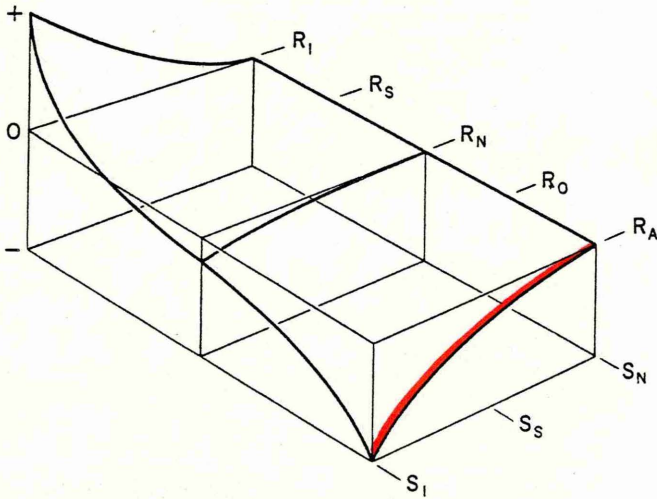


Figure 1.5 : Osgood's Third Law

The Relevance of Osgood's Surface for Management Training

If 'stimulus' is interpreted as the problems arising from a manager's job and 'response' as what he was taught on the training programme, then it is possible to identify the likelihood of positive transfer taking place. For example, a manager might be confronted with a complex scheduling task at work. This is his stimulus and is identical (other than in specific details) to a situation presented on the training programme when the recommended response was to apply a management technique called network analysis. If the manager decided to do exactly this and thereby respond in an identical manner, positive transfer would be at its maximum. If, for some reason he was

unable to do this but did use the general principles then his response would be similar and positive transfer would follow but with less impact. If he deliberately rejected the taught solution, or completely forgot about it then maximum negative transfer would ensue. By continuing to "muddle through" the manager would have wasted the opportunity to link theory and practice and become a more effective manager.

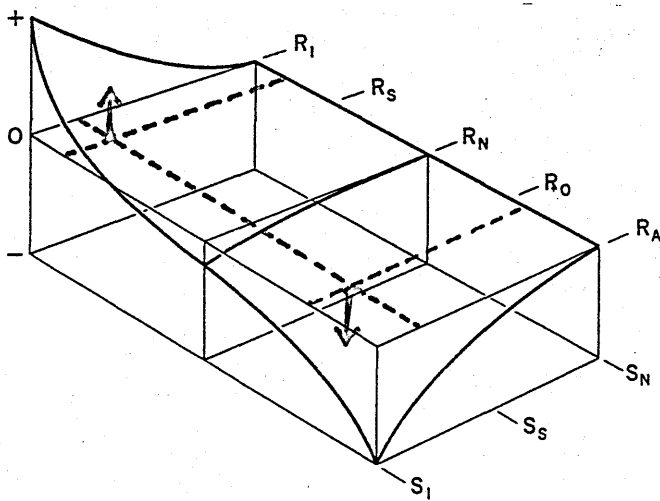


Figure 1.6 : An Example of the Osgood Surface in Action

Another example, based on a less clear-cut stimulus and response situation, is the case of the manager who decided to respond to his domineering boss in an assertive manner rather than with his previous submissive behaviour. The stimulus is similar to that encountered during training although not identical. The manager's response is only similar because he has not yet developed the skill to make it identical. According to Osgood's surface, some positive transfer should result which, by the rules governing S-R conditioning, should provide the manager with sufficient reward to repeat his assertive behaviour and become more skillful at it.

These two examples show how Osgood's surface can be used to measure or predict the level of transfer for both the more objective and subjective types of training.

The Value of Osgood's Surface

Osgood's model shows that the opportunities for greatest success are restricted to those stimuli and responses that are at least similar. The definition of similarity is crucial to the range of possible outcomes. It draws attention to the importance of the relevance of the training undertaken, the wit of the individual manager to make the connection between the elements and the opportunities available to him to change the nature of his response. It is possible to define similarity in terms of generalisation (Gibson, 1940) although Osgood dismisses such arguments as "inherently circular" as he sees generalisation as being simply "a case of positive transfer with functionally identical responses" (1949, p. 14). Whether the time-worn controversy between the two theories of identical elements and generalisation is actually anything other than semantic rivalry between the schools of the behavioural psychologists and the gestalt psychologists is still to be answered. The former view problem-solving in terms of a response set, as already discussed; the latter view it in terms of a perceptual set. That is to say they believe that a perceptual reorganisation of the elements in a situation must be undertaken before appropriate solutions can be considered. The required generalisation of understanding and application leads to a creative use of resources and the optimum solution for complex problems. The gestaltists take a comprehensive overview whilst the behaviouralists tend to reduce activity down to a series of S-R actions. The behaviouralists would argue, as did Osgood (1949, p. 14), that "perceptual reorganisation" is a search for identical elements. Nevertheless, there is little doubt that "a marked positive transfer occurs whenever the learner works on a series

of complex but similar problems" (Stephens 1958). Although the amount of transfer is generally increased by the amount of practice on the training task (Duncan 1953), it seems little affected by the elapse of time between learning and doing (McGeoch & Irion 1952). "Broad transfer effects, such as confidence or general approach, may be retained long after the details of the practised task are forgotten" (Woodward & Schlosberg 1954). Whilst all practice is useful, practice on a total complex task is more effective than practice on component parts of that task (Briggs & Brogden 1954, Kendler & Vineberg 1954). Even so, it is more valuable to concentrate on the key component than to spread the practice equally over them all (Eckstrand & Wickens 1954).

These findings have a recurrent theme. It is practice; the opportunity to practice new skills and cognitions on a variety of related situations both during training and on the return to work. Managers must be given the opportunities and encouraged to use them if their training is to be of any lasting value either to themselves or to their employer.

Since Osgood developed his model a good deal of research has been conducted which confirms its validity (Martin 1965, Shea 1969) and it is generally regarded as providing "a good means of predicting whether one can expect positive or negative transfer and how this will be changed by modifying the tasks." (Travers, 1977, p. 396). However, Ausubel and Robinson (1969) do suggest that Osgood's transfer surface is only a good prediction of transfer when stimuli are easily identified and responses are clearly defined. They feel it cannot be applied to more complex situations where stimulus and response are less important than the thinking process, or "internal verbalizations" that take place.

Language as a Mediator in the Transfer of Training

The relationship between language and thinking is important to management development. It is commonplace to use the phrase "we don't talk the same language" to mean we don't think alike and we can't communicate with one another. How closely related are these two, i.e. thinking in a language and using a language? Are they independent, inter-dependent or does one rely entirely on the other? If language determines thought as Whorf (1941) proposed, then the teaching of a new problem-solving, profit-oriented "language" at business schools could lead to more managerially-effective thinking when participants return to work. Even if language does not actually control but only influences a manager's thinking, it is still extremely important. Cohen (1977) criticised Whorf on two counts: first, for not specifying whether he meant what was thought, or how it was thought or both; second, for not comparing language with other influences such as education, culture and socio-economic status.

Language can be defined in terms of "signals and communications systems" (Cohen 1977) but a definition of thinking is far more difficult. Philosophers indulge in "rich descriptions" while psychologists adopt a much more circumscribed approach, considering only those rational processes that they hope to control in experiments. The latter also attempt to categorise thinking into various alternatives such as convergent and divergent. Neisser (1963), however, regards this as futile, for he believes such alternatives (and the various other 'types' of thinking) probably occur simultaneously in an intricate but ordered process.

Twenty years after Whorf, Piaget (1960) put forward the view that knowledge of a language reflected rather than initiated cognitive growth. He agreed that thinking was helped and developed by language, but pointed out that

the knowledge of words did not automatically bring about an understanding of underlying concepts.

In 1965 Chomsky took the argument one step further. He identified a dual structure in language: a surface structure displaying many variations, and an underlying structure of unchanging universal principles. Chomsky proposed that as thinking took place at the deeper conceptual level it was unaffected by the superficialities of language. This is the very opposite view to that held by Whorf. It is exemplified by the notion that "a rose by any other name would smell as sweet" and would reject the use of management jargon as totally unnecessary.

Whilst examples of using language without thought are not difficult to find, those of thinking without language are not so obvious. However, a number of studies have been conducted using the deaf and dumb, the mentally disturbed, young children, chimpanzees as well as the "restricted code" of the socially-deprived and the dual languages of the bilingual. Cohen (1977) has reviewed all these in the context of the theories discussed above. She concludes that "Language is not a sufficient condition of intellectual success, but the thinker without language is cognitively disabled" (p. 122). She suggests that a language is learnt in response to the specific needs of the individual. It draws attention to the significant differences and similarities in his life and helps him to remember them. In other words it assists in recognising the relevant identical elements and generalising from them. For the manager, a new language may meet his specific needs.

Cohen points out the absence of a particular language and its vocabulary does not mean that appropriate conceptual distinctions cannot be drawn; the problem comes when trying to communicate about them. She identified three major benefits to be accrued through the accomplished use of language.

All three are vital to managers:

1. "Language enables the user to formulate abstract concepts, hypotheses and inferences, rules and general principles at a level of complexity unattainable by the non-linguistic thinker";
2. "Language allows the thinker to rehearse mentally, to direct and maintain his attention, and to manage information in ordered sequences and nested hierarchies";
3. "Language enables us to acquire information from the accumulated experience of other past and present language-users." (pp 122-3)

Davies (1976) identifies language as one of the three major elements in the management learning process. The other two are theoretical models and patterns of behaviour. A manager needs all three to transfer new learning back to his place of work (12). Training programmes usually supply new models but, unless the appropriate language is also provided, the manager is, according to Davies, "inarticulate" as he understands and reacts but is unable to explain to others what he does and why" (p. 283). The manager who has simply picked up the jargon without understanding its implications is aptly labelled as a "line-shooter".

Vygotsky (1962), working with young children, was able to identify a pre-intellectual stage in the development of speech and a pre-linguistic stage in the development of thought. His view was that speech and thought develop independently until the age of two when they merge and "thought becomes verbal and speech rational". At about the age of seven "egocentric" speech is internalised to become the "inner" speech typical of adults. Despite the merging of thought and language, Vygotsky maintained that the two processes were not identical and that they were

still separable in the adult; thoughts cannot always be expressed and language can be used without thinking.

Building on the work of Vygotsky (1962), Stones and Heslop (1968) discovered that those children who were able to explain how they came to the solution of a task problem were the ones most likely to solve the associated transfer problem. To be able to verbalize understanding gives an individual much greater control over the transfer situation. It means that the essential learning has taken place (Overing and Travers 1966, 1967) and that language does provide a mediating mechanism in the transfer process. This is particularly the case in the transfer of concepts and problem-solving principles. In situations of such complexity, Travers (1977) believes that "the Osgood surface has little relevance in predicting whether transfer will or will not occur" (p. 404).

Kendler and Kendler (1962) drew attention yet again to the importance of language as a mediator in their research into reversal and non-reversal shifts. A reversal shift was required of the subject when the researcher changed (i.e. "reversed") the rules. A non-reversal shift was required when the researcher changed the "dimension" on which the rule was founded. Both involved the subjects in working out and performing different responses to the original stimuli. According to S-R theory, the reversal (or intra-dimensional) shift is more difficult as each S-R relationship has to be changed. According to the theory of mediation, a non-reversal (or extra-dimensional) shift is more difficult because the mediating label has to change. The Kendlers found that younger children and animals performed the non-reversal shift more readily than the reversal shift because they were working to a straightforward logic of S-R. Older children and adults, both of whom were language-users, performed the reversal shift more easily. These findings led the Kendlers to

propose that the language system differentiated between the two groups and mediated in the transfer process. These views were further supported in a later study (Kendler 1964).

Transfer and Teaching

A number of related studies followed those of the Kendlers but it was those of Campione et al (1973, 1974) that had the greatest relevance to the problems of transfer. They highlighted two important factors in the transfer process. These were the attention factor and the context factor. Both originate in the learning period. The attention factor refers to those items towards which attention was directed by the teacher. When a new situation occurs, attention to the same items is readily transferred and it is to these very things that the manager will give top priority. The context factor is linked to this in that it can influence generalisation to other situations. Campione found that "transfer takes place best when the form of the two situations remains the same" (in Travers 1977 p. 400). This confirms, once again, Thorndike's theory of identical elements. In Campione's experiments, the effect of context was overwhelmingly the most important factor influencing the transfer of training. He concludes that context dictates the strategy adopted.

Campione's findings were consistent for all ages of school children who were, in effect, "context-bound". The implications for management education are that problem-solving strategies should not also be context-bound but taught in as many different situations as possible. There is no reason to suppose that the importance of context should not be equally powerful amongst adult learners. Travers (1977) suggests that the ability to extract the similar elements from different situations; in other words, to overcome the problems posed by a different context, depends on the individual's verbal skills. Language is

again seen as the mediating variable in transfer, allowing a manager to code information from different situations and make the links between similar elements at an abstract level.

Because the transfer process is so complex, few academics have felt able to put forward a theory explaining it. Levine (1974), however, has put forward his H theory (hypothesis theory) to explain how transfer takes place in certain kinds of problem solving situations. He maintains that an individual, faced with a new problem, first classifies it as belonging to a particular domain, then samples ideas from that domain which he believes will help solve the problem. If this fails he moves to the next possible domain and so on. In this way he is hypothesising solutions which he tests by sampling from the knowledge stored in his memory system. This knowledge may be acquired through formal learning or informally, through experience. Haslerud (1972) suggests anticipating potential future uses for information by "tagging" it when committing it to memory. This, he believes, should make it more readily retrievable.

Although the responsibility for this last task should be shared between teacher and learner, the onus falls naturally on the teacher, who has more conscious control over the learning situation. The role of the teacher should not be underestimated. As early as 1951 Underwood proved that the amount of positive transfer depended on the thoroughness of the learning undertaken. This relationship was confirmed by Atwater (1953) and again by Mandler (1954) who also showed that the relationship between learning one task and transferring to another task is a complex one. They all drew attention to the importance of practice at the learning task for successful transfer to subsequent tasks. Travers (1977) surmises, from his review of the literature on transfer, "that thorough learning is a

desirable condition for efficient transfer" (p. 409). He recommends "thorough learning of whatever is learned", and that "overlearning is the rule. Hasty and superficial treatment of the subject matter in schools would appear to be a waste of time" (p. 409).

Task Complexity and Transfer

As so many studies have been conducted showing that greater transfer occurs, on the one hand, from simple to complex tasks, and on the other, from complex to simple tasks, Holding (1962) decided to put task complexity and transfer to the test himself. He found the relationship to be far from straightforward. With simple tasks, optimum transfer was made from the easier to the more difficult problems; with complex tasks, the reverse was true, optimum transfer being made from the more difficult to the easier problems. Of course, outside the laboratory much learning and application of learning is not specific enough to be clearly defined as learning tasks and transfer tasks or as stimuli and responses. Such forms of transfer were described by Postman (1969) as being "nonspecific". He explains how nonspecific transfer does not rely on simple similarities between tasks. Instead, it depends on skills and habits developed over time from a number of different activities which are generalised and repeatedly practised. A good example is learning how to learn which has the additional benefit of having been the subject of study itself (13). Harlow (1949) identified the elements that make up the development of a learning set. This is a series of problems and solutions that together form the basis of a problem-solving strategy. The individual not only learns what to look for when solving a problem but also learns the expediency of dropping one strategy in favour of another if the one originally adopted does not appear to be working. The formation of a learning set is cumulative and the time taken for it to be completed depends on its complexity,

the manner in which it is taught and the abilities of the learner. Harlow's work was done with monkeys and small children but Di Vesta & Walls(1968) demonstrated the same phenomenon with adults.

Artificial Learning Situations and Real Life

An aspect of the transfer process that is of special interest to management educators is that existing between artificial learning situations and real-life action situations. It is an aspect little studied by the psychologists and as Travers (1977) points out, "is a matter of special importance that deserves much more study than the problem has elicited" (p. 411). The use of physical simulators for students of flying, medicine and electronics has been well researched, showing good transfer and considerable savings in the cost of training (Blaiwes, Puig and Regan 1973, Finch and O'Rielly 1974). The danger that simulators might become too abstract and unrealistic has to be weighed against their usefulness in teaching problem solving strategies and techniques. The use of case studies, role playing and computer-based business games are management educators "simulators". Overing & Travers (1966, 1967) showed how important it is to teach principles in as realistic a manner as possible. The importance of providing students with problem solving opportunities is emphasised by Travers (1977). He firmly believes that if transfer is to take place, a student must have thoroughly learnt his subject and have been confronted with a wide variety of practice situations, preferably ones with a number of distracting and irrelevant features involved. "Teachers of today" states Travers "are much too optimistic in their hopes that transfer will occur (they) should emphasize principles and their application". (p. 415). As the research shows transfer to be context-bound, creative skills may not be readily transferred to new situations. That is why Travers calls for "training for flexibility". It is,

he claims, "one of the keys to transfer of training."

Translation: a Pre-requisite for Effective Transfer

Some of the most recent work to be undertaken on the transfer of training relates to the problems faced by practising managers attending short courses of study at business schools. It is being conducted by Binstead, Long and Stuart at Lancaster University. They link the two worlds of learning and of action (or work) by the dual concepts of transfer and of translation. The former they describe as the "modifier" of action; the latter as the "dictator" of learning. They see these as "reciprocal connections between learning and action" and suggest that a failure of either will break the link between learning and action. This would prevent successful management development from taking place. Transfer alone is not enough. Translation of appropriate needs into the learning programme is a pre-requisite for effective transfer. The relationship is shown in Figure 1.7.

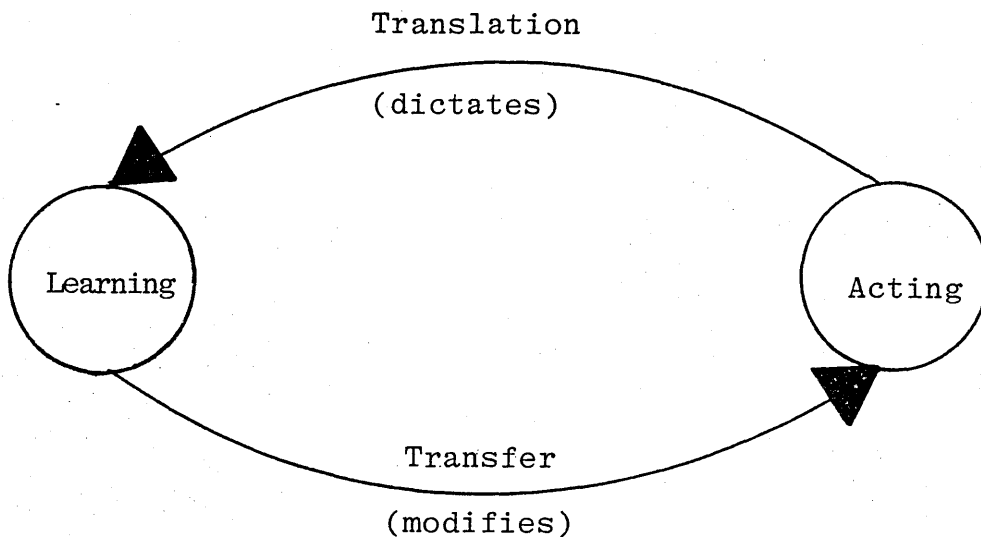


Figure 1.7 : The Relationship Between Learning and Action
(Source : Binstead et al, 1979)

Without translation there can be no useful learning and therefore nothing to transfer. Without transfer there can be no modification of behaviour as a result of training. Both are clearly necessary for successful management development.

Inducements and Barriers to Transfer

Having examined the characteristics of transfer, attention may now be turned to the conditions affecting the amount of transfer that takes place. A number of variables are important either as inducements to transfer or as barriers to transfer. Some are bipolar and can be a help when present and a hindrance when absent or vice-versa. They fall into three distinct categories (14):

1. the learning environment;
2. the individual learner;
3. the working environment.

Each category has within it aspects that facilitate transfer and aspects that inhibit transfer. Each category represents people who, in partnership, are responsible for the effectiveness of the training undertaken. Like most chains, it is as strong as its weakest link.

1. The Learning Environment as a Variable in the Transfer of Training Process

This category encompasses the why, where, who, how and what of training. Their particular importance to the transfer process has been highlighted by a number of studies.

Why? Why training should be undertaken in the first place needs to be carefully understood and relevant training objectives need to be set. Without an accurate translation of training needs at the outset, appropriate transfer is

impossible (Binstead, et al, 1979). Fleishman (1953) found that supervisors who had changed their behaviour in the direction of the stated training objectives were actually worse back on the job than other supervisors who hadn't been trained. The new "correct" attitudes didn't work in practice because there had been an inappropriate translation of the training needs.

Where? The location of the training experience is important as both the physical distance and the psychological distance needs to be bridged during the transfer process (Benne & Demorest, 1976).

Who? Whoever is doing the teaching must not only be competent but also acceptable to the learner. Expertise, whilst vital to a teacher's credibility, is not enough; his personal philosophy and style of teaching are also important.

The curriculum must be considered in terms of both what is taught and how it is taught. The recognition of the role of cognition in human learning and the increased attention being given to the "dynamic, organic process" of learning rather than simply to content learnt is now accepted (Anderson & Gates, 1950).

What? The content of any training programme must not only be relevant but also balanced (Miles 1964). Two common imbalances that Miles identified in training programmes relate to the curriculum; they are input overload and unrealistic goals.

Input overload generally results from too much information being crammed into the programme. It is frequently exacerbated by the scheduling of a major event towards the end of the programme. This is done, Miles believes, to engender an end-of-term excitement that will favourably effect the success ratings of the course as a whole.

Unfortunately, the impact on the participant on his return to work is less positive. He either feels dejected, being more aware of what he doesn't know and can't do than of the new skills and understanding he has gained; or he is still over-excited, not having had time to unwind and consolidate his thoughts. Neither of these situations is conducive to the useful transfer of what has been learnt; the manager is unfit to assess either his work or his colleagues in a sensible and rational way. Effective barriers to transfer have been created and both have their root cause in the curriculum design.

Unrealistic goals may be brought to the training programme by the participants or they may develop during the programme. The eagerness with which participants generally want to implement their goals on the return to work and the anxieties they have about how this can be done are shown by their characteristic desire to maintain links with the trainers, to form exclusive clubs of trained people and to send their superiors on similar programmes. The way in which unrealistic goals affect transfer is that either the goals - and the entire programme - are seen as having been of no practical value or new behaviour, relating to the goals, is tried, inevitably fails and leads to disenchantment. Throughout the programme, trainers should make every effort to help participants develop realistic goals. They should do this directly through discussion and indirectly through the selection of curriculum content.

How? When the process by which the curriculum is taught is entirely in the hands of the trainer, the necessity of "teaching for transfer" is clear. Stephens (1956) firmly believes that the amount of transfer induced can be increased by the method of teaching used. He makes four recommendations:

1. firstly, the teacher must emphasise the feature to be transferred;
2. secondly, the teacher must develop meaningful generalizations and make sure that the student is clearly aware of them. Whenever possible the student himself should be encouraged to make his own generalisations, develop his own insights and work out his own rules and formulae. This personal, creative ownership further enhances the likelihood of transfer;
3. thirdly, the teacher must provide a variety of learning experiences in which generalization can take place. His example is that an understanding of the concept of rhythm can be developed through the teaching of music, dance, prose, graphic design and poetry;
4. fourthly, and finally, the teacher must provide opportunities for practice. This includes deliberate exposure to situations beyond those immediately apparent to which the concepts learnt may be applied. There has been a great deal of research conducted into the relationship between the amount of practice and the efficiency of learning although much of it has been connected to the learning of motor skills. However, in human verbal learning, results suggest that learning is most efficient when practice is "little and often" (Estes, 1958).

Huczynski (1978) feels so strongly about the need to teach for transfer that he makes a number of practical suggestions inspired by Miles (1959) for how teachers might go about it. They revolve around treating transfer as a 'skill' to be taught throughout the programme. Teachers must rethink their approach so as to highlight transfer, which should be regarded by all not as serendipitous but as expected. Practical suggestions include role-playing the return to work, conducting problem-centred discussions and live

case-studies involving former students. Byham and Robinson (1977) believe the key to transfer to be the development in the learner of a new confidence. It is this, they argue, that will equip a manager to transfer the new skills he has learnt back to his place of work.

2. The Individual Manager as a Variable in the Transfer of Training Process

The transfer of training depends upon a strong link being made between appropriate knowledge and intelligent action. The onus must therefore be on the participant manager to make the actual connection. Such connections are the output of the learning process. No matter how carefully thought out the teaching material and how well presented the illustrations linking theory with practice, "all learning ultimately depends on internalization by individuals" (Dressel 1976, p. 187). Dressel points out that external factors, such as instructors, are only effective in so far as they are able to influence the internal ones. What are the important 'internal factors'? Academic achievement is described by Handley (1973) as being "the result of the interaction of intelligence, personality and motivation" (p. 74). Most important for problem-solving, according to Cohen (1977) are general intelligence and previous experience; motivation, age and sex are also considered pertinent but training is not mentioned (unless it is subsumed under 'previous experience'). Handy (1978) divides managers into four types, each with a preferred way of thinking, learning, behaving and changing. Each type has its own God and organizational culture: Zeus for the club culture; Apollo for the role culture; Athena for the task culture; and Dionysus for the existential culture.

Kolb has also differentiated between various learner characteristics (1971) and divided learners into four types

(1977). These are convergers, divergers, assimilators and accommodators. Lewis and Margerison (1979), working with British managers, have positively correlated Kolb's dimensions with those of Jung as measured by the Myers Briggs Type Indicator (MBTI). This is an interesting and important finding particularly as Mitroff & Kilmann (1975) have already used the MBTI to show how four different "types" of managers prefer to gather information and solve problems. Similar findings using a different test for cognitive style were conducted by McKenny & Keen (1974). Together, these researchers have linked preferred ways of learning with preferred ways of working. It would not be unreasonable to suppose that the transfer process might be facilitated or inhibited by the combination of "type" of manager and style of instruction provided. There is some evidence to support such a supposition. Mansfield's final conclusion in his "case study of the evaluation of management education" (1974) is that "results appear to suggest that different types of students benefit in different ways". A similar finding is made by Hogarth (1979) who suggests that the extent to which a manager profits from the CEDEP (Centre Européen d'Education Permanente) experience is largely a function of the type of person he is, the degree of support in his working environment and his company's attitude to management development. He draws particular attention to Rotter's (1966) "internal" and "external" personality orientations. Fundamentally the internal manager believes he has control over his life, the external manager feels controlled by life. Managers did not become more internally-oriented as a result of attending the CEDEP programme. This personality dimension proved itself stable over time. However, marked differences were apparent between the two groups in their perceptions of why they were participating in the programme, how they saw their working environment and the behavioural changes they later reported concerning their jobs. Externals are known to be more alienated than

internals (Seeman 1959, 1972). Their greater cynicism was evident in Hogarth's study (1979, p.81).

Johnston (1974) also believes that differences in perception are strongly influenced by particular dimensions of an individual's personality. He identified an "active" or "passive" orientation relating to the same feelings of "control" or "lack of control" over their working life as Hogarth found. Bray, Campbell and Grant (1974) conducted a study of managers in the American Telephone and Telegraph Company over a period of seven years. They identified two distinct "life styles" which really amount to a complete personality review; these were the "enlarger" and the "enfolder". From the detailed descriptions given of each it is quite clear that the enlarger controls his life whilst the enfolder is controlled by his.

Benne (1961) categorises learners by their typical behaviour whilst undergoing training and concentrates attention on the transfer problems they face on their return to work. He simplified this model to illustrate conference-going behaviour (1976). It is on Benne's second rendering of his model that Binstead, Long and Stuart (1979) base their arguments. Benne's model is fundamentally that of an individual in transition. When he enters the training world and when he re-enters the world of work he is faced with the same problems. He carries with him the attitudes, values and behaviours appropriate to the world he has just left; these are challenged in the world into which he newly enters creating a "personal emergency". In resolving this emergency the individual finds himself modifying his ideas and behaviour; these new attitudes in turn make re-entry into the world he left behind him more difficult. The dual realities of the world of work and the world of learning create situations with which the individual must cope.

The cognitive dissonance engendered by the conflicting cultures has to be reduced. (Festinger 1957). Individuals tend to respond in a number of ways. Managers responding in different ways are categorised by Benne as being:

1. The easy convert - who passively accepts the beliefs and behaviours of a new culture every time he enters one.
2. The tourist - who is a visitor, looking, collecting stories and souvenirs, taking an interest but keeping his psychological distance.
3. The expatriate - who rejects his past and becomes deeply involved in the new learning which he accepts indiscriminately.
4. The missionary - who came to learn and is zealous to spread the word on his return.
5. The self-mystic - who knows it works but doesn't understand why.
6. The learner-critic - who remains aware of the contrasting cultures. He is open to new ideas but is not uncritical of them.

The first three types are unlikely even to attempt any meaningful transfer of training. The next two may be successful; the missionary if he does not alienate everyone with his self-righteousness, the self-mystic after he has sorted himself out. The last type, the learner-critic, is, as Benne points out, "the best bet for transfer of learning" (15).

Binstead et al (1979) have drawn on this model and plotted the types graphically on the two dimensions "learning reaction" and "acting reaction". A modified version of

this is shown in Figure 1.8.

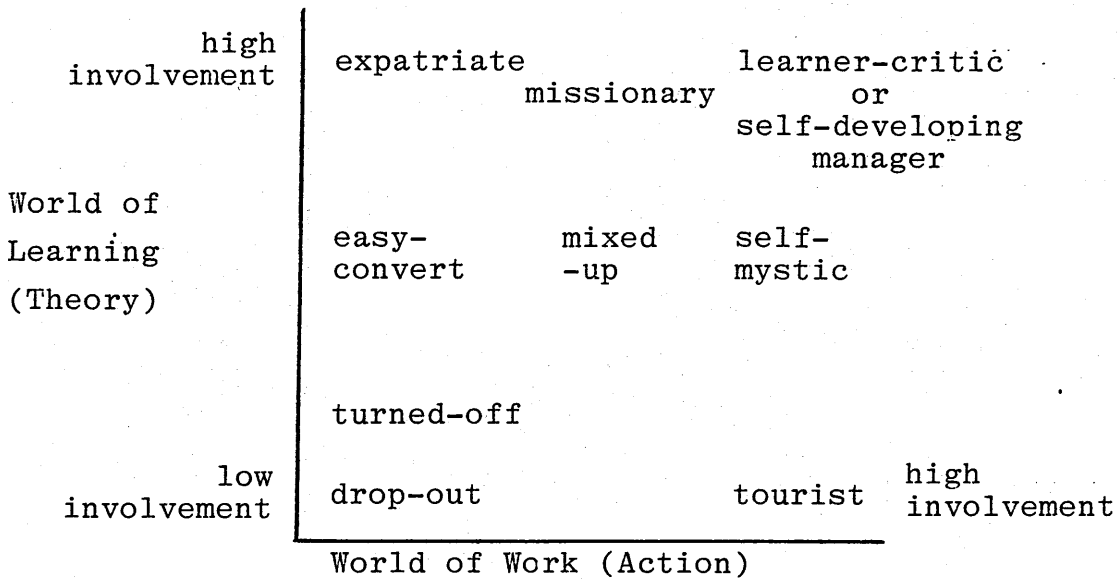


Figure 1.8 : Making the Connection Between Learning and Work

Binstead et al (1979) take Benne's learner-critic as the ideal. They call him the "self-developing manager". Such a person has "an insatiable appetite to learn and grow psychologically and has a seemingly inexhaustible supply of energy to achieve it. Because his action and his learning are closely integrated (see Fig. 1.8) his translation and transfer connections are strong and for him non-problematical".

Such a manager will be able to make his own connections between the relevance of what he is taught and the uses to which it can be put back at work. Others need the support of the tutors and fellow participants to help them to make the links and move closer to the self-developing manager mode. Those managers veering towards the tourist model fail to see the relevance of the training to their particular type of work. They may be right! The strategy which the tutor must adopt here is one of strengthening the "translation" process so that the learning experience is not only relevant but is also seen to be so. For those

managers veering towards the expatriate stance, the "transfer" connections need to be made more explicit. Although the tutor can, and should, facilitate the recognition of the relevant links between the two worlds of learning and of work, he cannot make the connections for the learner. Binstead, Long and Stuart (1979) point out how important it is that the learner himself should make his own translation and transfer connections.

They believe that high ownership of learning goals will lead to a strong translation connection. Likewise, high ownership of action plans should lead to a strong transfer connection. Both connections can be achieved through the design of "high reality learning events" in which the learner can perceive a close relationship between learning activities and work activities (Binstead & Stuart, 1979).

Huczynski (1977) sees the "decision" to transfer as a conscious act on behalf of the manager. Basing his work on that of Fleishman (1953), Huczynski describes the decision-making process as "an inner debate" in which the manager tries to forecast the likely "pay offs" of introducing change back at work. The decision as to whether to transfer or not is acknowledged by Huczynski as being complex but he believes there are four important criteria. These are:

1. the level of satisfaction with existing procedures;
2. the extent to which new procedures are an improvement;
3. the degree of effort required to implement change;
4. the likely chances of success.

The first two depend on the translation of training needs into relevant teaching, the third is a question of motivation and the fourth an amalgam of issues relating to the ability of the individual and the supportiveness of his organisation. Responsibility is left entirely to the individual manager.

March & Simon (1958, p.185) revived Gresham's law to suggest that when a person has a choice between tasks that are routine and tasks that require inventiveness, he will tend to give precedence to the routine. This rather suggests that managers returning to work from training courses will not be inclined to introduce the new ideas and skills they have learnt on the course. That is, unless it can be made part of the routine, as an action plan or "resolution". (Basically, Gresham's law is that the bad drives out the good. It originated with Sir Thomas Gresham's observations of the physical devaluation of the currency in the sixteenth century.)

Bray et al (1974) are of the opinion that "progress in management is a function of the characteristics of the individual (plus) the nature of total opportunity". This formula can readily be adapted to read successful transfer of training is a function of type of manager and organisation climate. And "if, as phenomenological psychologists suggest, the perceptual field determines behaviour then the logical extension of this finding is that these aspects of personality would also account for variation in behaviour in organisational settings". (Johnston 1974, p. 630).

3. The Organisational Climate as a Variable in the Transfer of Training Process

To define "organisational climate" is not easy for there is little agreement as to what it is or how it is measured. However, there is general acknowledgement of its importance to the transfer of training (16).

The term "organisational climate" has been described by Guion (1973) as a "fuzzy" concept confusing organisational attributes with individual attributes. James and Jones (1974) in their review of theory and research, identified three different approaches to organisational climate.

1. The first comprised lasting and distinctive organisational attributes which could be independently and objectively assessed such as size, structure, systems, goals, and leadership style. This approach is illustrated by the work of Forehand and Gilmer (1964).

2. The second was a subjective, often consensual, response to the organisational situation as postulated by Campbell et al (1970). They synthesised the previous work of Kahn et al (1964), Litwin and Stringer (1968), Taguiri (1968) and Schneider and Bartlett (1968). Four recurrent themes were identified and a possible fifth: namely,

1. individual autonomy
2. structure of job
3. rewards
4. consideration, warmth and support
- + 5. interpersonal relationships

Campbell et al thought that researchers had been influenced by previous work on job satisfaction and believed that "a great deal of environmental variation remains to be uncovered" (p. 39).

3. The third approach, championed by Schneider et al (1968, 1970, 1972, 1972), described organisational climate as a set of perceptions held by individuals about their organisational environment. It was "personalistic" depending on what was "psychologically important to the individual ... not how others might choose to describe it". (Schneider and Bartlett, 1970, p. 510).

The different approaches led to a good deal of controversy amongst the organisational climate researchers (17). But, despite this activity, Gavin (1975) pleaded that "more research is necessary to clarify the organisational climate concept". Pheysey (1977) felt that the different approaches

were not mutually exclusive and used all three in her research.

Despite the problems of definition, the manager's perception of the organisation's attitude towards new ideas, knowledge and procedures is going to affect his decision as to whether or not to try out what he has learnt (Huczynski, 1977). Huczynski believes that many employees, returning from a training programme, regard it better to "play safe" and not upset anybody. Their perceptions may not be accurate but they will, nevertheless, act on them. This supports Schneider's interpretation of organisational climate. Pym (1968) also stresses the importance of an organisation being sympathetic to the objectives of training if they want to maximise its effects. As early as 1951 the crucial determinant of change was seen to be the support given by the bosses to the new ideas that were being taught (Hariton, 1951). Shortly afterwards evidence was presented that showed the expectations of a man's immediate superior to be a more important determinant of his behaviour than the training programme itself (Harris & Fleishman, 1955). Indeed, enthusiasm for new ideas can be a source of frustration if not warmly received by the participant's boss whose encouragement is needed to maintain it at a high level. (Hazel, 1976). Managers tend to become increasingly critical of the status quo after training; their new knowledge provides them with a power base from which they may not only change events but also their relationships with others. (Sainsaulieu, 1974).

The dangers of changing the individual without, at the same time, allowing for change in the working situation are recorded by Davies (1972) in her study of the management training given, out of context, to hospital ward sisters. Gibb (1972), in discussing creativity, notes the importance

of "openness" in facilitating creativity within organisations. He deduced that people who feel trusted don't regard innovative behaviour as risky and are, therefore, able to take "risks" and behave in an uninhibited manner. Gibb calls for a flexible organisational structure which allows creative ideas to be translated into improved organisational life.

The notion of openness is reiterated by Berger et al (1973) who, working with British middle managers, drew attention to the importance of freedom and opportunity for the effective application of new learning to the job.

Freedom was rooted in the level of autonomy a manager possessed; opportunity in the unpredictability of the tasks in which he was engaged. Participants saw the former as more important, their bosses the latter. The relevance of the programme content to participants' personal weaknesses and the specificity of learning goals were also seen as important to the successful transfer of training.

An open-closed continuum of organisational climate was put forward by Halpin & Croft (1963). It had six divisions and was later used by Collins (1965) in confirming the hypothesis that those school teachers with similar personality characteristics shared their perceptions of their organisational (i.e. their school's) climates. Personality was measured on the N-S scale of the MBTI. Intuitive teachers gained high job satisfaction from working in an open climate; sensing teachers gained high job satisfaction from working in a closed climate. The opposite was also true for low job satisfaction of intuitive types.

The climate of an organisation was described by Halpin & Croft (1963) as being equivalent to the personality of an individual. Collins' findings would suggest that organisational climate is a projection of individual personality. The same open-closed interpretation of climate has been

used by Grunig (1975) and adapted in recent research into transfer by Slack (1980). He takes it as a straight forward dichotomy based on an individual's perceptions of himself as being either open or closed. The Grunig model provides a 2 x 2 matrix comprising four possible situations as shown in Figure 1.9.

		Individual Dimension	
		Open	Closed
Structural (Organisational) Dimension	Open	problem- facing behaviour	routine behaviour
	Closed	constrained behaviour	fatalistic behaviour

Figure 1.9: Grunig's Matrix of Possible Behaviours (1975)

Slack used this model to match managers' perceptions of themselves and their organisation with self-reports on transfer from a management development programme. He found that participants who came from an open organisation reported greater learning than those from a closed organisation and attributed this to the difference in organisational encouragement and commitment to the managers. Within the organisations, open individuals reported greater learning than closed individuals. This, Slack attributed to self-reinforcement as individual perceptions of the climate did not change significantly after the training. Open individuals preferred their organisations to be open; closed individuals preferred their organisations to be closed.

The greatest learning of all was reported by the open-open group; the least learning of all by the closed-closed group. Slack's findings highlight the mutual effect of the individual and the organisational dimensions and the implications this has for self-fulfilling prophecies and locus of control.

Part II: Empirical studies into the transfer of managerial training

Discovering which are the most influential aspects of an organisation's climate on the transfer of training is an intriguing question. As noted earlier, relatively few researchers have taken up the challenge. The work of five of them is discussed below:

1. Bakke - Norway 1959
2. House - USA 1968
3. Baumgartel and Jeanpierre - India 1972
4. Vandenput - Belgium 1973
5. Hogarth - France 1979

1. Bakke: Norwegian Managers, 1959

In 1959, Bakke published his evaluation of the Solstrand project held in Norway. This was an eleven week, residential general management programme. It was attended by 35-40 participants each year from a wide range of Norwegian companies. The majority (70%) were aged 35-50 and either held, or were destined for, top managerial positions. They attended the programme for five weeks in the Spring and a further six weeks in the Autumn.

Bakke interviewed 105 past participants from 75 different companies. These managers had attended the programmes of 1953, 1954 and 1955; two-thirds of them returned the postal questionnaire on which Bakke's report was based.

He was particularly interested in the benefits which they felt had accrued to them after their return to work. These fell into two distinct groups; personal benefits and company benefits. This was expected. What was not anticipated was the similarity of perceived benefits from the personal point of view and diverse nature of benefits from the company point of view. The participants were unanimous in their acknowledgement of Solstrand as a "unique experience" leading to increased self-confidence, a greater capacity for self-expression and a better understanding of others. When it came to company benefits, 82% of respondents found that "the Solstrand training was useful and advantageous" for their jobs. This figure rose to 87% amongst those executives who had total autonomy. A checklist of 54 items was presented, from which participants were asked to identify the "most important" benefit. Only two items received relatively substantial support. These were the delegation of authority and the handling of information. Of all the possible items on the checklist only five were not identified as most important by someone. This range in response was typical of the replies being made to many of the questions asked. It led Bakke to suggest that the degree of managerial effectiveness achieved by attending Solstrand was the result of a combination of inter-dependent factors. These comprised "the student himself, the Solstrand offering and the environment (chiefly the workplace and its people) in which the student must express any modifications made by Solstrand on him" (p. 89). As Bakke's results unfolded it became increasingly clear that far fewer of the benefits were being realized by companies than might have been expected. This was because the companies did not recognise their own vital role in the chain of events. They needed actively to encourage and support returning students so that what had been taught and learnt could be brought to life in the reality of the workplace.

The testimonies he received led Bakke to surmise that Solstrand emphasized "an approach to things, a way of looking at problems, an indication of how important it was to use their own initiative and their own ingenuity .." These things, he believed, stayed with the participant long after his return to work (p. 50). However, in his conclusion he places responsibility for the successful transfer of the new knowledge and understanding firmly on the organisation. They cannot simply "buy in" management development. They are part of the training process and must participate fully to achieve the result they want, and need. "The effect of Solstrand (depends on) the degree of willingness and wisdom with which the managements and workers in particular firms receive, accept, encourage and use the potential available to them when the student returns" (p. 157).

2. House: American Managers, 1968

Almost ten years elapsed before another management researcher drew attention to the organisation culture as the major variable of the transfer of training back to the workplace. House (1968) described the "social influences" which he believed served both to support and to hinder the effectiveness of the training when the trainee returned to work.

These "social influences" arise from three sources:

1. The first is the formal authority system within the organisation;
2. the second is the manner in which this authority is exercised by the trainee's immediate superior;
3. the third is the "primary work group" of the trainee.

If all three social influences are amenable to the new attitudes and behaviours taught during training then positive transfer will occur. If, however, any conflict exists between what has been learned and what is acceptable at the workplace then transfer will be inhibited and training may well become dysfunctional.

House was well aware of Sykes' powerful example of the need for congruence between company practices and the goals and ideals espoused in courses. Sykes (1962) told how only one year after completion of a supervisory programme almost half of the 97 frustrated participants had applied for jobs outside the company, 20 of them successfully.

House's "social influences"

1. The first of House's social influences was the formal authority system. By this he meant the rules and regulations, the policies, the procedures, the rewards and punishments, and the like. These are easier for the individual manager to adapt to than to try and modify. In fact, any attempts at the latter would almost certainly be misinterpreted.

2. The second influence was the way in which the trainee's immediate supervisor exerted his authority. Katz and Kahn (1953) suggest that subordinates model their behaviour on that of their boss; Shils (1948), Trumbo (1960) and Spector (1960) show that they adopt the same attitude as their boss; and Rosen (1960) goes as far as to say that they will try and anticipate what the boss will want and act accordingly. Given such a relationship between trainee and boss it is clear that the way in which the latter exercises even his legitimate power will have an influence on the extent to which the trainee will be willing to try out new ideas.

3. House's third influence was the primary work group comprising the trainee's peers and immediate subordinates. Their values and work norms can have an inhibiting (French 1960) or facilitating (Coch & French 1948) effect on the successful transfer of training.

The power of each of these three influences to modify the transfer process, in either a positive or negative direction, is, House believes, a function of three dimensions. These are:

1. congruence (or identical elements) between the training given and the work to be done;
2. clarity of their instrumental value to the trainee, that is, how much he is likely to get rewarded or punished for undertaking the new behaviour;
3. anxiety induced in the trainee by the prospect of new behaviour.

House calls upon the evidence of a number of researchers to support his argument (18). He points out the likely dysfunctional consequences if the trainee finds his learning to be in conflict with the prevailing social influences at work. These are the high risk strategy of attempting to change the organisational environment; the low risk strategy of rejecting or remaining indifferent to the training; the stealthy strategy of waiting for a new situation to develop; and the disillusioned strategy of looking for a new job. None of these strategies were the actions hoped for when the organisation sponsored the manager for leadership training.

3. Baumgartel and Jeanpierre: Indian Managers, 1972

Baumgartel and Jeanpierre (B & J) took a stratified random

sample of 240 managers from a population of over 2,000 who had attended one of 17 management development programmes held in India between 1964-7. These programmes ranged in duration from 1 to 32 weeks although 11 of them were between 2 and 5 weeks. All the programmes were residential, nine were general management and eight were specialist functional programmes.

Transfer was measured by the degree of "adoptive effort" expended by the individual manager on his return to work. Data was collected by interviewer-administered questionnaires. 25% of the managers reported having attempted a "major" innovation; 18% a "minor" innovation; 8% a general application; and 46% admitted to having made no attempt whatsoever to apply either new ideas or techniques on their return to work. The content areas of the self-reported innovation attempts were wide-ranging. When asked about their level of success there was a significant correlation between that and the level of innovation itself ($r = .43$).

B and J investigated the transfer of training in terms of:

1. what kinds of training programmes are most likely to produce adoptive effort;
2. what kinds of managers are most likely to apply new knowledge;
3. what kinds of organisational environments are most likely to facilitate such managerial effort.

The individual programmes were measured for their "output" of innovative managers; they ranged from 18% to 75%. Programmes that were rated high as providing relevant management techniques, improved decision-making, problem-solving and interpersonal skills, giving the managers self-confidence and a sense of managerial identity were positively correlated with subsequent innovative effort on the

part of the participants. There was a significant positive relationship between managers who rated the value of their programmes as high and those attempting innovations. In addition, programmes on which participants had established good personal relationships with the trainers and those on which they really felt the trainers understood their problems, produced significantly more innovators ($r = .31$, $r = .29$), whilst those programmes felt to be too difficult or poorly organised produced significantly fewer innovators ($r = .46$; $r = .29$).

Managers who described themselves as "planners" or "risk-takers" showed significantly higher levels of innovation. None of the other 21 personality traits were of importance. The only biographical variable to be significantly associated with transfer was level of income ($c = .22$). High income managers were more likely to report having tried to apply their new skills and knowledge.

Two aspects of the managers' back-home settings were examined. These were the extent to which the company used "modern management techniques" and the "nature of the social climate of the organisational structure". There was a weak correlation between two of the fifteen modern practices and innovative effort. These were the use of external consultants ($c = .18$) and of systematic methods of market research ($c = .19$). Type of company was not significant. Fifteen organisational climate measures had been examined of which six showed significant positive relationships with the adoptive effort score. These were:

1. Freedom to set personal performance goals ($r = .27$).
2. Degree higher management is considerate of feelings of

lower management ($r = .19$).

3. Degree organisation stimulates and approves of innovation and experimentation ($r = .18$).

4. Degree organisation is anxious for executives to make use of knowledge gained in management courses ($r = .18$).

5. Degree of free and open communication among the management group ($r = .16$).

6. Willingness of top management to spend money for training ($r = .15$).

Three items showing no relationship were:

1. Whether or not the company is growth-oriented.
2. The number of conferences and group discussions held.
3. Whether or not the manager feels restricted by rules and regulations.

The comparative effects of the different sources of variance - a good or poor programme, a high or low income level and a favourable or unfavourable organisational climate - were measured before B and J concluded that "organisational climate is the single most important factor affecting the efforts of trained managers to apply new knowledge in the back-home setting." (p. 693).

4. Vandenput: Belgian Managers, 1973

In 1973 Vandenput undertook an exploratory study into the transfer of training looking only at organisational variables. Those are the facilitators and the inhibitors

to the transfer process operating from the organisational environment. He felt that, "in order to understand the problem of transfer, we have to emphasise the organisational phenomena rather than the learning processes occurring during the training itself" (p.251).

He conducted semi-structured interviews with 62 Belgian managers. They represented a wide range of situations. Over half of the total (38) were on external programmes; the others (24) were on in-company programmes. 34 of them were from industrial companies and 28 from administrative organisations. 25 were senior or middle managers; 24 were junior managers and 13 were union officials. 26 were interviewed during the training programme, 26 were interviewed about a year after they had finished. Ten managers were interviewed because they were known to have been "reluctant trainees" for one reason or another.

When the interviews were complete they were content analysed. For every facilitator that emerged, three inhibitors were reported. Most of the items were bipolar; they could be either a facilitator or an inhibitor depending on the particular circumstances and the perceptions of the manager. For example, the keenness and enthusiasm of subordinates would be a facilitator, a lack of it would be an inhibitor. Every item except autonomy was seen as being an inhibitor most of the time. Human relationships were mentioned most of all. These would fall into House's second and third social influences, the exercise of authority by the superior and the primary work group of the trainee. Putting relationships to one side, the other most important factors (all described more frequently as inhibitors) were:

1. peoples' characteristics, particularly their rigidity and conservativeness;
2. the organisational structure (House's formal authority

system), emphasising the distribution of man power and control;

3. the environment, mainly limited to unions and customers;

4. job characteristics and the relevance of training. These two are clearly linked, especially when described in their negative aspect.

To return to inter-personal relationships, superiors, as one might expect, were more inhibiting than subordinates but, somewhat surprisingly, groups were mentioned far more often than individuals, both as facilitators and inhibitors. The most frequently occurring inhibitor was "lack of influence". It is interesting to compare this with the only overwhelmingly facilitative factor, autonomy.

Vandenput reported two significant inter-group findings. These were that the union delegates mention lack of influence LESS often as an inhibitor (sig @ .05) and that senior and middle managers mention lack of relevance of training LESS often as an inhibitor (sig @ .01). Another interesting finding was that participants on external programmes reported more inhibitors than participants on in-company programmes.

The analysis of the factors emerging from his study led Vandenput to conclude that "the organisation has a specific influence upon the transfer of learning. This influence, ... seems to be inhibitive rather than facilitative ...". He feels that his findings imply "an action whereby the training programme is not an isolated experience but maximally integrated into the organisation's life ...". To achieve this integration he recommends "a better preparation of the trainee for transfer, and OD sessions following the training" (p. 261).

5. Hogarth: French Managers, 1979

A fifth academic to undertake empirical research into the transfer of training was Hogarth (1979). He made a full-scale evaluation of a joint-venture in continuing education for managers. Seven French companies and the INSEAD business school developed between them the CEDEP project. It was essentially a sixteen week general management programme. Its novelty, challenge and ultimate value lay partly in its scheduling and partly in its close links with the constituent companies. Eight two-week teaching modules were spread over a two-year period, being held at regular three-month intervals. In between the sessions, managers returned to their regular jobs where they could put their new learning to the test. They could also identify those puzzling aspects of their work life for discussion at the next stage of the programme. In this way, the links of both "transfer" and of "translation" could be made effectively.

Conditions that Help or Hinder Transfer

Hogarth's investigation into the transfer process revolved around two checklists. One list was made up of 13 possible "helping" factors; the second list comprised 14 possible "hindering" factors. Eight of the suggested helping factors were agreed to be such by over half of the respondents but only three of the suggested hindering factors were agreed by the same proportion. Assuming that the right suggestions were being made, the responses suggest that conditions for the transfer of training were very favourable for the CEDEP participants. (Crudely stated, the ratio of help to hinder factors stood at "4:1 for" compared with Vandenput's "3:1 against".) The range of responses to the factors on Hogarth's checklists were similar to Vandenput's but agreement was higher for helping factors than for hindering factors. Thus, agree-

ment amongst the respondents with the various helping factors ranged from 33% to 79%; agreement with hindering factors from only 16% to 67%. The five most important helping factors reflected the Company's attitude to management development, the individual manager and the job he held. These are shown in Table 1.1.

Rank	Factor	% agreeing	Domain
1	The company has a general policy for continuing education	79%	(Company attitudes to management development)
2=	Your own character was important	70%	(self)
2=	You are the leader of your unit	70%	(job)
4=	You are fairly free to make changes in your own Dept.	69%	(job)
4=	Your job lends itself to changes	69%	(job)

Table 1.1: THE FIVE MOST IMPORTANT HELP FACTORS (Hogarth p. 53, 99) (n = 13, range = 33% - 79%)

The five most important hindering factors excluded job altogether and added the external environment, which was felt to be the most important hinderer of all, and aspects of the Company's structure. These are shown in Table 1.2.

Rank	Factor	% agreeing	Domain
1.	Fluctuations in economic conditions	67%	(external environment)
2.	Top management does not go to CEDEP	64%	(Company attitudes to management development)
3.	It is difficult to break the daily routine habits	58%	(self)
4.	There is a large degree of instability and uncertainty in the company	48%	(Company structure)
5.	There are incessant organisational changes	44%	(Company structure)

Table 1.2: THE FIVE MOST IMPORTANT HINDER FACTORS (Hogarth p. 53, 99) (n = 14, range = 16% - 67%)

The Individual and his Job as Variables in the Transfer Process

Hogarth then correlated these responses with other data that he had collected from the same managers. The patterns emerging showed how the help/hinder factors were dependent upon and influenced by the age and personality of the participant, the job he held and the attitudes he felt his Company took towards management development. Age proved to be an interesting variable. The older managers expressed less uneasiness about their Company and their career within it; they had less of a desire to move. Their personal relationship with their company exhibited, to use Hogarth's term, greater "individual integration"

than that of younger managers. However, this did not appear to make them complacent. They reported "more learning by way of discipline-oriented knowledge which, in turn, led to more behavioural outcomes" (p. 233).

Another of the major findings of Hogarth's research was the importance of personality for the transfer process. This had direct influence on transfer in that different types of personality are attracted to different styles of learning and managing. It also has an indirect influence in that different personality types interpret the policies, practices and reactions of their companies differently. It was in this latter area that the results were most illuminating. Hogarth measured personality by using Rotter's (1966) questionnaire on the personal control that an individual feels he has over events. An "internal" or an "external" orientation is identified. The internal manager feels himself to be in control of the events affecting his life, the external manager feels himself to be at the mercy of fate in general and of his boss(es) in particular. Hogarth originally used this instrument to see whether the CEDEP experience succeeded in moving managers towards a more internal mode. It did not. Personality, as defined by Rotter, was a stable dimension unaffected by the experience of management training. It did, however, divide managers who otherwise formed a homogeneous group. Distinct differences in important attitudes were found to link closely with a manager's internal-external score. Internals felt that they understood why they had been sent to CEDEP, what it was trying to do and what was expected of them. They also believed that their managers saw CEDEP as important. The externals were far more cynical and less optimistic on these issues. There was no relationship between personality and learning whilst at CEDEP but on thinking about returning to work, the internals saw their companies as a much more amenable environment for transfer than did

the externals. After they had gone back, the internals reported higher levels of behavioural change than did the externals. Such changes featured sensitivity to others, openness of management style, enthusiasm for work, self-confidence and efficiency.

Predictive power regarding successful (or unsuccessful) attempts at transfer was not forthcoming from any of the job variables selected by Hogarth. The one aspect of a manager's job which did lead to an interesting finding concerned its predictability. An index of task predictability was drawn from 12 of the items on Hogarth's job description questionnaire. He found a positive correlation between this index and the anticipation and, to a lesser extent, the actuality of transfer. That is to say, the more stable a manager perceived his job to be, the greater the likelihood of positive transfer. When predictability was absent, so was transfer. This is an interesting finding because it is in direct contradiction to that of Berger et al (1973) who linked unpredictability of task with opportunities for change and the transfer of training.

Of far more value than job variables were those Hogarth grouped together under the heading "company attitudes towards management education" and the straightforward, lone statement "perceived supportiveness of immediate working environment". These findings confirm House's (1968) assertions regarding the "social influences within the work organisation" (p. 559).

The Role of the Company in the Transfer Process

As the evidence regarding the transfer process is accumulated, Hogarth is forced towards the conclusion that "the crucial link ... in the outcome of the training effort is what happens in the company. In this respect the data show there is much that companies can do. In particular,

there is a need for a supportive working environment" (p. 131). He suggests a number of ways in which to create this:

1. The first is via a "critical mass" philosophy.

Hogarth discovered a positive relationship between the amount of contact a manager has with colleagues who have also participated in the CEDEP programme and the extent to which he finds his working environment supportive. However, he does admit that the link was strong in only three of the seven participant companies. On the positive side though, those managers whose immediate bosses had attended CEDEP were less concerned about the lack of top management's involvement in the project than those whose bosses had not been.

2. Another way in which Hogarth suggests that a company can develop a more supportive working environment is by emphasising the need for management education and the value of the particular programme that the manager will attend.

3. The company should also recognise this importance by clearly involving top management, either as participants or as visiting speakers.

In all these activities Hogarth believes that the training centre and the company should work closely together. These suggestions are grounded in the important variables for the transfer of training that Hogarth found within the company. Another interesting finding linked to the company's role relates to the period before the manager even embarks on the programme. Hogarth found that managers view the help/hinder factors differently before they arrive than they do after they return. At the beginning they tend to be rather idealistic, underestimating the difficulties they will face and overestimating the interest of their superiors, the closeness between the company and CEDEP, and the willingness of the company to change.

Hogarth feels that the participant managers need help concerning the potential difficulties of transfer and that a more realistic understanding earlier on may avoid frustration later.

Another interesting discovery he made was that staff managers find their company structure and atmosphere less conducive to transfer than do line managers. Given earlier findings on the importance of autonomy (Vandenput 1973, Berger 1977) this is to be expected. What is rather surprising is that only 29% of CEDEP managers felt that a personal lack of sufficient autonomy might hinder the transfer of what they had learned (p.99).

The Determinants of Transfer for CEDEP

Hogarth concluded that the extent to which a manager profits from the CEDEP experience is a complex function of:

1. the individual manager;
2. the CEDEP programme;
3. the manager's job environment;
4. the closeness of the relationship between the training centre and the sponsoring companies.

As far as the individual is concerned, age and personality are the important variables particularly the latter which influences the way he prefers to behave and the perceptions he has of his own actions and those of others. The CEDEP programme is seen as a meeting ground for two dissimilar cultures. There are cultural gaps and there are areas of overlap keeping the relationship between managers and faculty a dynamic one. Managers expect to learn specific, functional "content". In fact, they are taught, and tend

to learn, a "process" of management. The distinction and its implications does not seem to be apparent to the managers. Threequarters of them saw CEDEP as benefitting them personally, only half saw it as benefitting their work in the company and one third as being helpful to a specific job they were doing. Despite the apparent lack of relevance a disproportionate number of job-related behavioural changes were reported. As they progress through the programme the managers become less dependent on the faculty. At the same time any "malaise" concerning the company declines and their perceptions for a favourable transfer of training increase. Indeed, the longer they are on the course the more behavioural changes they report.

The answer to the single question "you felt your immediate working environment would support you?" was one of Hogarth's best predictors to the transfer of training. The manager's boss too has an important role as he recommends or approves his selection, briefs him, debriefs him, provides opportunities for the transfer of new ideas and holds the keys to the reward system. For best results, Hogarth believes that this role should be played sensitively by the boss who should be interested and helpful rather than zealous and demanding. The boss-subordinate relationship was shown to be at its best when both managers had participated in the CEDEP project. Other aspects of the organisation that were important were company attitudes towards management education, top management involvement in CEDEP and task predictability. The manager's level in the hierarchy and the function to which he belonged were not important.

Summary

Two important themes emerge from the literature discussed in this chapter. The first of these is that the transfer process is complex and little understood: the second,

that as regards management education, there is clearly much scope for further investigation.

Many issues have been raised in the literature. They fall into three broad areas:

1. the internal characteristics of transfer;
2. the external agencies of transfer;
3. the implications of transfer.

What follows is a summary highlighting some of the important elements within each.

1. The Internal Characteristics of Training

The three most powerful and recurrent internal characteristics of transfer are similarity, generalisation and practice. The most important mediating factor in the transfer process is internal verbalization.

Much research has been done on these characteristics but unfortunately most of it has used children, often quite young children, and occasionally animals, as the subjects for experimentation. Relatively little work has been done with adult learners.

2. The External Agencies of Transfer

Within the specific field of management training, research interests have focussed on three agencies: the programme, the manager and the sponsoring organisation. It has been shown that educationalists have tended to concentrate upon the programme whilst psychologists have laid particular stress upon the manager. The work of the management scientists who, as has been noted, have drawn little benefit from the insights of the educationalists or the psychologists in this area, have come, in the main, to regard all

three agencies as of more or less equal importance. In other words, each agency is now seen as a constellation of different people, all of whom must not only make the appropriate links with one another but must also take their particular role seriously. If, from this school of thought, one agency is to be singled out as relatively more important to transfer then it must be the sponsoring organisation. This perhaps reflects the pervasive influence of the sociologists on all aspects of the social sciences during the last twenty years. Within this organisational area, the factors of greatest importance are a manager's autonomy and the supportiveness of others, especially his immediate superior.

Exactly how these agencies interact can be represented as in figure 1.10.

1st chain



2nd chain

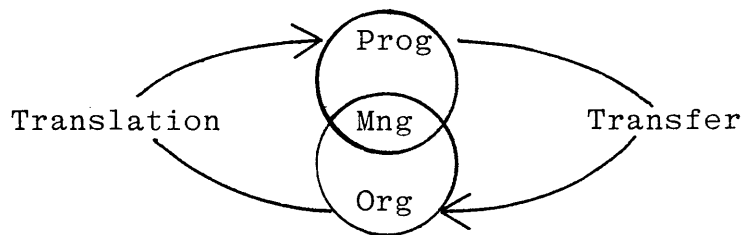


Figure 1.10: Inter-relationships between the agencies of transfer

The first chain shows a linear pattern of relationships between each of the agencies. Note that the manager mediates the programme to the organisation and vice-versa. Within the second pattern, however, there are close links between the programme and the organisation the intention of which is to facilitate the transfer of training. In fact, the two patterns are present and can be represented as in figure 1.11.

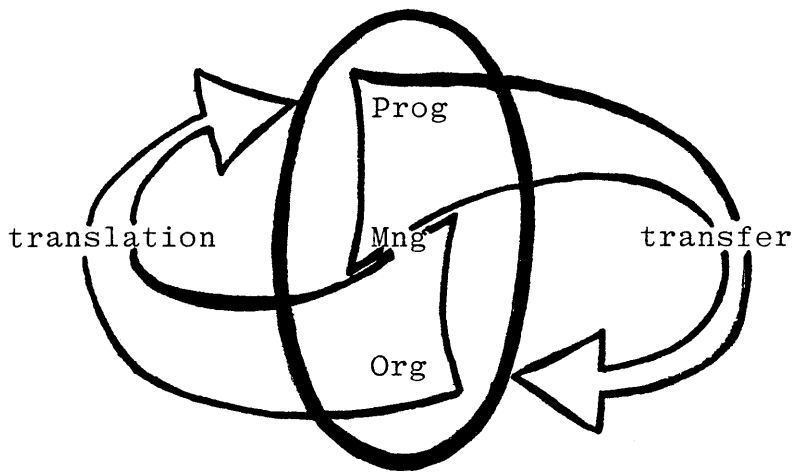


Figure 1.11: An integrated model of the external agencies of transfer

It might be hypothesised that the success of transfer depends upon these two patterns being integrated in an appropriate manner. This is discussed further in the next section.

3. The Implications of Transfer

Although not reviewed in this chapter, implicit throughout is the role of the manager as a change agent. Figures 1.10 and 1.11 also indicate this.

The programme can equip the manager with appropriate re-entry skills through building transfer strategies into the curriculum. Alternatively, by neglecting to do this, it can alienate him from the "unenlightened" colleagues he left behind. In its turn, the organisation can provide the manager with appropriate job opportunities on his return from training. By not doing so, it can negate the potential benefits of that training. Of these benefits one that is reported repeatedly in the studies discussed earlier is personal development such as increased self-confidence and improved relationships with others.

This chapter has examined the general context of the transfer of training. The next chapter is concerned with the specific context of the joint-venture in management development between Cable and Wireless Ltd. and the Cranfield School of Management.

Notes to Chapter 1

1. During the 1960s US federal legislation made the evaluation of federally-funded projects mandatory. This fanned the general demand for accountability and all aspects of education were rapidly subjected to evaluation studies. At the beginning of this period educational evaluation could be equated with "testing" although the criteria have since broadened (Maling-Keepes, 1977). Even so, as a glance through the many volumes of Dissertation Abstracts will show, the ubiquitous GPA (grade point average) is used in the evaluation of programmes, teaching methods and students, being correlated with characteristics such as age, ethnicity and personality.

2. Highly sophisticated econometric analysis is used by some evaluators to estimate the benefits of various training programmes. Bloch's (1979) reader gathers together studies by Ashenfelter, Cooley, Kiefer, and Goodfellow with comments from Ehrenberg and Hammermesh.

3. These are the studies conducted by management scientists. Selected for their concern with transfer, rather than simply with evaluation, are those by Bakke (1959), House (1968), Baumgartel and Jeanpierre (1972) Vandenput (1973) and Hogarth (1979). In addition, there has been some very recent work on transfer in the managerial context by Nienstedt (1980) and Slack (1980).

4. This is illustrated in the writings of Babbitt (1893), Morgan (1894), Payne (1880), Roark (1889), Thomas (1893) and Wormell (1899).

5. Sixteen separate studies into the value of latin are cited. They span 31 years, from 1906 to 1937. Other subjects were also studied but aroused less controversy.

LATIN: Swift (1906), Perkins (1914), Harris (1915), Partridge (1915), Starch (1915, 1917), Dalham (1917), Wilcox (1917), Foster (1917), Thorndike (1924), Thorndike & Ruger (1923), Briggs & Miller (1923), Cox (1923) and Hamblen (1924), Sorensen (1929), Smith & Douglas (1937)

ARITHMETIC: Winch (1910), Starch (1911)

GEOMETRY: Rugg (1916), Ulmer (1939)

SCIENCE: Hewins (1916)

NEATNESS: Squire (1905), Ruediger (1908)

6. Again, a substantial number of studies were undertaken and articles written. Almost all were conducted before the First World War.

MEMORY: James (1890), Ebert & Meumann (1904), Dearborn (1906), Fracker (1908), Winch (1908, 1910), Sleight (1911)

MOTOR SKILLS: Bergstrom (1894), Blair (1902), Angell & Coover (1908), Judd (1908), Coover (1916), Webb (1917)

DISCRIMINATIVE JUDGEMENT: Thorndike & Woodworth (1901), Judd (1902), Bennett (1907), Angell & Coover (1908), Kline (1914), Whipple (1910), Foster (1911). The studies in Notes 5 and 6 are cited to illustrate the range and extent of interest in transfer. Further bibliographic details are not provided.

7. Article in The Times (15/7/80, p.4, col.A) headed "Clever Children Do As Well In Comprehensives As In Grammar Schools, Study Shows" The research was conducted by the National Children's Bureau, funded by the D.E.S. (£35,000). Full report: STEEDMAN, J (1980) Progress in Secondary Schools, NCB.

8. Robinson (1927), McGeoch et al (1931, 1937), Gibson (1940), Osgood (1949).

9. This is because when things are almost the same there is more likely to be confusion than when they are not at all alike. In other words, if a new response was needed for an old stimulus, the old response would interfere with the learning process and transfer would be negative rather than positive.

10. STIMULUS GENERALISATION: Yum (1931), McKinney (1933), Hovland (1937), Hamilton (1943)

RESPONSE VARIATION: Tolman (1932), Bruce (1933), Wickens (1938), Gibson (1941), Siipola (1941), Bugelski (1942), Underwood (1945)

SIMULTANEOUS VARIATION OF BOTH STIMULUS AND RESPONSE: McGeoch & McDonald (1931), Johnson (1933), Gibson (1940), Melton & Von Lackum (1941)

11. Transfer refers to the impact of new experiences on those of the future, whilst retroaction refers to the impact of new experiences on those of the past. Both can be affected in either a positive or negative manner. So, positive transfer would occur when learning Task A helped in the subsequent learning of Task B and negative transfer would occur when Task A interfered with Task B, causing confusion and mistakes. If learning Task B helped one to remember the earlier Task A then positive retroaction would have occurred. If, however, Task B caused one to forget Task A then negative retroaction would have taken place.

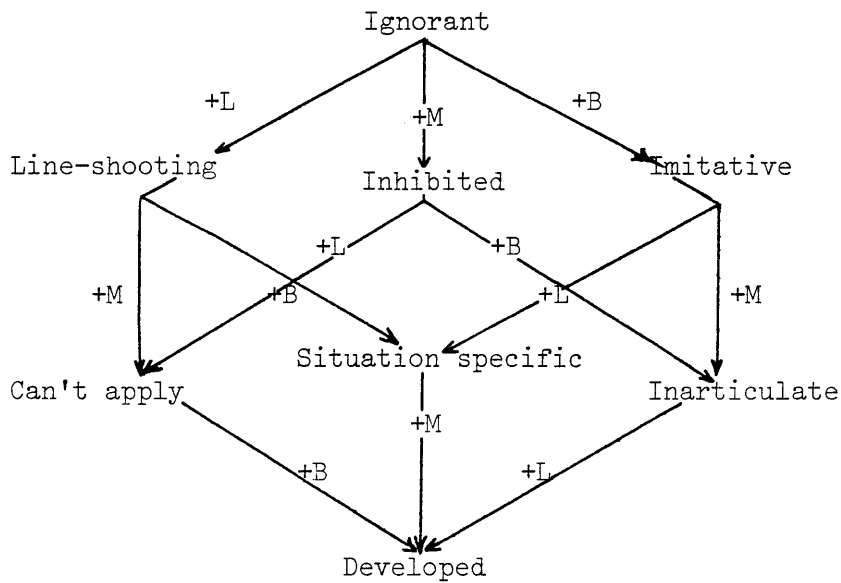
12. Davies shows how a manager returning to work without the full combination of language, models and behaviour cannot possibly transfer what he has learnt on the programme to his job. She describes each combination (table 1.3) and their inter-relationship (fig. 1.12). A manager may have a variety of profiles at the same time depending on the subjects taught.

See Table 1.3 and Figure 1.12 overleaf (p.67).

Table 1.3: Davies' Transfer Types

Description	Model	Language	Behaviour
Ignorant	-	-	-
Line Shooting	-	+	-
Inhibited	+	-	+
Imitative	-	-	+
Inarticulate	+	-	+
Situation specific	-	+	+
Can't apply	+	+	-
Developed	+	+	+

Figure 1.12 : Inter-relationship Between Types (Davies, 1976)



13. Research into learning how to learn has been conducted by Woodrow (1927), Ward (1937), Melton & Von Luckum (1941), Harlow (1949), and Thune (1950).

14. Attention has been drawn to the importance of all three by Bakke (1959), Lynton & Pareek (1967), Baumgartel & Jeanpierre (1972), Davies (1976) and Hogarth (1979).

15. There are close similarities between Benne's types of manager, and those of Davies although they reached their typologies by different routes.

Benne

1. East convert
2. Tourist
3. Expatriate
4. Missionary
5. Self Mystic
6. Learner critic
7. Drop out

Davies

- line shooting
imitative
can't apply
situation specific
inarticulate
developed
ignorant

16. For example, Bakke (1959), Lynton & Pareek (1967), House (1968), Baumgartel & Jeanpierre (1972), Vandenput (1973), Hand et al (1973), Steifel (1974), Hogarth (1979), Slack (1980).

17. These included Campbell & Beaty (1971), Herman & Hulin (1972), House & Rizzo (1972), Pritchard & Karasick (1973), Guion (1973), Johannesson (1973), Elbert (1976).

18. Clarity: Raven & Rietsema (1957), Georgopolous et al (1957).
Anxiety: Wallen (1942), Mukhopadhyay & Malani (1960), Robbins (1963), Spielberg (1966).

CHAPTER 2

THE CASE STUDY AND ITS CONTEXTS

Introduction

To explore the issues inherent in the transfer process, empirical research has been conducted into the experiences of a joint-venture in management development. The venture is now entering its fourth year. It began in March 1977 when a major British company and a leading British business school contracted to work together in the field of management development. The event was remarkable for a number of reasons. The scope of the project was unusually broad - the company committing itself up to the sum of £1m in the first three years; the business school to the training of up to 600 managers (1). Members of each organisation were expected to work closely with one another and the ultimate objective of the experience was to effect far-reaching changes within the company. Management development was seen to be the means; organisational development was felt to be the end.

Co-operation of this type and on this scale between industry and academia was, and still is, a rare event. That such a venture should have been undertaken in Britain, a country slow to appreciate the benefits of management education, is itself of interest. This chapter will give an overview of the joint venture, setting the context for the in-depth study of the factors facilitating and inhibiting the participant on his transfer of training back to the workplace. It is based on the oral evidence of a wide variety of managers and lecturers. Chapter 3 discusses the methodology by which these phenomena were observed and measured. Following chapters analyse the data collected, look at the implications and make recommendations.

The company is Cable and Wireless (C & W); the business school is the Cranfield School of Management, (Cranfield), a constituent part of the Cranfield Institute of Technology.

Part I: The Business Context

1977: The State of Play

1977 was a year of peak performance for Cable and Wireless. Overall group revenue had been rising rapidly throughout the 'seventies; in 1977 it broke through the £150m barrier with record profits of almost £60m. This represented a 40% return on capital invested and even when, 12 months later, these figures were revised to counteract the impact of inflation on depreciation allocations, they still remained the best ever at £45m p.a. and 31% respectively. By 1979 profits had slipped below £40m p.a. and the yield had fallen to below 20% although overall revenue had continued to rise, albeit at a reduced rate of growth (2).

So, from the point of view of financial achievement, 1977 was notable on two counts. Firstly, it was the highpoint and secondly, it was the turning point.

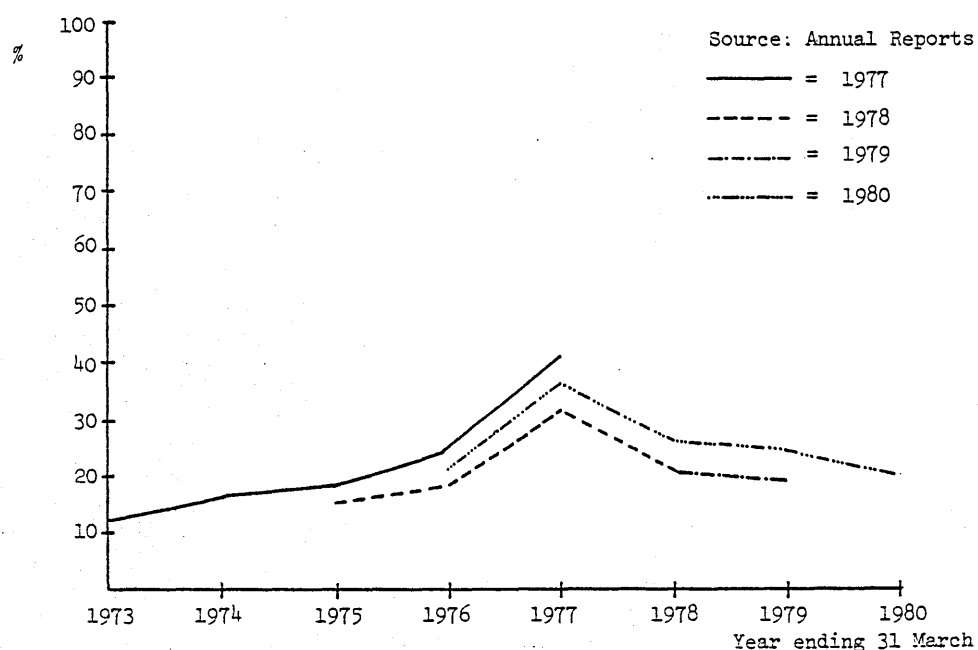


Figure 2.1 : Return on Capital Employed, 1973 -1980

At the time the warm glow of success was in most people's minds. Profits had doubled on the previous year (1976) which, in its turn, had represented a doubling on those of two years earlier (1974). The Company installs, operates and maintains telecommunication services throughout the world. The increased contribution was due largely to increases in traffic, although the weak £ provided favourable currency exchange rates. Telex was the form of traffic showing the most spectacular rise in 1977; 34% more minutes than in 1976. Telephone minutes were up by 20%, as were the number of satellite circuits. The number of leased circuit terminals had increased by 23% and even the number of words sent via telegrams was up by 2% (3).

The company owned and operated 13 national telephone systems, a fleet of six ships, 40 radio stations, seven satellite earth stations and four technical training colleges.

It operated in 71 countries with a staff of 9,488 of whom 1,645 were employed in the UK. New contracts were being sought, and won, in both the traditional and new areas of business. The Queen's Award for Export Achievement awaited them in their Golden Jubilee year of 1979. Her Majesty's Government as tax collector and single shareholder gathered in almost £40m, seven times that of only five years earlier. The British press were to praise their achievements; a rare event for any company, but especially so for a nationalised industry.

However, there were dark clouds on the horizon. World demand for telecommunications was, and still is, growing rapidly. In absolute terms and traffic passing through the company was increasing but, in relative terms, they had a shrinking slice of an ever-growing cake. Their revenue was rising but their market share was falling. This situation stemmed from a number of reasons not least

of which was their dependence upon concessional business. When the British Empire declined, C & W generally stayed on to run the highly profitable international telecommunications for a country or the less profitable internal telecommunication network, or both. They did this after the successful negotiation of a "concession" from the host Government. Concessions represent monopoly power over the market so when they come up for renewal there is always keen competition from other international telecommunications companies from the USA, Canada, France, Japan, Germany, Sweden and Holland. They frequently undercut C & W who set their high prices against the quality of the service they offer. However, the greatest threat to the concessions came not from the competitors but from the host governments themselves who, in their desire to run their own utilities and to reap some of the profits, often wanted to nationalise the activities. They would either take over the entire operation or insist on becoming the majority shareholder. They did not, of course, have to wait for a concession to run out before making this frequently political rather than economic decision. A number of concessions were lost in this way in the general search for greater self-determination of the late '60s and early '70s. Pessimists predicted a life span of some 15 years for the remainder of the concessions held by C & W upon which about 95% of the company's revenue depended. Meanwhile the competitors had developed highly commercial organisations and were cashing-in on the growing demands from sophisticated industry in the more lucrative markets of Europe and the USA (4).

C & W felt a strong need to move from the public utility to the private system sector of the market and to adopt a more aggressively commercial stance. This would be necessary if the company was to survive and continue to offer employment opportunities to its extremely loyal, well-trained and career-oriented engineering staff. The Company had

recently had its fingers badly, and publically, burned in an attempt at diversification (the Coltronic affair) (5). It was painfully aware of the need to stay within the business it knew, that of telecommunications, and to approach the future in a more commercial, professional and planned manner. To meet their changing environment C & W needed to change their personnel, either physically by replacement or mentally by re-training. Being a career company, their commitment to the individual was such that the latter choice was the only choice, to be tempered by the recruitment of new skills where these couldn't be found or developed internally and a revision of the criteria against which new recruits were selected.

An immediate new appointment was that of a senior level executive to be responsible for staff development and training. He found the technical training to be well in hand. The importance of understanding and keeping up to date with changing technology was recognised in the Company and four training colleges were run exclusively for the technical training of C & W engineers. The largest was at Porthcurno (PK) in Cornwall, the others were in the three most important overseas locations, Hong Kong, Bahrain and Barbados. Management training was only recognised in terms of "administrative training" and there was a total lack of any formal management development.

The Company was also in the process of divisionalisation which implied a devolution of authority and responsibility to the branches overseas. For an organisation which, since the early days of the Eastern Telegraph Company in the previous century, had always been highly centralised with a policy that all decisions be "reflected back" to Head Office in London for solution, this was a major break with the past. The structure would change, the lines of authority would change, the traditions of "how things were done" would change. The hierarchical bureaucracy of the

Company was not ready for change, nor were the engineers and administrators who would be called upon to respond as professional managers.

The need for management training could not have been greater. The new Group Manager, Recruitment and Development, explored the training needs of every department in Head Office (HO) and drew up a plan for the management development of the Group as a whole.

The Company decided not to set up its own schools, as it had done for technical training, but to draw on the broader experience of external centres. Four such institutions would be involved. Middlesex Polytechnic would continue to run the two-week Introductory Management Programme (IMP) which was linked to a two-week in-house Administrative course; the Oxford Management Centre would be used for seminars to be attended by Heads of Departments; INSEAD would provide for the managers in Eurotech (the Company's European subsidiary); and the fourth institution, which would provide the bulk of management education, had yet to be selected. All the major centres were visited and the final short list comprised the three places most noted for their practical orientation and their close links with industry. These were Sundridge Park, Ashridge, and Cranfield.

Cranfield at this time, March 1977, had just moved into a brand new custom-built School; a building which expanded its capacities well beyond the needs of its existing clients. It was looking for custom.

The two organisations agreed to work together on a bold experiment; a joint venture in management development. The differing cultures of the two organisations and the differing values of their members made them an odd couple. They recognised their need for one another, enjoyed an enthusiastic beginning and then lived through a long and uneasy accord whilst making the painful readjustments

necessary for a long-term and productive relationship.

1980: Where Are We Now?

To date, 14 general management programmes have been run as part of the joint venture. All but one have been held at Cranfield; the maverick was conducted in the field, or to be more literal, in the desert, at Al Ain in the United Arab Emirates. The programmes were designed to cover a range of experiences and abilities. They fell into three categories:

1. the Middle Management Programmes (MMP);
2. the Senior Management Programmes (SMP);
3. the Management Refresher Programmes (MRP).

At the end of the initial three year contract, the SMP and MRP were merged into a new Experienced Managers Programme (EMP). The MMPs were of five weeks duration, the fourth week being spent on a project in HO; the other programmes lasted two weeks each and were located entirely at Cranfield. The mix of course participants for the MMP was usually one-third national staff (Nat), one-third Head Office staff (HO) and one-third foreign service expatriate staff (Fl). For the other programmes the split was nearer to 50/50 HO/Fl with no Nats being included. Together the 14 programmes accounted for 42 direct teaching weeks; a further 36 teaching weeks are ear-marked for the future.

During the past three years a number of significant changes have occurred in the environment of the joint venture. Five which have already had an impact on its development or promise to be influential in the near future are discussed below.

1. A Change of Leadership for C & W

The first happened shortly after the venture began. The

Managing Director resigned over the issue of Director's pay which had got caught up in the payfreeze of the Labour government. Despite their enormous overseas earnings, the Company found itself unable to make any increased earnings available to Directors, whose pay actually fell behind that of their own senior managers. Ironically their real earnings fell as their workload increased for there were fewer and fewer of them to share the responsibilities. It was extremely demoralising for them and for the Company as a whole. With the Managing Director's departure a great vacuum was created for he had been a man with a tremendous capacity for work. He was described by colleagues as strong-willed and single-minded. He apparently refused to delegate, insisting on personally making "all" the decisions. Some have since described him as a "dictator" but others believe he was a man of great vision, ahead of his time, intent on dragging the Company into the twentieth century. Wherever the truth lay, his sudden departure left them naked in their new found freedom. The appointment of two temporary Joint-Managing Directors added to the ambiguity as no strong leads could be expected from those sharing the role of temporary caretaker.

Eventually one of them was made Deputy Chairman and Group Managing Director. He brought to the job a management style very different to that of his predecessor. Far from being authoritarian he is open and participative. He believes in delegation and gradually his example has been followed by other members of the Company, particularly in HO where people had got used to passing decisions "upstairs" and being dependent on the instructions that were passed back down to them. The Chairman of the Company was also relatively new to the job. He had been appointed in October 1976 for a three year period and resolved to use his time and his influence to attempt to bring about a greater measure of industrial democracy with

the aim of worker-directors. His initiatives have been built upon and a three tier consultative machinery has recently been set up. So, a new spirit of "bottom-up" decision making is pervading the Company.

2. Traditional Business Wins Through

The second important development was that concessional business did not collapse. In fact, some new concessions were actually taken up. Linked to this the new business activities didn't "take off" in the way that had been hoped. This was partly because they were saddled with an unduly heavy share of HO overheads and partly because they were venturing into new markets, a hazardous experience for any organisation.

Two cultures had been developing within the Company. One was associated with the traditional business, the other with the new. The traditional Public Telecommunications (PT), side fearful of the spectre of declining markets and feeling threatened by the market-orientated attitudes of the newly spawned Division that was to salvage its future, withdrew into the safety of their protective bureaucracy and continued to be busy doing what they had always done. On the whole they didn't quite trust this radical departure from the past. It was as though by volunteering themselves to become part of this task-force for the future, former colleagues "ceased to be gentlemen" in much the same way as those involved with radio rather than telegraphy (that is wireless rather than cable) had been regarded some 40 years earlier.

Meanwhile, those who joined Communication Systems and Services (CSS), as it became known, felt they were spear heading the Company into the future. The excitement of exploration and the challenge of commercial opportunities attracted some of the more adventurous engineers and administrators from other parts of the Company; others

were bought in, including the Managing Director who was to run it. Physically set apart from the other buildings of HO, they developed an identity of their own. Any feelings of being a commercial élite within the Company were soon tumbled by their relatively poor financial success and their disappointingly slow take-off. The continued buoyancy of the traditional business restored the self-confidence of the remainder of the Company. The new business area is now seen more as a secondary generator of income rather than as an alternative.

3. The Purse Strings Tighten

The third area of change is fairly recent and concerns the financial situation of the Company. C & W has always been a prosperous company. It has had few debts, and during the late-1960s and 1970s the rapid growth in demand gave everyone the feeling that "money was oozing out of the floorboards". In recent months however, a new situation has been recognised; the Company is still prosperous but has greater need to spend its money with care. The reasons are four fold:

1. Firstly the strength of Sterling has meant that revenue, earned in foreign currency, yields less than formerly when remitted back to the UK at less favourable exchange rates. So even though revenues are up, remittances are down.
2. The second problem is the high level of inflation in the UK where many of the costs are incurred. The current (1980) rate is 20% (6).
3. Linked with this is the third problem - the size of HO. Some 2,000 people are now employed by HO in London; they have just been awarded a 20% pay increase. The HO administration represent about 30% of total costs, a heavy burden to be supported by the revenue earners out in the field.
4. The fourth problem is a new one to C & W and potent-

ially the most worrying in that the others may only be temporary. It concerns the growing need to borrow. An MLR of 17% (7) may also only be temporary but the need to borrow is unlikely to be. Medium term loans raised outside the UK for overseas investment are subject to local rates of interest. This is usually in single figures but, even so, loan capital currently stands at £16½m compared with £6m last year (1979) and £2½m the year before (8).

With an equity base of £100m the Company is felt by some to be reaching its borrowing limits. The extra cash is needed to maintain the high level of investment in capital equipment in Hong Kong and Bahrain where keeping up with an ever-changing and increasingly sophisticated and expensive technology has its price. New business (CSS) is another area requiring a high level of investment and new concessions like those in Botswana and Tonga also require high initial investment which yields only a small return in the short-term (9). These increasing demands have led to a new awareness of the need for effective financial management. A freeze has been put on HO posts and a 5% cut imposed on total numbers of staff. Suggestions have been made that "low priority areas such as public relations and training" are cut and minor economies have been made all round. Total costs of activities have been measured sometimes for the first time; training is such an example - £8m per annum - much of which is absorbed by the costs of running three technical training colleges. (Barbados was closed down in 1978).

The developments outlined above have led to some important potential developments for the immediate future. External circumstances, as well as internal desires, are seen as forcing change on C & W.

4. Think Tank for the Future

In the early Spring of 1980 six senior managers in the company and an external manager from IBM were seconded for three months to work together on a full-time investigation of the future constraints on the Company's development. This was the first time that such an exercise had been undertaken. The Management Systems Review Group (MSRG), in their Report of March 1980 "recognise that two aspects upon which the Group's future profitability significantly depends are:

1. Identification of future business opportunities
2. Reduction of running costs".

They stress the need for greater financial accountability throughout the Company via the creation of Revenue Earning Units (REUs). These would be profit centres not simply cost centres; they would have a line responsibility to their Regional Director who would, in turn, be responsible to the appropriate Managing Director (PT or CSS). The functional departments in HO would play only a supporting role. This change in structure has important implications for management development activities. The increased decentralisation, to be made possible through the installation of a new IBM computer-based business information system, shifts responsibility and authority from HO to the Branches. Career opportunities at HO will decline and the managerial demands being made on those in the REUs will increase. The most important training needs must be identified and appropriate development activities be designed to match them.

The plan has its opponents, not so much on principles as execution. They do not believe that the relevant financial data will be available in time to allow any manager to make a meaningful analysis of a situation, nor do they

believe that the manner in which financial data is currently collected and analysed will be suitable for the purposes of the general manager with specific local problems. The proposed structure depends very heavily on the ability of the manager to access the appropriate information and on his ability to interpret it correctly.

The need to increase the financial awareness of business managers and the business awareness of Engineering and other service departments was identified in the MSRG Report. They also drew attention to the need for improved medium and long-term planning - in marketing, finance, and personnel, particularly manpower, succession and training.

5. Who's Afraid of Denationalisation?

The fifth and final thread of change in the Company during this period is one based largely on speculation and entirely in the future. It concerns the Tory Government's announcement to denationalise the profitable sectors of the nationalised industries. There are few to choose amongst; C & W is one of them. No decisions have yet been taken but many people expect a partial denationalisation with the Government retaining 51% of the shares. Even a partial change in ownership will lead to a demand for tighter managerial controls. Should this come about the Post Office will in all likelihood have lost its monopoly too, offering some interesting market opportunities for C & W.

Operating as it does, under Government ownership but entirely overseas, the Company finds itself in a strange dilemma. It is not a State Corporation like the Post Office, whose key position in the economy ensures its existence, but has to do much as it does without any such assurances. C & W has to rely on profits for its existence. The Government seems to benefit in both directions

at the moment - demanding, and getting, a profitable return and allowing the Company to subsidise its political activities overseas. C & W's involvement in local and international telecommunications makes for important British influence in many parts of the world, particularly in the Indian Ocean and the Gulf. Some branches are strategically important to Britain but are loss-makers for the Company. For example, the Falkland Island branch is run at an annual loss of £100,000. The Ministry for Overseas Development has been asked to make available official overseas aid to subsidise this expense but refuses.

Private or semi-private ownership may insist on the closing down of unprofitable branches; a Government eager to cash in its assets may sell off the more profitable parts of the Company like Hong Kong. This could be fatal to the Group as a whole. Nothing has happened yet and maybe nothing will but the insecurity engendered worries some and excites others as it sends its ripples of uncertainty through the Company.

Implications of these Changes for Management Development

The changes taking place in the Company - the adoption of more open styles of management; the maintenance of existing markets; the new financial difficulties; the recommendations of the Management Systems Review Group; and the possibility of a change in ownership - were mirrored by changes in the area of management development within the Company. One small, but significant, change came with the change of name from Staff Department to Personnel Department. It was more than simply a change of name. It represented a restructuring of the department, a seat on the Board and a shift in emphasis from "staff welfare" to a professional concern for career development, manpower planning and related issues. It also represented recognition by the Company for the importance of its most valuable

asset - the people it employs.

Cranfield is to remain the main route for management training and education. The success of the MMP has led to a waiting list of 300 who will take a further five years to filter through Cranfield. Those more senior managers, in both age and status, are frequently reluctant to leave the office for two weeks at a time for what they often regard as the dubious benefits of attending a management programme.

In order to improve selection of participants and to ensure equal opportunities for all departments, the system by which staff development is structured has been improved. A Staff Development Committee is chaired by the Group Managing Director; a Development and Training Committee by the Head of Personnel. A section of the Personnel Department is devoted entirely to staff development and a senior manager in each department of HO and each major branch overseas has been nominated by the respective Head of Department or Branch Manager as their Departmental Training Manager (DTM). The DTM is responsible for identifying training and development needs and for ensuring that they are carried out, giving assistance and guidance when necessary. There are now 20 DTMs in HO, one for each Department, and one for each of the major branches overseas; 80% of the people work in 20 of the branches and they are all covered. The others are looked after by HO. F1 staff are catered for by two members of the Personnel Department, both formerly F1 staff themselves. The DTMs vary in their enthusiasm for the task just as the Departments do in their belief in the need for training of any sort, managerial or technical, for their staff. There is general acknowledgement of the need for management development in the Company since the programmes started at Cranfield. There is some disagreement as to where and how this should be undertaken but the consensus view is that a good start has been made at Cranfield and should be

continued.

Meanwhile, Cranfield's environment had also been changing. Trade had blossomed and a situation of near-enough full capacity had been reached. Lecturers had greater opportunity to select the sort of work they personally enjoyed most; this did not always include in-company general management programmes. An analysis of the revenue earned by the programmes showed the most profitable type to be publically held general management programmes, where every additional participant after break-even represented marginal profit. C & W programmes may have offered a guaranteed income but it was also a fixed income.

Part II: The Educational Context

The joint-venture was created, an intangible entity, without physical form or shape. It was the product of two completely different organisations who, with their overlapping needs, designed it to operate to their mutual benefit. The term "joint-venture" was proposed by the newly-appointed Professor of Management Development at Cranfield who was to become the Project Director. It was adopted because it encapsulated the spirit of co-operation and the close links that the Company was seeking with an appropriate business school. Cranfield was seen as appropriate for a number of reasons: it was technologically based, international and enjoyed a high reputation. It resembled C & W in all these ways and, in addition, was making major investments into its own resources - new building, new equipment and new staff. It was seen as being on a rising trend.

The Objectives of the Joint-Venture

The original proposal, developed by the Director of the School of Management and the Professor of Management Development in response to the Company's interest was for

a co-operative venture. Policy and plans were to be agreed by a joint Steering Committee who would also supervise operations. Even at this early stage several of the key issues had been recognised. The need for Cranfield staff to become familiar with the work of the Company and the changing roles of its managers; the need for specially-designed teaching materials; the need for the active support of the senior managers in all the functional and geographic areas of the Company. They were essentially the need to collaborate and the need to communicate. Nor was the management education effort seen to be limited to the Cranfield campus. "Follow-up" activities were seen as natural continuations of taught courses; in-company workshops were envisaged for issues as wide ranging as policy formulation for the Group as a whole through to individual counselling. The proposed Project Team was impressive. A Project Director, supported by a full-time Administrative Assistant, would report to the joint Steering Committee. Reporting to him would be a number of Course Tutors, one of whom would be a Company man seconded full-time for the period of the venture, a Teaching Materials Co-ordinator, a Research Co-ordinator and an in-company Operations Co-ordinator. This team would be responsible for harnessing the energies, commitment and contributions of the members of both organisations.

The objectives, as finally agreed, were that Cranfield "will act as a major resource in the management development activities of C & W Ltd. from now (29th March 1977) until March 1980". The role was to encompass working closely with the Company identifying "specific problems associated with change and growth", discovering how they could best be resolved and "designing and providing training courses which prove to be needed to equip staff in dealing with these changes". In addition, it involved "acting as a catalyst in the developing of new thinking and skills amongst managers at all levels; providing a forum for discussion of all subjects of concern to management; (and)

identifying required skills and building these skills into Cable and Wireless Ltd." (10)

The apparent carte blanche was limited by the Steering Committee. This committee comprised three representatives of Cranfield and four representatives of the Company. "(It) will have responsibility for setting out training policy and plans which will be implemented by the Director of Studies working through his course tutors. It will advise on the determination of training needs but will not be responsible for course content which sets out to meet these needs" In reality, it spent a great deal of it's time discussing and reviewing course content and the mechanics of programme planning. Less time was spent grappling with the trickier strategic issues and their implications for the internal political systems of the Company.

The initial agreement also recognised a formal programme of five types of training activity: general management programmes at three levels - Senior, Advanced and Middle; specific functional programmes and in-company workshops. The joint nature of the venture was emphasised:

"programmes will aim to consist of a mix of contributions from both parties as appropriate to the subject matter and teaching objectives".

The objectives, as outlined above, were broad enough for all those concerned, over time, to develop their own interpretation by homing in on specific issues. This included items mentioned by one side but not the other, such as the precise manner by which the operation would be manned. The Project Director pressed continually for a C & W manager to be seconded full-time to the joint-venture. Several job descriptions were discussed but the appointment was never made. The decision was constantly stalled until the programmes were set up satisfactorily and top

managers in the Company's Personnel Department could legitimately regard the expense as unnecessary. The programmes by this time only needed day-to-day liaison which could well be provided by existing staff. The follow-up aspect of the role together with the continual investigation into training needs and innovations into style of programme were not considered as sufficient justification. The newly-created DTMs in HO and the major branches were expected to handle these aspects, although they did not necessarily have the skills, interest or time to do so effectively.

The "agreement" had to be kept flexible so a legal contract as such was ruled out. Instead, a series of letters were exchanged, setting out "the arrangements". This meant that some issues were forgotten or mentioned as an afterthought or simply assumed. In the heady days of all possibilities it was not unnatural for the pipedreams of one to be fed by the optimism of the other. As time passed, the mundane realities of everyday disappointment destroyed many an unshared vision but for some the idealism lived on and, indeed, still does. Others, however, have found themselves having to compromise with a bitter suspicion that the Company only ever saw Cranfield as an external provider of internal courses. Organisational development was the unwitting bait for management development adventurers. Expectations, like beauty, tend to be in the eye of the beholder. The negotiators were probably right to keep the "arrangements" flexible; where they failed was in not clarifying them as they proceeded. There was, as always, a need to re-think because the situation was continually changing. The environment was changing and everyone's understanding of the issues involved was developing with the experiences of action.

The First Six Months

This was a period of great activity. It began with a

C & W presentation at Cranfield which was reciprocated at C & W's HO in London. Meetings were held between the Cranfield Management Development staff and the joint Chief Executives, the Unions, the Training Department and the Corporate Development Advisor. A visit was also made to the C & W technical training school in Porthcurno. Individual interviews were held with 23 C & W Senior Managers, including Directors, to explore their opinions on management training needs and Company values and activities. Discussions lasted between one and three hours and the outcome formed the basis of a meeting of Company Heads of Departments with Cranfield Management Development staff. C & W's Chairman, a former Secretary of State for Education, expressed an interest in the management development activities, attended the meeting and invited the Cranfield staff to lunch with him and his Directors. Meanwhile, back at Cranfield the first MMP had been run just five weeks after the signing of the contract.

Although the comprehensive and high level team envisaged in the first proposals never materialised, the Project Director did not lose his commitment to the concept of a Project Team. He wanted lecturers from Cranfield and managers from the Company to commit themselves to working on the joint-venture for periods of not less than a year at a time. He was opposed to the approach by which people were "tapped on the shoulder every now and then" and asked to make a teaching contribution to a programme. To some extent the plan succeeded but at the same time by nominating one specific member of a subject group to work on the C & W project, some Heads of Groups felt they could legitimately wash their hands of any further interest or involvement.

The Course Tutor successfully called together the newly convened Course Team to discuss the nature of the first

programme before it was held and a review meeting afterwards. This represented greater cross-disciplinary team work than was usual at Cranfield, even on General Management Programmes. The team evaluated the first programme, a three-week Middle Management Programme (MMP7), and debated the second (MMP8) scheduled for the autumn, some four months later. The objective was a general management programme, tailored to the needs of the C & W middle managers. The structure of the programme was changed to incorporate a project week held at HO and new ways of integrating a teaching input from C & W personnel were explored. The outcome was a five week programme comprising 3 weeks at Cranfield, 1 week working on Company projects at HO, and a final week back at Cranfield for project presentations and consolidation of the academic subjects. This basic formula for the Middle Management Programme (MMP) has been kept ever since.

The projects were to be analytical rather than evaluative. The plan was for groups of about four managers to spend the week in a particular department of HO gathering information as to how it operated. They would be looking at the objectives of the department and how they fitted into those of the Company as a whole; they would describe the departmental structure, the interfaces with other departments and the informal networks of communication; they would also attempt to locate where the major pressures for action came from and what were regarded as the major problems occurring. Finally, they would look at the ways in which the department was developing for the future and what sort of opportunities and threats were anticipated. The following week each group would present their findings to their fellow students and representatives from the host department. The latter could then contribute to the discussion initiated by the project group. In this way the participants would be learning how to undertake organisational analysis and in doing so would be developing skills in planning, observing, analysing,

presenting and working in groups (11).

Individual members of the Cranfield academic faculty spent time with their counterparts in the Company to develop case studies and other teaching materials. There were also meetings between Cranfield staff and the senior managers from the host departments for the in-company projects. All the participant managers on MMP7 had been interviewed and their views on the curriculum were incorporated into the newly planned programme for the autumn.

By the time the first Steering Committee meeting was held, six months into the venture, the second MMP was underway, two company based case studies were completed, three projects lined-up and the number of "shared" classroom sessions had risen from 2% to 20%. Training and development needs for MMs had been investigated at all levels of management and continued exploration of these was planned through a postal questionnaire that had been piloted on MMP7 and MMP8. On the immediate agenda were official visits to Cranfield and MMP8 by the Chairman and by Union officials. In progress were a further eight case studies, designed to create a portfolio from which future course teams could select specific topics at their discretion. The in-company project presentations were to be recorded on CCTV so that students could review their own performance and undertake critical self-assessment. The video tapes would then be stored for viewing by subsequent course members or Cranfield lecturers who were interested in learning about particular Departments and Company issues.

It was also planned to follow up the course participants at a later date at their place of work to see what influence the programmes had actually had on them. Such an evaluation procedure would incorporate a time perspective through which the Steering Committee hoped to become

increasingly realistic about training needs and increasingly adept at meeting them. The importance of regular communications between the two organisations was recognised and plans were made for a new C & W training brochure to be circulated and a twice-yearly Newsletter to be launched. The newsletter was to contain details on programmes being held and popular academic articles. It was also anticipated that previous course members would make contributions and that it would act as a forum for debate on management development and education. Cranfield hoped that these two publications would establish them as an integral part of the Company; they also planned for a middle manager to be seconded to the Management Development Research Centre (later the Management and Organisation Development Research Centre) on a full-time basis.

Activity was running at such a rate, the first overseas programme was to be held in two months and the SMP was to be launched in three, that the Steering Committee decided to meet quarterly rather than half-yearly.

The Full Three Years

The first six months, as has been briefly described above, was typified by activity, excitement and visible progress. All three were to fall away sharply in the following year. Commitment to and interest in the joint-venture fell away from both parents of this rather awkward and demanding child. With the passing of time, the novelty of involvement was lost. The original challenges had been successfully met and new projects took the attention of lecturers and managers away from the joint-venture and towards other things. The once-pampered child lost its charm and became neglected. Sustenance was withdrawn, not in terms of funds but in terms of participants and of specially created teaching materials. The two programmes scheduled for the end of 1977, an overseas MMP and the first SMP, both fell victim to a shortfall in the number of managers

willing to attend. The overseas programme bounced around the world before coming to rest, at the last possible moment, in the most remote possible location. No branch manager would foster the child to the extent of being responsible for a new, uncertain and experimental MMP being held on his territory. It would probably be a lot of extra work and might fail so was a responsibility to be avoided. It was eventually held on relatively neutral ground - in the hotel of a desert town where the Company had a partnership with a local firm. Twenty-four locally based MMs were expected to attend the programme; instead there appeared a strange assortment comprising mainly Arab national staff and Indian expatriate technicians. The only Fls were from the Bahrain Training Department and a Staff Manager was flown in from Management Services in HO. There was not a front-line manager among them! The three weeks were fraught with administrative problems, generally of the Company's own making.

Cranfield academics were flown in and out to present intensive modules of their functional specialisation; there could be no in-company project and few Company speakers. Nevertheless, as an educational experience it was felt to be worthwhile by those who attended. It was also a powerful learning experience for the Cranfield staff who began to appreciate something of the Company culture - what it was like to be an expatriate out in the field with a job to do, yet hamstrung by dependence on a remote, slow-moving bureaucracy hundreds, maybe thousands, of miles away with apparently no understanding of the local situation. That, intermingled with the strong undercurrents of internal politics, put into the minds of some of the Cranfield staff their first apprehensions about the depth of commitment of C & W to the joint-venture.

At more or less the same time, the first SMP, due to run two weeks later, was cancelled through lack of support. Unlike MMs, SMs couldn't be ordered to attend nor were there enough of them to be able to stand in for one another at the last moment as had happened on the MMPs. None of the three functional courses planned for 1977 ever materialised. A general disquiet began to pervade Cranfield. Was management development of such low priority that only those managers with nothing else to do (such as Fl staff awaiting a new posting) were selected? Was the Company only ever going to send managers who, because of the structure, could not effect change on their return to work? Disenchantment set in; Heads of Groups gave little lead to their staff to devote the necessary extra energy to the development of new training materials for C & W and some actively discouraged it. The Course Tutor responsible for the early success of the MMP moved on to other things and because the joint-venture was a "special case" it had not found its way into the overall schedule for teaching commitments within the School. As a result a new Course Tutor was asked, at short notice, to re-assemble the next MMP (MMP10) from those academics who were both available and willing. The programme was not well timed as it was scheduled to run over Easter with the project and its presentation straddling the holiday weekend. C & W speakers and project hosts were difficult to pin down to specific times and dates, the Cranfield tutors had to be endlessly juggled to accommodate the changing arrangements of Company speakers and, most disconcerting of all for the Course Tutor, some of the participants arrived resentful of the conflicting attitudes about the importance of management development within the Company. It became increasingly apparent that all was not well between Cranfield and C & W nor between managers within the Company.

Two months later, when this new low in the relationship had been consolidated by gradual fading of interest and effort on both sides, the Senior Management Programme was finally launched. It was a two-week general management programme similar in much of its content to the MMP. A greater emphasis was placed on strategic issues but fundamentally it was a fairly conventional taught course tailored to the general orientation of the Company. The "skills" component suited many of the participants who had not been exposed to them before, but there were others who were disappointed by both the content and the approach. In April the first Advanced Management Programme (AMP) had failed to materialise; in July the second AMP followed suit.

The general air of mutual dissatisfaction prevailed until the autumn when the fifth MMP (MMP11) was run by a largely absent Course Tutor. The School's refusal to reprimand the offending Tutor with what the Project Director regarded as "sufficient" severity caused the latter to resign his leadership of the venture. The self-perpetuating downward spiral had resulted in a crisis of commitment. Many of the original academics were no longer associated with the programmes. Most of the unfinished case studies of the previous year remained unfinished; the newsletter had never been launched; the seconded manager became a full-time liaison man within the company who never materialised; the programmes were regarded by many academics as a burden; the early enthusiasm was replaced by mutterings in corridors. The joint venture had ceased to be exciting and challenging. It had become uninspired and routine. Languishing in such a sorry state actually proved to be its salvation. Shocked by the venture's relative decline, and it must be emphasised that it was still performing at an acceptable, albeit mediocre, standard, several of those involved determined to improve matters.

As a result of those efforts and the renewed interest in the venture that they evoked, each successive MMP went

from strength to strength. In the remaining 18 months MMP12, MMP13 and MMP14 all benefited from dedicated Course Tutors, enthusiastic lecturers, carefully selected participants, confident C & W speakers and the additional bonus of a high level BBC producer to direct the new style "video-reports" of problem-oriented in-company projects. These reports were widely viewed within the Company. Depending on the subject matter of the project report, the Managing Director, Directors, Heads of Departments and other Senior Managers have used them as a basis for discussion; their impact therefore reached beyond the confines of the management development programme. Participant managers returned to the company with their verdicts on the MMP; there is now a waiting list of 300 middle managers for this programme.

A total of four SMPs were run, all of them in a similar, although slightly ammended vein as the first one. The same criticisms remained, that the programme was too mechanistic, too structured and too formal. However, the support of senior academics to interact with senior managers both in the Company and on the programmes, was lamentably absent. The resources to run a strategy-orientated open-discussion style of programme did not exist. In addition to which many SMS could genuinely include exposure to managerial skills amongst their training needs!

In the Spring of 1979 a new, and perhaps the most difficult, programme was launched. It was the Management Refresher Programme (MRP) designed to meet the needs of the older middle managers in relatively senior positions who were unlikely to be promoted further. However, they filled important roles and would continue to do so until retirement. They might well have managers reporting to them who had attended the MMP. Because of the obviously sensitive clientele for this programme and because the

problems met by the MMP and the SMP were now apparent, a lot of planning and preparation went on behind the scenes before this programme was launched and its participants were selected. It lasted two weeks and almost half of the sessions were run wholly or partly by C & W speakers. The level of integration was high and was to rise to 60% on the next MRP. This reflected the close collaborations between the Course Tutor and his counterpart in the Company's Training Department. The experiment, the successor to the ill-fated AMP, was only to run twice. On both occasions the participants deemed it a success, the second less so. On both occasions the lecturers (from both organisations) deemed it hard work, the second time more so. In retrospect it was agreed that the reason lay in the mix of participants. (The importance of selection is discussed on p.117).

In May 1979 a Senior Managers Workshop was held at Cranfield to discuss the management development work in the Company and the role of Cranfield. It was attended by 28 managers from the Company and represented the first meeting of its kind since the early months of the venture, two years earlier.

So, by the end of the agreed three years a total of 14 programmes had been run; 8 MMPs (one overseas); 4 SMPs 2 MRPs. Renegotiation of the contract was undertaken several months earlier when one MMP, one SMP and one MRP had still to be run.

Renegotiation of the Management Development Contract

Renegotiation of the contract took place at one of the regular meetings of the Steering Committee. The situation as far as the programmes was concerned was fairly healthy. The MMP had come through its problem period, the SMPs were running, though not to everyone's complete satisfaction, and the MRP had been successfully launched. C & W

came to the meeting to suggest an increase in the number of MMPs from two a year to three a year, the maintenance of two SMPs a year and two MRPs a year with the possibility of an additional two-week programme to go to the SMP or MRP as required. This represented an increase in annual general management programme weeks held at Cranfield from 16 to 20-22. They were stunned by Cranfield's response; an offer of 12 programme weeks a year. The reason given was that Cranfield was now reaching a situation of full capacity, its resources were limited and it found itself in a relatively buoyant market. The emphasis for the future was on the more profitable public programmes rather than in-company programmes and there was a strong belief that no single Company should be relied upon for a disproportionate share of total revenue; the maximum teaching weeks for any single customer was in the region of 12-16 weeks per annum. In addition, the Director of General Management Programmes was of the view that academics would welcome more variety than that offered by more of the same for a single company. He had called a meeting to discuss their preferences but few bothered to attend. After so much had been said and assumed about a special relationship existing between the two organisations, the "here today, gone tomorrow" attitude of the School came as a shock and a disappointment to the Company representatives at that meeting. Their deep-felt Company values of loyalty and integrity were affronted by the open hostility with which they felt much of the discussion was conducted.

No decision on the future could be made without further deliberation by the Company. Cranfield looked to a continuation of 2 MMPs and 2 SMPs each year. Three months later they were offered, and accepted, three MMPs and two Experienced Managers Programmes (EMPs). This new course replaced the former SMP and MRP; a new-style SMP, based on discussion groups, was to be launched at a rival

business school, the Oxford Management Centre. The news filtered unusually slowly through Cranfield; it received a very mixed reception.

The Second Phase

A new reality exists. There is less emotion, more concern. The people who have stuck with the venture have a clearer sense of purpose than either they, or others, had before. They work with their counterparts in a more open and straight-forward way and many of the wrangles of the past are seen now as issues to be resolved or ideals to be set aside, beyond the limitations of current management development activities.

This is consistent with the beliefs of Herman (1975) who stresses the importance of adopting a Gestalt approach to problem-solving. He warns against dealing with symptoms in isolation as the solutions produced are likely to be only superficial and temporary. He emphasises "staying with the transaction until both parties have completed their business ... (their interactions will then be) stronger, deeper and more concrete". The history of the joint-venture is replete with "symptoms" of misunderstanding and conflict. The effect has been to alienate a few and divert others. The majority are possibly not even aware; some have recognised problem areas and started to work them through. As a result, they have a better understanding of, and greater respect for, one another. It is on them that the future of the joint-venture depends.

The problems are by no means over but they are at least being recognised. Nor are the programmes over. Almost as many programme weeks have been earmarked for the next three years as have been worked through over the last three years. Presentation Skills Workshops for C & W speakers have been mooted since the very first programme

was run. It was a sensitive issue but gradually the demand began to be voiced by the speakers themselves. Three workshops have been arranged in the space of five months. Yet twice they have been cancelled at the eleventh hour. Old problems die hard.

The Organisational Evolution of the Joint-Venture

Wacker's (1979) model of organisational evolution fits the experiences of the joint-venture very well. He identifies seven non-linear phases as shown in Figure 2.2.

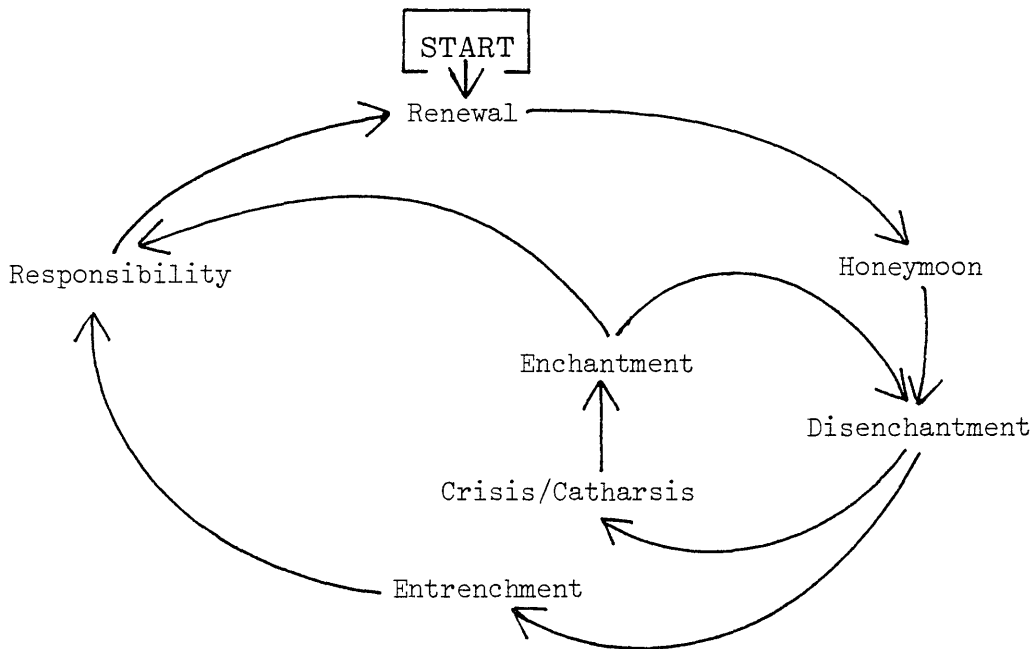


Figure 2.2 : Model of Organisational Evolution (Wacker,1979)

The initial phase he calls renewal as the creation of an "organisation", in this case the joint-venture, is the reorganisation of former situations in the contexts of which are the seeds of future problems. The most important feature at this stage is the shared vision which joins people together in a new way. They proceed naturally into a honeymoon period when attention is focussed on adjusting to the new arrangement and making it work - the necessary generosity of spirit is not expected to last! A number of researchers (12) believe that disenchantment sets in as people begin to perceive differences between their expectations and their observations. This

anomalous situation is perpetuated because the people involved are not willing to reconceptualise their basic premises. The shared vision which had previously held everything together disintegrates and the stage is set for conflict.

Two routes are open. One is confrontation, the other a "cold war" peace. In the former a good deal of "scape-goating" takes place and the original authority figures are often replaced. This crisis/catharsis phase inevitably leads to enchantment, either through the acceptance of new leaders or forgiveness of the old. This phase, like the honeymoon, is short-lived, leading either to new disenchantment or to another phase, responsibility. The alternative route, cold war peace, is entrenchment. The gaps between the ideal and the actual are accepted, territories are carved out and barriers are put up. Individuals restrict their interests to their own tasks and ignore everything else. Trust is low and gossip cruel. There is a persistent lack of imagination, enthusiasm and vigour outside the narrow bounds to which people have resigned themselves.

Either route can lead to the responsibility phase. Here adjustments are made to what is actually happening and responsibility is taken for the outcome of events. Ultimately this stance leads to new visions and the renewal phase is embarked upon once more.

The evolution of the joint-venture was, and still is, partly a reflection of the evolution of its members. Different people took different routes and moved at different speeds; some got stuck at certain phases, others were brought in at certain phases. Likewise, different aspects of the venture can be seen to have progressed at different rates. At whatever level one focusses, a struggle seems necessary before the desired state of

responsibility is reached. This compares with Whitehead's freedom-discipline-freedom model. Wacker sees one way of short-circuiting the anguish and getting into a productive renewal-honeymoon-responsibility spiral. It is by acknowledging the need for reconceptualisation as events take place. Such flexibility may lead to chaos without the knowledge of hindsight. However, reconceptualisation is the prerequisite of the responsibility phase and it seems to be a slow and painful task when done naturally. The important issues for the joint-venture arising from the model are:

1. Although it has had its ups and downs, the joint-venture was not unusual in this; it is a normal part of the evolutionary process of all organisations.
2. Some of the problems and traumas might have been avoided if people had been willing to reconceptualise issues when things did not appear to be going to plan. Rethinking was perhaps associated with "failure" rather than with the opportunity to avoid failure.
3. Reconceptualisation should not be confused with the easy option of abandoning plans as soon as problems are encountered. It entails careful and serious thought, bold and courageous action. Sometimes these may be as tough to grapple with as the other routes to reconceptualisation - those of crisis/catharsis and entrenchment.

The Nature of the Teaching

Several approaches to the management educational needs of the C & W managers were considered. The choice available ranged through the full spectrum of educational theory from formal classroom teaching at one end to problem-orientated in-company work-group learning at the other. Both have their advocates and their critics. There was

never much doubt however in the minds of most of the negotiators as to the style of education sought. It was neither wholly teacher-centred nor wholly student-centred; it was Company-centred. Lecturers were drawn from both organisations. They were encouraged to work together although many chose to work independently. The teaching approach they adopted was a matter of personal preference so long as they related principles to applications and applications to the Company's operations.

The managers attending the programmes, by virtue of their age and careers with the Company, brought with them experiences from "the real world". The lecturer could choose whether to present his theoretical arguments and hope that the participant could link them unaided to his past experiences, or he could draw out the collective experiences of the class and build his teaching on that. There were as many different variations as there were lecturers but all had to work within the confines of the classroom and for the larger MMP this meant a conventional tiered lecture room. Neighbouring syndicate rooms could also be used for small group discussions.

The Learning Environment

The location of Cranfield is remote. There are no distractions, "the office" is a long way off, participants are forced to live closely together although they have the privacy of their own study bedrooms. These are comfortable and convenient, they comprise part of a custom-built residential Study Centre across the road from the School of Management. The meals served are excellent and the level of service is generally high. The quality is equivalent to a 4-star hotel. Participants' material needs are met as far as possible and any special problems are generally handled for them by the Programme Administrator. The majority of participants on other programmes are male, in the age range of 30-50, holding middle to senior

managerial positions in the private sector of British industry.

The quality of the learning experience depended partly on the participants own attitudes and abilities and partly on those of the lecturers. To make an acceptable contribution to the programme, the lecturer must be both credible and relevant in the eyes of the participant. The likelihood was that the Cranfield lecturers would be regarded as more credible and the C & W lecturers as more relevant. However, both could move towards an ideal state of being credible and relevant. The Cranfield lecturer could "tailor" his material to the experiences of the Company to make it more relevant for the participants; the C & W speakers could develop their presentation skills to make themselves more credible as lecturers. Some high-level C & W speakers, like the Managing Director, already had high credibility because of their status in the Company. Some Cranfield lecturers might, through poor performance, lose their credibility. Without credibility a lecturer would not be listened to; without relevance he would not be understood.

Design of the Curriculum

The value of the management development programme lies in what managers can take away and apply back at their place of work. As discussed in Chapter 1, this is partly dependent on the content, that is what they're taught, partly on the process, that is how they're taught and partly on the overall objectives, that is why they're taught. Although many would argue that the performance of individual lecturers on the day is "what counts", getting the right mix in the curriculum design is also vitally important. For a C & W programme that was not only the right balance between the subjects taught but also the best combination of Cranfield and C & W speakers - taking into account their lecturing styles and the extent

to which they had "tailored" their materials. These decisions hung on the specific objectives of the programme which, in turn, derived from the perceived training needs. Training needs could be described as being the product of five factors. These were:

1. Company policies and strategies;
2. research undertaken at the workplace;
3. the educational beliefs of the academics involved, particularly the Course Tutor;
4. feedback from participant managers;
5. feedback from participant lecturers.

Described above is one half of the genealogy of a C & W programme at Cranfield; the other half, which must be matched up to it, is the careful selection of the appropriate managers to attend the programme. The inter-relationship between these factors and the resultant programme are shown in figure 2.3.

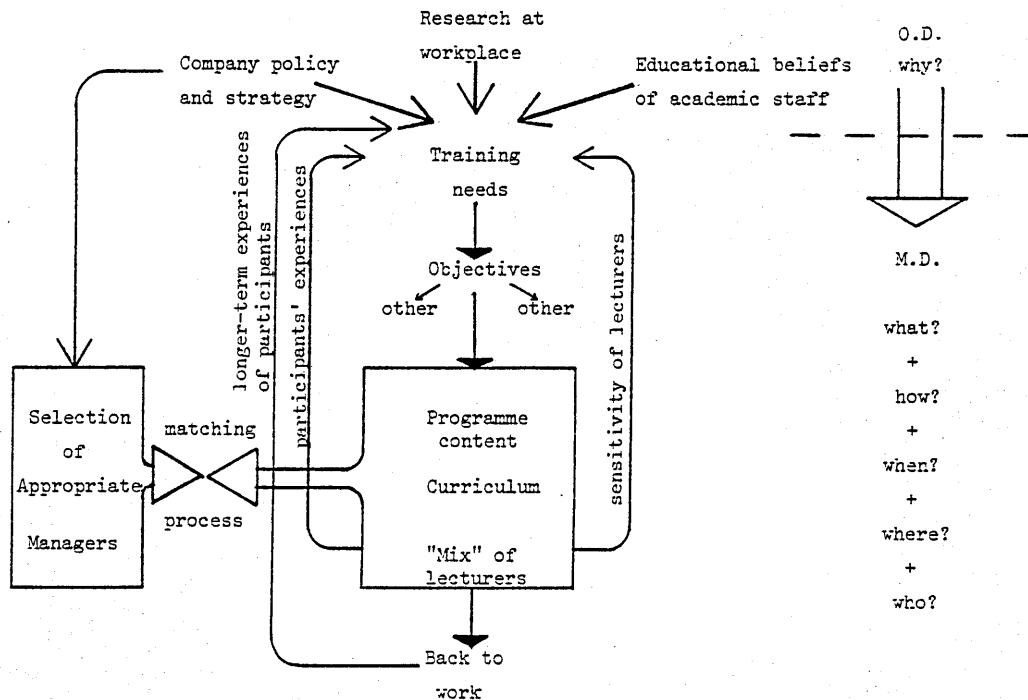


Figure 2.3 : The Perception of Training Needs for Curriculum Design

The Boundary Between OD and MD .

It is important when deciding on the content of a programme to make clear the distinction between the strategic question why? this content and the operational questions what? how? and when? this content. These questions belong respectively to the domains of organisational development (OD) and management development (MD). Because the decisions as to who will teach what, how, where and when should not be made until the question "why do we want to train our managers?" has been answered, successful management development must be seen to be a function of organisational development.

A fundamental problem for the joint-venture was, as the Professor of Management Development was later to point out, that the Company had a policy but no plan. They had taken the policy decision to send their managers on development programmes but had not planned how they were going to use these newly-trained managers when they returned to work. They had decided what to do but not why they were doing it. They knew why in general terms but not with the precision of a carefully thought through strategy. Because of this, lecturers and participants alike were never really clear as to what was being expected of them. Cranfield could have helped the Company to think through this problem but these were, by definition, early days and it would have been unlikely that any company would have entrusted an outside organisation with its inner thoughts. Experience here showed that a lengthy period of exploration, experimentation and adjustment was needed during which time each could put to the test the others ability, values and commitment before true collaboration could take place. As indicated earlier, through the impact of some of the later MMP projects, some organisational issues have been drawn to the attention of the top management in the Company by the participants

themselves. In this way organisation development has been a function of management development. The link has been established and from it new initiatives are expected to be forthcoming in the future. Like all circular relationships it is never easy to break into the circle at the apparently logical starting point.

Crucial Educational Issues for Management Development

When all those from both Cranfield and C & W who had been associated with the joint venture were, in the Spring of 1980, individually interviewed and asked for their opinions and experiences regarding the past and the future of the joint venture several important themes emerged. The individuals, some 44 in number, may have been involved as lecturer, course tutor, administrator, member of the Steering Committee or a combination of these roles. Despite their diverse activities they drew attention to similar issues. As a result, central themes have been identified. The core problem, both existing and potential, is the creation and maintenance of commitment on behalf of the lecturer both at Cranfield and at Cable and Wireless. Individual commitment is vital to the success of each programme and to the success of the venture as a whole.

A number of key solution areas were highlighted. These are "solutions" if the problem of a lack of individual commitment is seen as a current problem. If it is seen as the most likely, and it's certainly the most dangerous, future problem then these would be more properly described as "flashpoints", their potency varying with the commitment of the individual lecturer. To neglect these areas is to invite trouble. They are as follows:

1. The setting of the management development objectives;
2. communication of knowledge about the Company and the joint venture;
3. tailoring of materials;

4. the role of the Course Tutor;
5. rewards for lecturers and the Course Tutor;
6. selection of appropriate course participants.

Flashpoint 1: The Setting of Management Development Objectives

Despite the fact that the Company has drawn up a list of educational objectives for each of the programmes run, many lecturers felt a great lack of clarity as to what was, and is, required of them. This is partly a communications problem but it is also a problem of "scope". Scope can be interpreted in a number of ways. Because these are general management programmes there is the danger of trying to provide all things to all men. Specific management development needs are difficult to pin down because of the wide range of experiences and abilities amongst the participant managers. The "mix" is largely the responsibility of the Course Tutor and to save those who are taught from what Whitehead (1932) describes as "this horrible burden of inert ideas" (13) it is important that he selects only a limited range of subjects but makes sure that they are taught well. The result of doing otherwise is, Whitehead believes "the passive reception of disconnected ideas, not illuminated with any spark of vitality". He sees vitality as the secret ingredient of university information. The same information can be imparted more cheaply from reading a book but "the justification for a university is that it preserves the connection between knowledge and the zest for life." An atmosphere of excitement is engendered from an imaginative approach to considering "the facts". In this atmosphere a manager is provoked to think again about issues he might previously have accepted without question. His mind is opened to new ideas, new knowledge and new possibilities. To create this learning environment and meet the Company's stated objectives, the Course

Tutor must select the mix of subjects taught and the mix of lecturers and senior managers teaching them with great care. They too will have objectives for the programme; objectives of both an educational and a personal nature which may not always be consistent with the overall objectives of the programme.

Another aspect of the "scope" of the objectives relates to the venture as a whole rather than simply to individual programmes. The crucial issue here is whether Cranfield and C & W are, through the joint-venture, going to work together on the broader implications of management development or whether the venture is going to be limited to the provision of general management programmes in return for cash payments. In the latter case C & W would undeniably be the sole client in a straightforward business agreement. As for the former, it would include identifying and meeting the strategic needs of the Company and building on the foundations laid during the Cranfield programmes by following the managers back into the Company with further tuition. The scope for a broad involvement was certainly indicated in the original agreement but any attempts to activate it were never encouraged by the Company. Is it unrealistic and over-ambitious? Was the ideal of a broader involvement no more than a device, designed by the Company to win the support of the Cranfield staff at the outset and to prevent complacency setting in amongst them once the courses were underway? The Company undeniably wanted, and needed, a more professional approach in its non-technical operations. It wanted to produce "a generation of managers from one of functional experts". On being asked recently, the Managing Director said that he was very reluctant to involve outsiders in the Company's strategy, policy and structure. He was supported by some of his most senior colleagues in believing strongly that the things that really matter to an

organisation must come from within, since outsiders cannot ever hope to understand a company well enough to be actively involved in strategy and policy. However, he does believe that outsiders can help with skills. This is perhaps the cue for Cranfield to reassess its objectives.

Flashpoint 2: Communication

Problems exist here both between the partners of the venture and within their respective organisations. Communications between the two organisations have gradually improved over time as people have got to know their counterparts.

On each programme the main link is between the Course Tutor at Cranfield and his counterpart in the Company's Training Department. If this link is reinforced by contact between Cranfield lecturers and C & W lecturers, then the relationship between the two organisations is strengthened. The responsibility on any one individual for things going wrong is diminished and the enthusiasm for trying new things is increased. Concentrating communications into too few hands at the organisational interface puts a heavy load on a few people. It also runs the risk of creating a power base for a few individuals who can take upon themselves the role of gatekeeper.

Within the two organisations there are major communications jobs to be done. In the Company, management development opportunities have to be "sold" to potential participants and to their superiors who have to authorise their release, arrange for their work to be done whilst they're away and pay their fees. Host departments for projects have to be nurtured and senior managers encouraged to visit Cranfield and speak on the programmes. Simply "creating awareness" is not enough although it is a crucial step in the communications process. People also have to be

kept up to date on developments and be given feedback on their involvement. Likewise, within Cranfield the venture has to be "sold" to potential Course Tutors and lecturers if it is to attract the best among them. They need to know about the joint-venture - its philosophy, its financial contribution, its contractual obligations, its opportunities and its rewards. The broad-based Project Team envisaged at the beginning of the relationship would have provided a communications network throughout the School; the seconded manager would have been a direct link from deep within the Company. A momentum might have kept going instead of interest rising and falling to the rhythm of the course timetable.

Flashpoint 3: Tailoring of Materials

This is perhaps the most visible aspect of the joint-venture. It has many facets; the C & W speaker; the "shared session"; the in-company case study; the tutor's general understanding and awareness of the Company; the skill of counselling in the classroom.

There is still some disagreement over the value of having C & W speakers on Cranfield programmes. Nobody disputes their role but there is a minority view against their taking Cranfield "airtime". Because they are not professional lecturers, they are felt to interrupt the flow and create a backlash for the lecturer who follows them. Most lecturers however, regard them as an integral part of the programmes and many Company people think them essential; "Otherwise" said one "the experience is too isolated. It would be a waste of money without the C & W speakers because they make it more relevant and provide an opportunity for Cranfield lecturers to better understand the Company". Whilst it is generally agreed that C & W speakers should make a contribution the

"shared" session is not very popular. This is because such a session requires even more skill than a solo presentation. It is important for the two people sharing the session to understand one another's point of view and lecturing style. They need to work together as a complementary team and this usually entails a good deal of preparatory work beforehand. There is the danger for any Company speaker of being unwittingly "put on the spot" by their Cranfield counterpart because there has been insufficient pre-programme preparation. When it comes to designing and presenting their contribution, the Company speakers rely heavily on the guidance of their counterparts. Collaboration is not always forthcoming although many lecturers do recognise their responsibilities towards the C & W speaker. This is just as important for "C & W only" sessions as for shared sessions. The great danger can be that the speaker merely recounts the activities of his department or gets onto a personal hobby-horse. To overcome this they need careful briefing from Cranfield. In addition, some departments have developed a lecturing "package" so that anyone from their Department can make a similar presentation. This ensures that the general outline has been carefully thought through without the effort being repeated each time yet the detail can be added by the individual speaker.

Such a package has been developed by the Finance Department, who have had to come to terms with two problems. "The first is the wide spectrum of student expertise and experience in finance this means adopting a very general approach ... It is difficult to lecture at several levels; an associated problem is how to answer questions - at what level does one reply?" The second problem is that "it is not easy to follow professional lecturers on the same subject unless one is aware of the line that they have taken ... it's important to link up the academic theory with the practical actuality". In thinking through his teaching materials this Company

speaker was having to cope with the same problems that confront the professional teacher. He wanted guidance on where to pitch the lectures and what it was that the course was trying to achieve. He found it helpful to meet up with the finance lecturers at Cranfield and sit in on their sessions. Others have not been so fortunate in their experiences. One manager believing that "the interface between C & W and Cranfield leaves much to be desired"; another that "I sat in on a morning session ... I watched more than enough to see that practical problems were not being drawn from the theory. Parts of it were irrelevant. A bridge needed finding between tutor and audience but neither managed to find it". However, he remained undaunted and continued, "We need to build bridges between theory and its applications and we need to find appropriate illustrations for the principles ... (our managers) need to understand the fundamental issues rather than the mechanics. They need to be taught how to use a balance sheet and profit and loss account not how to compile one. We need illustrations from C & W to link to the financial principles ... we need illustrations that are relevant to the Company".

For most people the obvious relevant illustrations are company-based case studies. Although a number of case studies have been started only three have been completed and one of them has recently been withdrawn from use. The problems seem to be twofold. The first is in writing the case study; the second is in using it.

The writing of a case study requires a tremendous investment of time and effort on behalf of the academic. He needs to work very closely with the Company and be allowed access to all aspects of the central theme of the study. A partial account will be both incomplete and biased; as such it will be insufficiently robust for classroom discussion. The evidence developed needs to

be absolutely relevant. It is not at all useful for a Cranfield lecturer to be sent "some useful material" by a C & W manager as has in fact happened in several instances. The finished case should illustrate theoretical principles so the material has to be selected with these in mind. Both the purpose and the material needs careful selection; no case study should be developed for its own sake. A case study, by its nature, needs to be built on a problem situation and frequently on one that has been mishandled. To investigate such a situation involves the researcher in politically controversial issues with all their inherent problems. As the researcher attempts to gather data, barriers are put up against him, the Company clams up, managers subconsciously close ranks against the intruder in their concern for the exposure of individual personalities. British companies are notorious for not liking criticism and therefore they resist the researching and writing of case studies. C & W, for all its protestations to the contrary, is no exception. For the academic, whose input on a general management programme is never large, this actual or even anticipated reception is very demotivating.

When it comes to using case studies, Cranfield is an expert, priding itself on having adopted the Harvard approach to management education. The role of the lecturer in using a case study is to be a third party being provocative and projective, encouraging discussion and drawing out the participant managers. All share the information given and have to work within its limitations. One of the problems with a Company-based case study is the range of additional knowledge held by the participants. This can lead to the introduction of red herrings, character assassinations and attacks on the case writer for his interpretation of the "facts". This last point is very important. The collective wisdom of the partic-

ipants will inevitably overwhelm that of the casewriter. If the case is not cast-iron they will turn their attention to criticising it and the lecturer will lose his credibility if he is made to be defensive about it. Even if it does not come to this, the participants are the experts about the Company and he is in the weaker position. Besides, the educational experience should be a positive one, not simply a criticism of the Company and its past behaviour to which internally-based cases could easily lead. Many lecturers find it more constructive and more valuable to chose cases in similar industries - like computers or communications industries. In this way, they are able to tease out the principles being illustrated and encourage the managers to draw the parallels with their own Company.

An alternative source of company information on which to base a classroom discussion is research data collected by the lecturer into on-going organisational problems. This approach also helps the lecturer to develop long-term relationships with managers in the Company. Exposure to the Company for the purpose of developing teaching materials has helped some lecturers both to understand the Company better and to make their teaching more relevant. However, as such "bespoke" case studies can rarely be used on programmes other than those run for C & W, they provide little in the way of return to the lecturer for the time and effort involved. Putting the same energy into materials that could be used more widely may seem to a lecturer a better use of his own scarce resources.

There is another view. It is that the art of "tailoring" does not lie in the rewriting of a lecturer's material but in the extent to which he can adopt a counselling style of teaching. His skill as a counsellor will allow him to tailor his material in the classroom to the

stated needs of the individual participants. Knowledge per se is less important than concepts and understanding. These enable the lecturer to "prompt" the participants to help them find the words they need to describe their own interpretation of a situation. The lecturers are the language-givers, the framework providers. To be able to do this effectively, their personal values are just as important as their skills.

Most academics are geared to developing knowledge. Teaching others how to use the knowledge to solve their own practical problems is difficult to do (Whitehead, p. 6). It is much easier simply to pass on knowledge, particularly if it is wrapped in the familiar garb of an in-company case study.

Flashpoint 4: The Role of the Course Tutor

The role of the Course Tutor (CT) is recognised as crucial in all general management programmes. In the case of C & W programmes the CT not only has to co-ordinate a large number of academics from several different disciplines, he also has to liaise with the Company. He has to ensure that everyone is kept informed and has made contact with their counterpart. He is also responsible for the "spirit" of the programme. The extent to which sessions are "shared" by Cranfield and C & W lecturers; the style of teaching encouraged; the clarification of objectives and the providing of an overall educational context are all in his hands. So too, are the anxieties of the participants. In the first few days he must be close enough to them to observe the nature of the participation and bring on those who are reluctant, whether they be naturally shy and reserved or deliberately uncooperative. He must win their confidence so that he can adapt the programme to fit their particular needs and interests. It is a difficult and

demanding role requiring total dedication for the full duration of the programme. A five week programme can be a very wearing experience for the CT who still has to fulfil his regular teaching, research and administrative commitments elsewhere in the School. The Company would like to maintain continuity from one programme to the next by using the same CT time and again; an idea not always relished by the academics involved. Had C & W undertaken some of the burden by providing the once-promised Company man, the responsibility might not have been so onerous and the success of any individual programme might not have hung so precipitously on the personality of its Course Tutor.

Flashpoint 5: Rewards

"C & W isn't sexy. It's very worthy but where's the excitement and the thrill? There's a lack of "umph"; no vital spark." Other lecturers had less colourful ways of saying it could become dull, or boring, or bureaucratic. The long-term repetitive nature of the venture tends to grind down the enthusiasm of the lecturers. The intrinsic satisfaction of doing a good job well loses its potency with time. The danger for some is complacency but for others classroom participation with managers from a company one knows something about brings its own rewards. For many, job satisfaction comes from the innovation; from creating and revising material. The problem inherent in any long term contract is that of stagnation and it is important to inject new challenges from time to time. C & W have been criticised for forcing Cranfield staff to create "bureaucratic" rather than "entrepreneurial" types of programme. The knowledge that the School is earning money from the venture offers little comfort to many as they see what little financial gain there is, going largely to the MODRC.

So much for the intrinsic rewards. What benefits are accrued by the individual lecturer from Cranfield? These are negligible. The School system does not acknowledge the extra work required of a lecturer on an in-company programme: that of tailoring materials or spending time learning about the company. The Course Tutor upon whom so much depends, is given only passing recognition as having made a small administrative contribution. Teaching hours and published research weigh far heavier in the promotion scales. From the Company itself come opportunities for research but the few who've ventured in have discovered that it's a fairly prickly place. One recalls that "they are very sensitive about touchy issues, becoming defensive and reluctant as soon as one begins to probe into the details of how and why." Funds allocated by the Company for research and development could have helped but were rarely linked to specific activities and were rarely spent outside the MODRC. The glamorous aspect of C & W is that it is an international organisation and one thing that lecturers do find "sexy" is foreign travel. The ill-fated overseas MMP could have played an important role in maintaining the morale of the Cranfield lecturer. His flagging spirits could still be revived by workshops, research consultancies and genuine development opportunities.

Flashpoint 6: Selection

Selection is undertaken centrally for F1 staff and by the new DTMs for HO and national staff. The DTM system successfully delegates the responsibility to those who know the managers and their immediate training needs but, without clear guidelines, it militates against a consistent approach across the Company. There is undoubtedly an increased awareness throughout the Company of the management development opportunities now available and there is general acceptance that managers, especially F1 staff, should go on management training programmes. This makes

the task easier but the current freeze on personnel means that some Departments feel themselves to be under pressure. The very people who have been selected for training tend to be those who are most useful in the Departments. They cannot be spared; time is a constraint and on-going work is always of higher priority than training.

The Company is seen by most managers as being weak on career development; the Personnel Department deny this but feel unable to disclose their plans for the anticipated progress of individuals. Allied to this is a general ignorance of underlying career development policy from which criteria for selection would normally be drawn. There is also confusion in many managers' minds as to the timing of the management education experience, so not only do managers not know why (and therefore who) should be trained but they are given little guidance as to when they should be trained.

At Cranfield the concern, particularly in the past, has been that managers frequently gave the impression of having been "sent" on a course without knowing why. There was a lack of briefing and debriefing and participants could be an ill-assorted mix in terms of age, ability and attitudes. Senior people in particular, tended to be reluctant to participate and some were quite resentful about having been "sent". Such attitudes created a difficult atmosphere for the lecturers and gave the C & W programmes a bad name with some of them. However, the majority of Cranfield lecturers regard the C & W participants as a good natured group of managers with a higher average intelligence than that held by equivalent managers from other companies. The SMs were felt to be very able; the MMs very lively; and the MRs very difficult. This last group is an interesting one in that it was carefully selected but there seemed to be insufficient variety in the mix of partici-

pants to bring the programme to life.

The problems regarding selection will remain as long as the reasons for undertaking training remain unclear.

Summary

The importance of individual commitment to the joint venture is crucial to its success. This is as true within C & W as it is within Cranfield. However, the Company has the advantage of being the recipient of newly developed managers who now fan the demand for more activity and make that already undertaken feel worthwhile. Within Cranfield, enthusiasm is more difficult to engender and more important to maintain. This importance was highlighted by Whitehead when he reminded us that "The university imparts information ... imaginatively ... This atmosphere of excitement, arising from imaginative consideration, transforms knowledge ... Imagination is not to be divorced from the facts: it is a way of illuminating the facts". (p. 139).

C & W and Cranfield together share the responsibility for keeping the imaginations of the lecturers alive and excited. The Company have not bought a product which, once perfected, will be delivered at regular intervals throughout the year. They have helped give birth to an organism, which if it is to stay alive and flourish, needs to be kept fresh. To quote Whitehead one more time "In all education the main cause of failure is staleness" (p. 86).

Part III: The Career Context

The Cable and Wireless career is an important aspect of the organisation's culture, hence the perceptions that managers have of it reflects their contractual commitment to the Company.

Cable and Wireless fits neatly into Handy's Apollonian role culture. Big and bureaucratic, it maintains internal consistency through a complicated network of rules, regulations and traditions. Efficiency rather than effectiveness is the keynote of Cable and Wireless and similar organisations (i.e. energy goes into doing things better rather than questioning whether it is still necessary for them to be done at all!) Stability and predictability are ideal conditions for smooth-running bureaucracies. Such conditions tend to be nurtured in the Company and assumed beyond it. As a result, operational systems are routine but reliable and the general view of the environment rather blinkered and naive. The disruptive effects of change are avoided for as long as possible in the hope that adaptation will not actually be necessary.

Whilst employees are indispensable, they are also interchangeable. This leads to the role being seen as more important than the individual who fills it ("We need a man in Bahrain. There's a man - send him"). Consequently, many a Cable and Wireless manager is ill-matched to his job or spends time as an "organisational squatter" filling-in between more appropriate posts. Nevertheless, there is great psychological security in working for Cable and Wireless. For it offers a job for life with a good pension at the end for those who conform to the needs and values of the Company. Conforming begins at an early age. The "womb to tomb" commitment is illustrated by the numbers of sons who have followed in their father's footsteps. The creation of a Cable and Wireless man has resulted.

Development of the Career Concept

By the turn of the century, Cable and Wireless's forerunner, the Eastern Telegraph Company, had acquired a reputation for being "the source of a fascinating but

safe job; a company to which once admitted, a young man ... knew he had a job for life. There would be a place too, he knew, for his son or brother" (Barty King, 1979, p. 149). Even at that time the Company was operating on a world-wide basis and, before the invention of the regenerator (14) in 1925, employed a large number of operators, as well as managers, overseas. Their life style would best be described as "colonial" until the early 1960s when Macmillan's wind of change began to blow long and cold.

Over the years, and even today, the Company has restricted its vitality by deliberately avoiding the recognition of high-fliers who, in other companies, might have been singled out for special training and opportunity. Too often promotion has been linked with length of service; training is still either task-oriented (as with the many technical courses) or all-purpose (as with the general management programmes). This does not mean that there is no élite. There are both horizontal and vertical divisions in the Company.

The horizontal divisions draw fine distinctions between employees throughout the world as they climb the incremental ladder of a lifetime. Each step brings with it additional privileges and status. In London, if managers from different levels wish to lunch together they must do so in an outside restaurant for, within Head Office, dining rooms are exclusive preserves. The managerial hierarchy is evident in other ways. For example, until last year senior managers were known with rather quaint grandeur as "Officials" and the Board of Directors is still called "The Court". A change of name has apparently done little yet to improve communications through the hour-glass-like channels connecting them with middle managers. In HO, promotion to a senior position means joining a new social set and leaving behind former colleagues with the subtle ruthlessness of any class

conscious society.

But it is the vertical divisions that have led to distinctly different career paths. There are three groups, each with its own history but all sharing the same future. They are:

1. the foreign-service mobile staff (F1);
2. the London-based Head Office staff (HO);
3. the locally-based National staff (Nat).

The three groups share many characteristics although they are not always willing to acknowledge them in one another. Perhaps the most visible example is their strong sense of loyalty, which is discussed later in this chapter. As the influence of a changing world - political, economic, technological, educational and moral - has permeated the Company, tensions and antagonisms between the three types of staff have surfaced. They all recognise that their careers are no longer predictable; the careers of the future are no longer the careers of the past. The anxiety or excitement aroused often leads them to make scapegoats of one another and the Company itself yet all are "Company men" by Maccoby's definition (1977). That is, their entire sense of identity is rooted in the knowledge that they are part of a powerful and protective company. They share its "low profile - high performance" philosophy and enjoy the high regard in which much of the world holds it.

The development of the Cable and Wireless manager has revolved around the expatriate engineers - the F1 staff. In the past, it was they who naturally evolved into "managers." HO and Nat staff were recruited largely as F1 "support" staff either at home or abroad. Gradually these groups have asserted themselves and infiltrated the coveted positions of management, creating, at the

same time, career paths for their kind. Not only have they claimed the Fl's managerial jobs they have also, to a very great extent, adopted their culture. To understand this culture it is necessary to look back through time ...

The Fl Career

Before the outbreak of the Second World War, a career in Cable and Wireless was regarded kindly by many middle class parents as an alternative to the Church or the Army. Sons followed fathers into the appropriate "regiment" - Eastern or Western - long after their merger with Marconi in 1929. Parallels with the Army are easily drawn. It was a respectable, institutional way of life. The Company would provide training, responsibilities and some adventure; they would make a man out of a young chap, and keep a parental eye on him into the bargain. Straight from school went the young recruits; parents had no sooner finished paying the fees of one before they began those of the other - for three years, at the residential engineering training college at the Porthcurno (PK) Cable Station near Lands End.

During the war, recruitment ceased to be so "exclusive"; boys aged 16-18, who were good with their hands and had English, Maths, Physics and some Geography, were taken in. The training ceased to be fee-paying and the trainees actually received a small wage. In 1942 the first non-public school entrants were admitted to PK; they were also the first entrants not to have family connections with the Company. They received a full three-year cable training and then some of them went on for a further six months into radio training. Since about 1970, the formula has been Basic and Advanced engineering courses interspersed with practical experience and City & Guilds exams.

The remoteness of PK helped prepare the young men for their future careers in other ways too. They learnt

how a Cable and Wireless man was expected to behave; they became skilled engineers and self-reliant individuals who could cope with uncomfortable surroundings and separation from their families. These qualities are still important today. Throughout their careers, like the military and diplomatic services, they never knew where they might be sent next; nor were they expected to raise objections. The Company looked after domestic details like accommodation and the schooling of children. They became an integral part of a completely interchangeable staff. The recruiting booklet for 1951 promised, as its title implied, A Career Abroad:

"... the Company's work overseas provides an ideal occupation for the man who combines a keen interest in electrical engineering with a spirit of adventure and readiness to serve anywhere in the world". In addition "a well-developed sense of tolerance and balance is essential, if staff living in isolated conditions are to lead a happy life."

Branch managers held high social status locally; most of their expatriate staff lived in the Cable and Wireless equivalent of a British Officers' Mess. The Company was extremely paternalistic. Permission had to be requested for most things, including matrimony. Once married, the Company took care of the family, providing fully furnished housing, travel, schooling and so on. Everyone moved branches at least every three years so links with the host community were never as strong as those within the Company. A "family" culture developed which still exists, with all its implications for deference to traditions and the exclusion of "outsiders".

Even today, many people regard the Fl staff as the

"blue-eyed boys" of the Company. They have good cause to, for Fls still appear to lead a glamorous life - travelling the world as highly respected professionals, earning good money and a myriad of perks, getting the best jobs - those with the greatest challenge and visibility - and, when it's all over they either retire with a Company pension at 55 or transfer to Head Office (if they haven't already done so) to take the senior posts towards which the HO staff have been patiently working for many a long year.

An Fl manager will swiftly remind one that they and their families undergo perpetual personal upheaval; their careers are rarely smoothly planned, they are often "messed about" on postings and sent to places they would rather not go and obliged to do jobs and work alongside people they would never have chosen for themselves. They acknowledge earning a lot of money but explain that a high proportion of it is in the form of allowances - pensions being calculated on basic salary. Where, they ask, does that stand against inflation in the UK where most of them hope finally to settle down?

They also see themselves as being squeezed out of their overseas jobs by the Nats and out of their London jobs by the HO staff unions. Their view is not so rosy. The days of pink gins on the verandah may be over but few of the Fl staff would change their jobs because of that.

The HO Career

The training, development and career of the Fl man was seen as being wholly separate from that of the HO employee. The HO man was originally recruited for "office work". His job was London-based and of a clerical nature. It was also highly functional. There was no inter-departmental activity and promotion was strictly within the

function. To request a transfer to another department was regarded as heresy.

Whilst Fls could attain promotion into some grades by passing technical examinations, HO staff could only be promoted by their successful application for a vacant job. If they did not succeed or there were no suitable vacancies then they must be content to work their way up the salary scale by annual increments and occasional merit awards. In January 1977 there were 7 HO salary scales, 4 executive and 3 clerical, comprising in all, 56 increments and 14 merit awards - a total of 70 divisions. Promotion to "Official" was at the discretion of the Company. The Officials formed the policy-making and senior decision-making body who, based at HO, were drawn from both Fl and HO, but never Nat, staff. It represented the pinnacle of a career in Cable and Wireless for those who were eligible and, for those who were not, it reminded them of their place.

However, in HO it was seen as being possible for anyone who worked hard and studied to do well for himself. As the Fifth Report from the Select Committee on Nationalised Industries pointed out, in 1976 "all Cable and Wireless management, up to and including full-time directors, have risen from the ranks of the company" (p. xxxiii). There were several success stories to encourage the ambitious: a Managing Director had started out as a clerical assistant; a messenger boy had worked his way up to one of the most important and powerful jobs in the Company, that of Group General Manager of International Operations.

A career in HO was a male preserve and even today, there are few women at the management level. Likewise, few graduates were employed. In 1974 a graduate recruitment campaign was launched and the annual intake is now about 15. However, these have yet to filter through to the senior levels of HO management. The relatively high level of

turnover amongst the recent graduate element has been a disappointment to many of the HO staff. It reflects a different sort of attitude towards personal career development and commitment to a single employer than that traditionally found in C & W. HO is also the home of a number of specialist engineers. Their activities are twofold: they evaluate new equipment so that the Company can recommend and use the best and most appropriate for their overseas clients; and they develop and produce equipment, not manufactured commercially, to meet the special needs of their clients.

HO then, has had two activities: administration and engineering. Until very recently, HO made all decisions of any significance. This has led to the growth of a powerful centralised bureaucracy. It sprawls over Holborn, and even across the Thames, in twelve different buildings (15). Big and unwealdy, HO employs almost 2,000 people. In 1977 it was 1,645 and in 1973, 1,200. Reflected in this growth are a number of personal "empires", built-up by well-intentioned administrators who limited their horizons to Departmental efficiency and confused the Company's interests with their own. The formal authority system, as in most bureaucracies, links power and status with size of operation. It's very nature encourages bigness which, in turn, creates problems of communication, duplication and the loss of common goals. These are all too often "solved" by further expansion.

In 1969 PA Management Consultants Limited recommended the reorganisation of HO. Although there was widespread protestation at their suggestions, a modified version was adopted which took the twin themes of diversification and divisionalisation. Implied in this was some decentralisation of authority away from HO. As a direct result a new business unit was established in London. The birth of PSB (Private Systems Business), later called CSS

(Communications Systems and Services), opened up an alternative career path for HO personnel. They could now choose between the traditional path or a more entrepreneurial one.

The emphasis in HO has always been on administration rather than management. The words "management" and "manager" were not used until quite recently and the language spoken was operational rather than managerial.

The National Staff Career

In the past, Nats were not expected to have "career" aspirations. They were recruited to relatively low-level clerical and menial positions; all technical and supervisory roles were filled by the F1 staff. This was in keeping with British colonial practice worldwide. Besides which, the general level of education amongst Nats did not equip them with the skills required for more responsible jobs. The first Hong Kong Nat with HNC was not recruited until 1964.

In the mid-1950s the first national technician passed through PK; today the majority of trainees at PK are national staff and the overseas colleges are devoted to their training. It has become Company policy "to train and develop local national staff for overseas posts at all levels" (Select Committee, 1976, p.xxxiii, 89, my underlining). This has come about for a number of reasons. The two most important are political and educational. It was political in that Britain had relinquished her imperial role in the world, allowing a strong-felt desire for self-determination to surface in the countries in which Cable and Wireless operated. A "localisation" policy has resulted, partly in response to local pressure. It was educational in that the Company began to recognise the abilities of the younger Nats who, with improved schooling, were now capable of a greater range of jobs

than their elders and represented an under-utilised Company asset. Often too, particularly in Hong Kong, the older Nats had unused talents, as many were to prove when the opportunities were presented.

Not all branches offered Nats of the standard of those in Hong Kong. Sometimes they had no formal schooling at all - for example, in the Gulf where the middle level of staff had to be brought in from Pakistan and India as semi-mobile staff. But, over the years, careful recruitment and in-company training has provided a competent team of Nats at all of the traditional overseas branches. They are even ahead of HO with regard to the employment of women; Hong Kong is today well-seeded with female engineers!

Over the past 25 years the Nats have been able to develop a career path that is now well established. Worldwide, Fls make up about 10% of all overseas staff; in Hong Kong it is only 3% (i.e. 60 out of a total of over 2,000). On one of the other branches, a Nat relates how there is only one Fl today compared with 15 when he joined in 1954 and 70 when his father joined the Company as a young man at the same branch. Although the physical presence of the Fls is dwindling, their dominance is still apparent as they hold almost all the top jobs overseas. This is a source of irritation amongst many Nats.

The career of the Nats clearly has still not realized its potential, but nor has it got to its current stage without some scuffles. Whilst the Nats acknowledge the Company as being a good employer, many of them have been compelled to resort to union action to ensure being treated fairly when taking on those jobs formerly held by Fls.

Because of the continual growth of traffic through Hong Kong, those Nats see their career opportunities increasing,

despite the Fl presence. In other parts of the world however, this is not the case. The West Indies, for example, have been "localised" recently but, unlike Fls, the Nats are not mobile so vacancies are rare. Senior positions, therefore, are held by Nats with many years of service still remaining. For their subordinates it is a waiting game of "dead men's shoes" right through the hierarchy.

Rivalries Between Staff Groups

Current rivalries between the different types of staff are based on resentment about careers.

HOs are anxious to protect their jobs, and promotion, from aging or travel-weary Fls. So seriously do they see the threat from Fls that as early as 1972, their union (16) insisted that any vacancies had to be offered first within the Department in which they arose, then to other HO staff then, after consultation with the union, to Fls for a maximum of three years whilst a HO employee was trained up. If none of these sources was fruitful the job could be advertised on the open market. This was a cumbersome procedure but, as far as possible, it kept jobs within the HO career path. Internal recruitment became increasingly difficult with the growth of CSS and the demand for more market-oriented skills.

Many Fls on the other hand have no desire to work at HO. They lose their allowances, are forced to commute to and from work and often find the 9-5 routine activities boring. It is not the work they joined the Company to do. They miss the "action" of branch life, the good weather and the overseas lifestyle. When seconded to HO they are frequently treated as "temps" without any real responsibility or sense of purpose. For them a tour in HO can be a frustrating experience.

Overseas, the policy of nationalisation has undermined many Fls sense of security. Some of them resent having to train local staff to take over their own jobs. In fact, the bouyant world market for telecommunications has meant continued jobs for everyone but, even so, suppressed anxiety about the future is frequently channelled into denigration of the Nats which sometimes comes close to open racism. Nats are distrusted by some Fls because of their dual loyalties to the Company and the host government - who may not always be in complete harmony with one another. Regardless of who runs local telecommunications, the Nats are sure of a job.

Branches vary tremendously in the amount of the work to be done. As a result some require round-the-clock commitment from staff whilst others are blatantly overmanned. An internal investigation by the Company revealed that job satisfaction amongst Fls was greatest where the level of activity was highest. Conversely, when Fls were not fully occupied they were most dissatisfied.

The dissatisfaction is multi-causal but if Fls are not being stretched at work and their domestic responsibilities are taken on by the Company there is every likelihood that small irritations will be blown-up out of all proportion and the energy released will be directed against two scapegoats: HO and the Nats: the former for being secretive and slow-moving; the latter for threatening their future.

The Nats are not insensitive to the bitterness of some of the Fls and, in their turn, think it unfair that they should receive different pay and conditions when doing the same jobs as Fls. Many of them would also like to travel if their families could accompany them. Increased mobility throughout the Company would improve their career

opportunities and reduce their dependence on the Fls as being the only "experience carriers". At the same time, some Nats recognise the plight of the Fls and regard them sympathetically as "the victims of Cable and Wire-less staff policy".

The Nats share many of the Fls criticisms of HO. They do not like the way that HO dictates policy from the other side of the world. They are on the spot, understand the situation and want to make their own decisions. From all parts of the world come similar complaints of having to seek permission for all stages of the business from authorising new ventures through to setting rates, and taking debtors to court. Added to this is a growing feeling amongst Nats that HO is a burden, a heavy overhead which they are having to carry. Nor have they much faith in HO's competence and flexibility: "HO is not keen on new ways of doing things, new ideas or procedure ... They won't move with the times ... HO can't cope ... it's closed-minded ... they won't make any effort to change ... HO are way behind Hong Kong in accounting practice ..."

The Millstone Effect

Despite these feelings, there are two characteristics typical of the staff as a whole. These are: first, that although all staff have a natural affinity for their own "type" at an individual level they generally work well together. Secondly, they are bound to one another by their mutual loyalty to the Company.

Together these characteristics have led to "the quiet efficiency" praised by the Select Committee (1976, p. lvii). But the same Committee also noticed "... too great a dependence on traditional loyalties and methods of working..." (p.lvii). This is a topic that a group of middle managers discussed with the researcher. They agreed that they had a strong and high regard for C & W but explained

that if being "loyal" was one side of the coin, then being "trapped" was the other. This was because a manager, taken on at an early age, has no other work experience; trained with the Company, he has no recognisable qualifications with which to find another job; tied in to a slow but sure career with a good pension at the end (and with children at boarding school in the case of Fls) he finds that after about 10 years the "millstone effect" has come into effect. The Cable and Wireless manager cannot afford to leave the Company. Besides, he feels rather stale and unable to compete outside. For engineers, opportunities in other telecommunications companies are very limited for they too recruit young and promote from within. So, the longer he stays the more trapped he becomes - and, cognitive dissonance (17) being what it is, the more comfortable with the status quo and the more loyal he becomes.

Careers in the Future

There is a general recognition that careers in the future are going to be different from those in the past and "F1" recruits are now being given 2-3 year contracts. The assumption is that traditional business will be increasingly run by the Nats and that new business activities, particularly projects, will be expanded. This will entail a UK-based engineering and administrative staff who will travel abroad, unaccompanied, for short-term assignments. Whilst away they will be expected to work long and hard to meet commercially competitive deadlines and budgets. This, according to the managers, will mean the Company becoming tougher with all of them. Some have already experienced the pressure of such project work in the Middle East and found it exhilarating. Others are appalled at the very thought.

When discussing the implications for their careers of changing market demands, the managers thought that the

lifetime approach would decline and that there would be a shift from a technical to general background. This would make it easier for others to join, and for them to leave, mid-career. They also expected a decline in rules, regulations and conformist staff and a shift from Lewin's (1947) field-dependent to field-independent managers. They already saw this distinction between PT and CSS. The former they described as "institutionalised, relatively restricted and easier to control", the latter as "more versatile, ambitious and enterprising. They are also more difficult to control and retain." When they listed the personal characteristics required of Cable and Wireless managers in the past and compared them with those they believed necessary for the future there were many differences (18). Essentially, they represented a shift from Eysenck's stable-introvert to his stable-extrovert (19) and from Handy's God Apollo (roles and hierarchies) to his Goddess Athena (teams and tasks) (20).

To meet these, and other possible needs for the future, there are four approaches. All have arguments for and against them:

1. Things can be left as they are. But a preoccupation with uncertainty is already causing jealousies to develop. In addition the cost to the Company of an Fl is widely reported to be three times that of a Nat in the same job.

2. The Company can buy in managers with the requisite skills. This has been done in some cases but there is a regretful acknowledgement by Senior Management that most of the experiences with "new blood" have been "unhappy". The problem starts with salary which has to be high, by HO standards, to attract managers of a suitable calibre. The existing staff resist the intrusion by excluding the newcomer from the old-boy network. This, together with

his lack of experience within the Company has, all too often, resulted in a sideways move so that the "legitimate" Cable and Wireless heir can be given the job after all.

3. The Fls can be integrated into HO as engineers and managers to be called on, with HOs, for overseas duties as required. Such an intermix is being strongly resisted by both the Fl union (ASTMS) and the HO unions (SATA and ASTMS). The former is protecting pay and privileges, the latter positions and promotions.

4. The Company could aim for a reduced HO, replacing it with a number of profit centres staffed by a totally multi-national, mobile staff. This is the ideal of many managers but will probably remain something of a pipe-dream. It is the most radical, requiring a complete structural reorganisation; it is the most expensive, requiring an increase in the number of people on expatriate conditions of service; and it is the most liberal, requiring acceptance of all nationalities by clients as well as colleagues.

The Role of Management Development

Because the Company is so conservative it has tended to recruit in its own image and, because it is so "family", it takes its employees for life, for better or worse. This applies to Nats as well as to Fl and HO staff. As a result there is no "hire and fire" tradition and an attempt is made to find an appropriate place for everyone. One manager described it as a "caring and carrying company" which summed up its moral strength and commercial weakness resulting from its traditional paternalism. The casualties are usually carried by HO and the larger branches where they can be absorbed unnoticed. A number of managers admit to biding their time, hanging on for

their pensions; they would welcome early retirement if it was offered. On the other hand there are managers, often in the very top positions, who have overstayed their retirement dates by special arrangement with the Company. But they too have to go eventually and are blocking other people's promotions until they do. Manpower planning is an area which the Company is only just getting under control.

Because of these values, new demands must be met from internal resources and this highlights the need for training and development opportunities.

Management development in the past was an ad hoc affair. Day release facilities were available for the self-motivated; occasional external programmes were attended by a select few but the Introductory Management Programme (IMP) was the only well-established management training provided. As its name suggests it was a general programme introducing a wide range of management subjects. It lasted two weeks and was intended for those whose jobs had some managerial responsibility. A survey of nine programmes held in the mid-1970s revealed that the 38 Fls attending had an age range of 26 years (i.e. from 27 to 53) and an average age of 38! The best chance a manager had of becoming a "good" manager was to have a good boss and be quick on the uptake.

It was hoped that the joint-venture with Cranfield would overcome the neglect of the past. By keeping the IMP for Junior Managers and providing a full range of general management programmes at the Middle, Senior and Refresher levels it was hoped that the backlog could be cleared and a firm base for further specialist training, in-company workshops and seminars be laid. Managers of the future would thus enjoy the benefits of a planned career backed by a planned development programme.

Post-Script from the Future

In the Spring of 1981 the British government announced it's decision to denationalise C & W. The governments of the 70 countries in which C & W held a telecommunications franchise had been consulted and their views taken into consideration. An initial sale of 49% of the shares is to be made in the Autumn. The Treasury is expected to raise £100-150 million from the sale. Opposition politicians attacked the decision as "doctrinaire" but the financial press gave it a warm welcome.

One area of concern lay with the Hong Kong contract which only had another six years to run. Hong Kong is well known to be the major revenue earner of the Company.

Publically, the Company admit to Hong Kong accounting for 40% of total turnover; its contribution to profits is not disclosed. (Sunday Times 24/5/81). Bahrain takes second place in the revenue earning league. Together 55%-60% of total income is attributed to these two branches.

(Financial Times 10/3/81). Rumour has it that Hong Kong is responsible for 76% of all profits and Bahrain for 20%; leaving only 4% for the rest of the world!

In May 1981, a new contract was agreed with the Hong Kong Telephone Company by which C & W would continue to operate in the colony but the local government would retain 40% of the profits instead of only 22% as before. (This was better than many managers expected; a 50/50 division was the best some predicted). Other governments are now expected to follow this precedent. The franchise in Bahrain is due to expire next year and the Barbados Telephone Company submitted a demand for comparable terms (i.e. up to 40% from 20%) within hours of the Hong Kong agreement being announced.

If fewer profits are to be remitted to HO, the Company is

going to find it even more difficult to maintain, or justify the maintenance of such a large workforce - and heavy overhead - in London. Substantial redundancies seem inevitable.

All these developments have an impact on managers' perceptions of their careers and on the Company's future need for training and development.

Already, on the training front, all non-technical programmes held outside Cranfield have been cut back severely. The programmes due to be held at Cranfield have been reduced to four a year (two MMPs and two EMPs). Future MMPs are to be only three weeks in duration and cheaper residential accommodation has been requested for all programmes. The project component of the MMP is being dropped but not simply for financial reasons. There is also the problem of finding new topics requiring investigation. They are to be replaced by visits to other organisations. Those arranged for the next MMP are British Leyland and New Scotland Yard. Like C & W these are large organisations with a strong pride in their past, yet are facing problems today. How these problems arose, and how they have been identified, monitored, analysed and tackled will be compared to what is happening in C & W. The programme curriculum has been revised so as to be more specific to the managerial needs of the participants. More emphasis is being placed on finance, marketing, international economics and organisational behaviour, at the expense of subjects such as computing, statistics and corporate planning. The staffing of the programme will be about 50/50 Cranfield and C & W with an emphasis on debate and discussion rather than on lecturing.

These changes reflect the influence of the new Project Director, appointed when the contract for the joint-venture was renewed. He works closely with his counterpart in the Company and his observations and experiences have led him

to believe that the key elements to a successful joint-venture in management development are:

1. the leadership skills of the Project Director - he must be able to set up the programme and run with it;
2. the commitment of the Group Heads at the School - they must recognise the demands that will be made and keep their enthusiasm;
3. an appreciation of the climate of the Company and a willingness to work within it. The desire for immediate and dramatic changes must be resisted, although a long term view of change can be a source of inspiration.

The Company's approach to management development in the future is expected to be more flexible so as to meet the needs of both the Company and individual managers. In-company workshops and seminars on specific topics, using tutors from Cranfield who have been selected for their proven process skills as well as their assumed content skills, would be a typical example.

Since the joint-venture began, there have been far-reaching changes in the Company's situation. The ever-increasing sophistication of telecommunications technology has shifted the Company from a labour-intensive to a capital-intensive organisation. In 1977 it was cash-rich but by 1981 it has become a borrower. The new Chairman anticipates the investment programme to rise to £200m in the next three years (Financial Times 10/3/81). The floating of public shares should make fund-raising easier although the Company will be expected to respond to market conditions more quickly than it has done in the past.

Back at Cranfield, the recession has taken its toll on other programmes too. Enrolments have, so far, held up well on

the publically-run GMPs and a new General Management Programme for specialists (i.e. engineers and technologists or accountants) has been successfully launched. However, a number of short functional programmes have had to be cancelled due to lack of demand.

The C & W programmes are now seen as a regular part of the School's calendar. The venture is generally regarded as having been a success and plans are afoot to entice back the SMP.

Notes to Chapter 2

1. The budget was met but only one-third of the managers were trained. This was partly because not all the planned programmes were run and partly because fewer managers attended each programme than Cranfield had originally expected.

2. Figure 2.4 shows Group revenue and profits (before tax and supplementary depreciation) from 1973 to 1980. Figure 2.5 shows the annual growth rates for revenue during the same period. Of particular note are:

1. The position in 1977 and the assumptions about the future that would be made at the time from an extrapolation of the existing trends.

2. The deceptive increase in revenue, masking a dramatic fall in the rate of growth in 1978. This is echoed by declining profits.

3. The phenomenon of rewriting history: changes in accounting practices referring to supplementary depreciation and deferred taxation permitted retrospective adjustment of earlier figures. The full impact is shown in the graphing of retained profits.

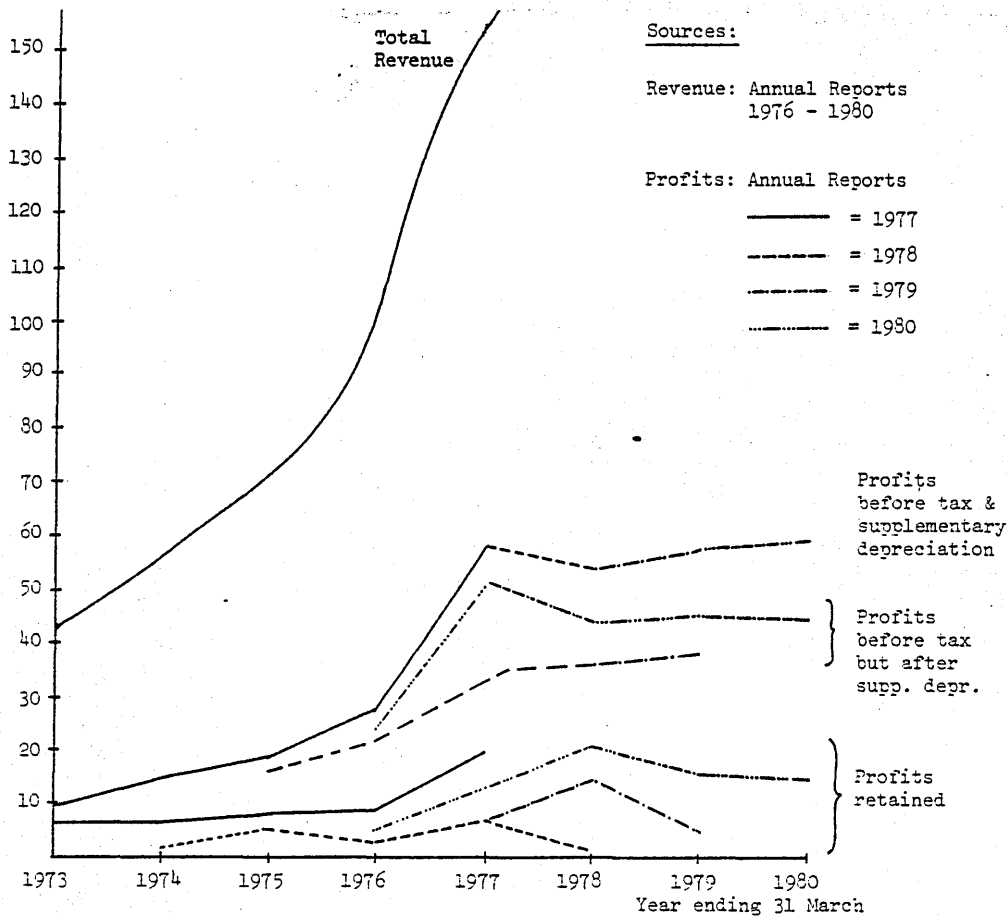


Figure 2.4: Group Revenue, Profits Before Tax (before and after supplementary depreciation) and Profits Retained, 1973 - 1980

See page 141a for complete graph.

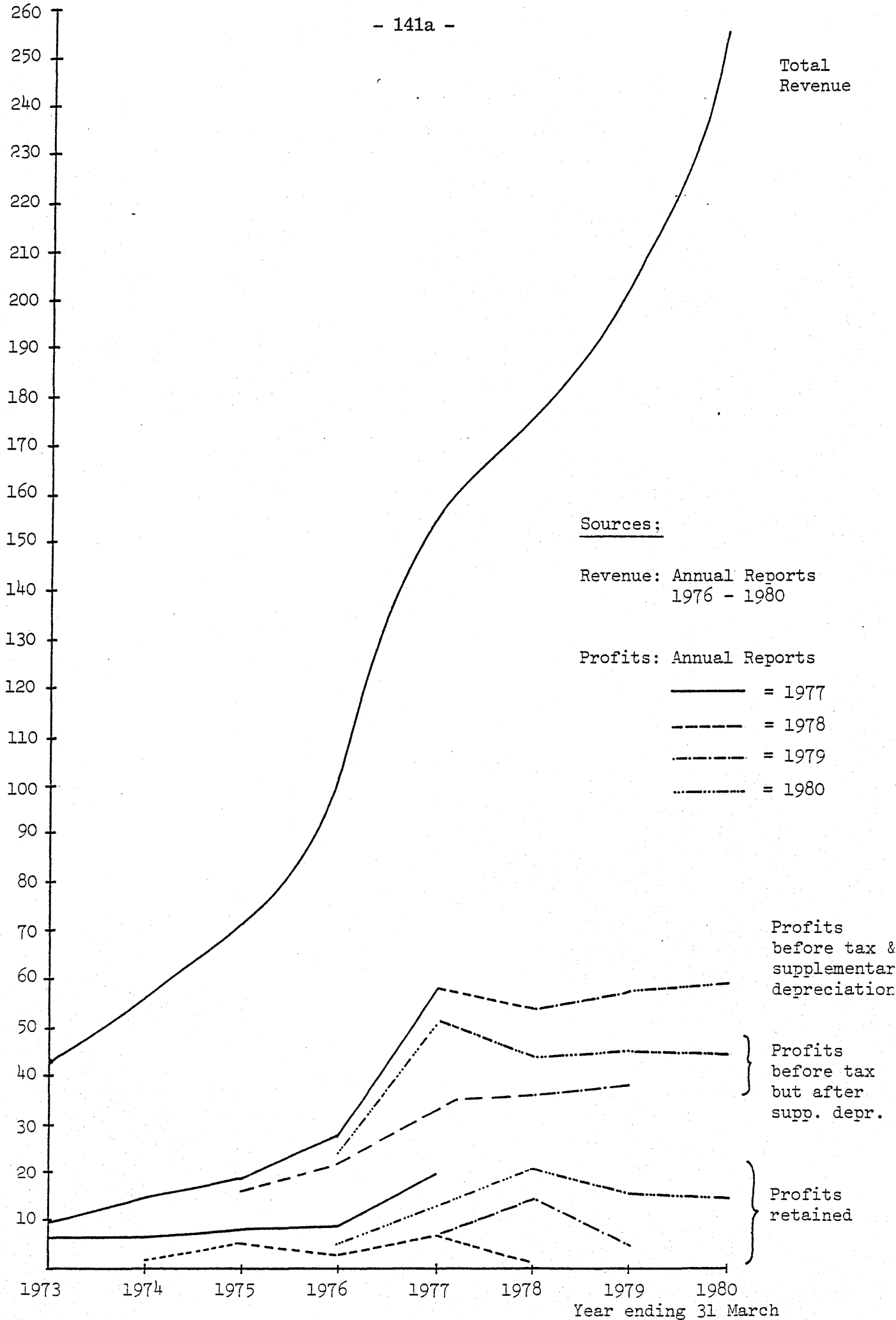


Figure 2.4: Group Revenue, Profits Before Tax (before and after supplementary depreciation) and Profits Retained, 1973 - 1980

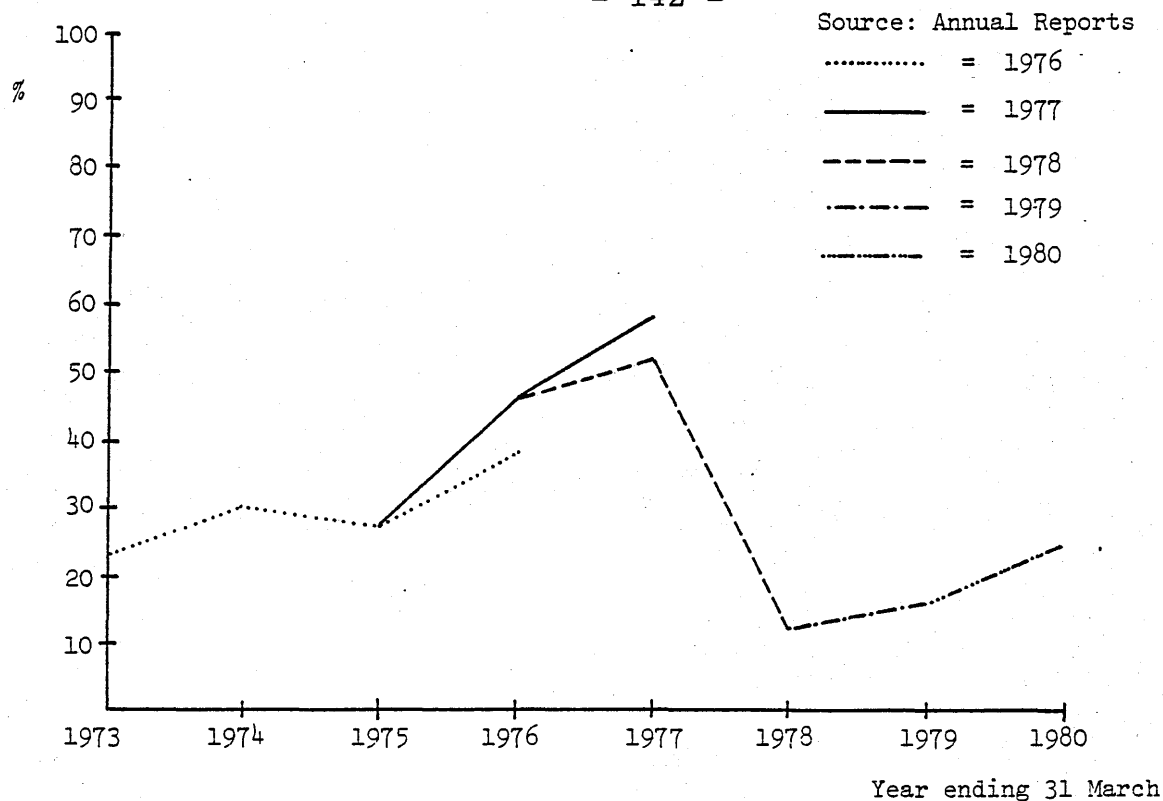


Figure 2.5 : Group Revenue: Annual Rate of Growth, 1973-1980

3. Table 2.1 shows the volume of traffic for the public telecommunications (traditional) business during the period 1975-1980. The annual growth rates for 1977 were not exceptional; they were all equalled or bettered by other years in the series.

TRAFFIC TYPE	TELEPHONE		TELEX		TELEGRAM		LEASED CIRCUITS		SATELLITE CIRCUITS		
	Year Ending 31 March	Volume in Minutes (000,000)	Annual Growth Rate	Volume in Minutes (000,000)	Annual Growth Rate	Volume in Words (000,000)	Annual Growth Rate	Revenue in £ Sterling	Annual Growth Rate	Number of Circuits	Annual Growth Rate
	1975	56.8	24%	26.0	40%	262	2%	£9.7	4%	412	-
	1976	71.8	26%	31.8	22%	240	-8%	£11.3	16%	579	41%
	1977	86.2	20%	42.6	34%	245	2%	£13.8	23%	693	20%
	1978	96.0	11%	48.8	15%	232	-5%	£17.0	23%	748	8%
	1979	135.3	41%	69.4	42%	212	-9%	£18.3	8%	856	14%
	1980	176.0	30%	78.4	13%	219	-3%	£19.6	7%*	1095	28%

* 17% in local currency

Table 2.1: Public Telecommunications Traffic, 1975-1980

4. In 1977 the North American and Western European market represented two-thirds of world revenue from telecommunications activities. This share was expected to be maintained for the next ten years although the European market was forecast to grow faster than, and at the expense of, the North American market. (1977: N. America 47%, W. Europe 20%; 1987: N. America 40%, W. Europe 25% of the world market). When the forecasts were broken down by type of business, the fastest annual growth rate was expected in the private systems business. (Source: Laurie, Millbank and Co.)

5. In 1972 a newly appointed General Manager exceeded his authority and committed a recently acquired subsidiary, Coltronic Ltd. in Hong Kong, to the manufacture of pocket calculators at extremely unfavourable terms to the Company. (i.e. quantity, range, delivery dates and price were all unrealistic). The manager was dismissed. C & W then attempted to renegotiate the contract to which they were now bound. Litigation ensued although settlement was finally made out of court. The Coltronic company was put into liquidation and the stocks disposed of. The total loss was £3 million. An attempt at diversification had turned into a fiasco. To add insult to injury the entire affair, which the Company, in its embarrassment, was trying to handle discreetly, was made the subject of public criticism by the journal Social Audit (5) Aug 74, (6) Dec 74. This was done with the active collaboration of at least one C & W employee. Social Audit accused C & W management of incompetence and of an attempted "cover-up". The matter went to the Department of Industry who accepted C & W's explanation as did the Treasury. Thus the Company were vindicated of the allegations. Nevertheless a scandal had occurred. (Fifth Report of the Select Committee on Nationalised Industries, 1976, pp xlix-lv, 113-121).

6. The precise rate of inflation was 19.8%; the HO pay award matched it exactly. Source: "Monthly summary of business conditions in the United Kingdom, May 1980" The Royal Bank of Scotland Group Ltd.

7. Source: same as 6.

8. The very real concerns felt by senior members of the Company were understandable but a little alarmist as the financial gearing was still only 6.7% and interest was covered 30 times. This was better than had been the case in 1973-5 and represents a very low level of risk. The Company might even be losing money by not utilizing its greater capacity for borrowed funds! More worrying perhaps is the necessity to invest so much into fixed assets. The "business" gearing (i.e. fixed expenses as a proportion of total expenses) is difficult to estimate without detailed figures but, from the Annual Reports, would appear to be running at about 60%. If correct, this could have important implications for future cash flow and make more threatening the ever-present risk of nationalisation of assets at the local level.

See Table 2.2 overleaf.

Year Ending 31 March	Med. Term Loans £m	Capital Empl. £m	Financial Gearing	Interest Cover (Times)
1973	9.5	96.8	9.8%	-
1974	10.6	108.5	9.8%	-
1975	8.0	116.7	7.9%	-
1976	6.7	135.7	4.9%	29
1977	4.2	161.2	2.6%	67
1978	2.5	181.3	1.4%	60
1979	6.2	207.4	3.0%	42
1980	16.6	247.8	6.7%	30

Sources: Annual Reports 1977, 1980.

Table 2.2. Medium Term Loans and their Financial Implications

9. Figure 2.6 shows the net annual expenditure on fixed assets, investments and goodwill before depreciation for the Group as a whole.

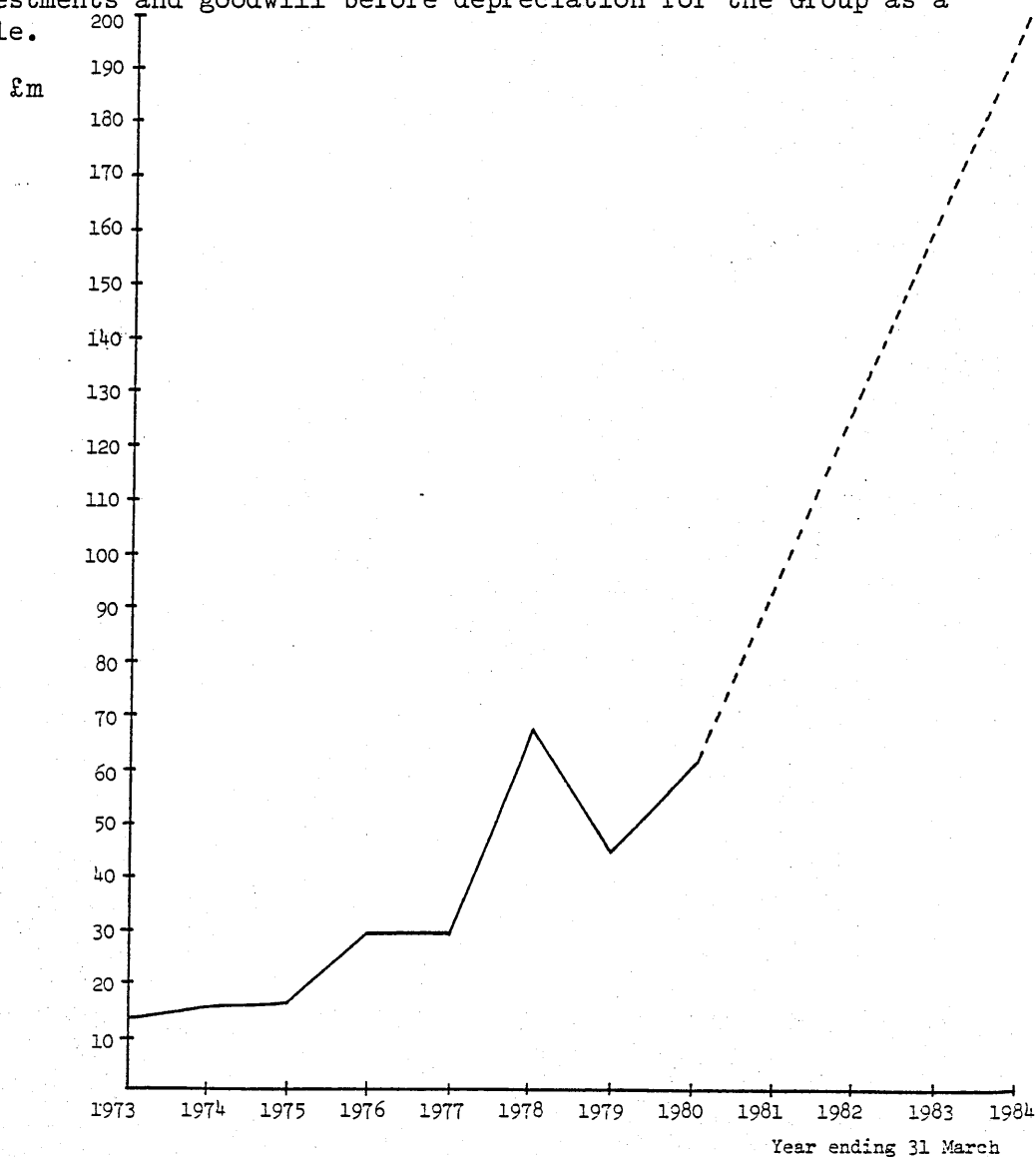


Figure 2.6: Purchase, less Sales, of Fixed Assets, Investments and Goodwill, 1973-1980 with projection to 1984. (Sources: Annual Reports 1977 & 1980 Financial Times 10 March 1981)

10. Source: Correspondence between the Group Manager, Recruitment and Development at C & W and the Professor of Management Development at Cranfield.

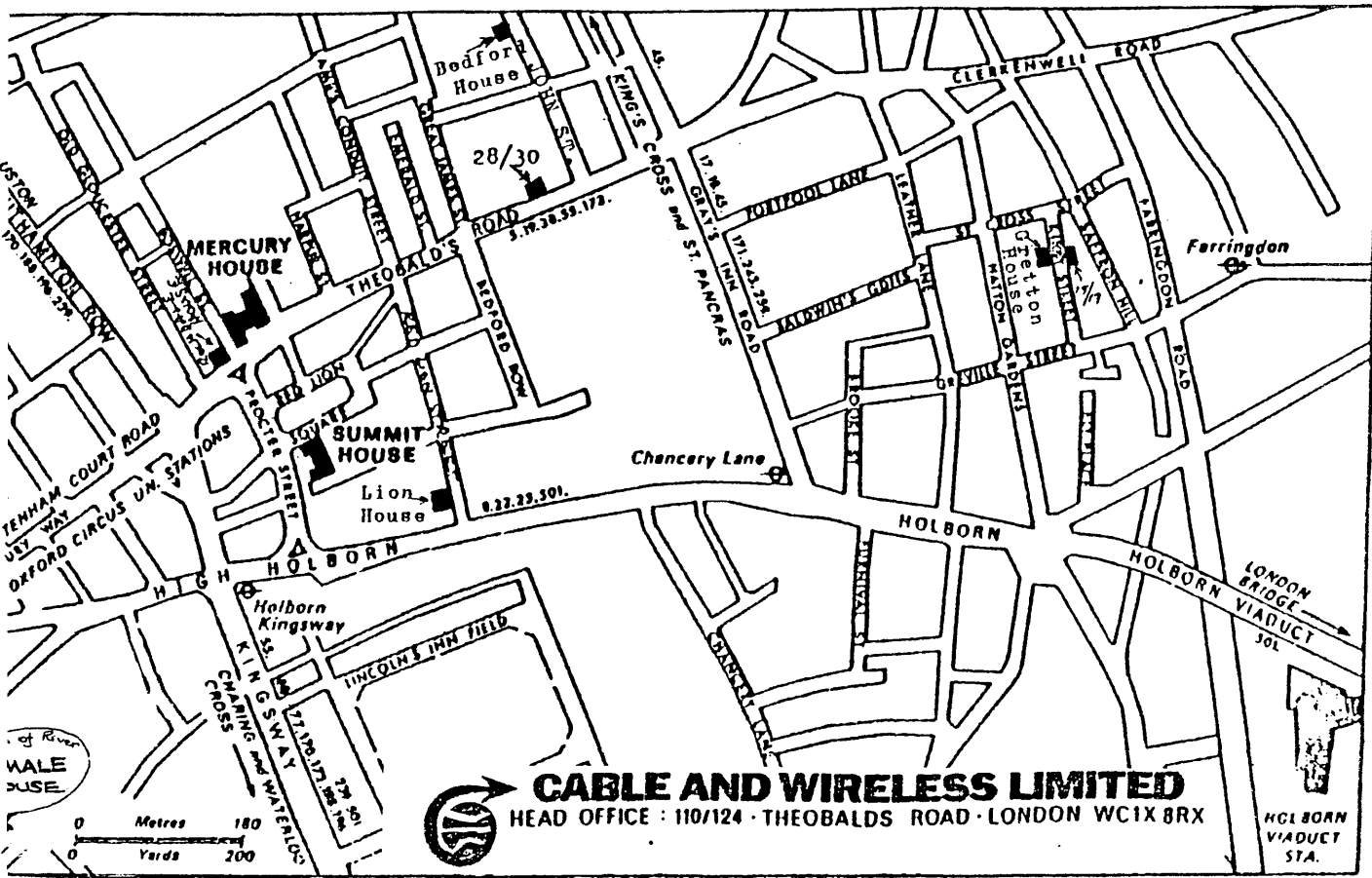
11. This style of project, although educationally sound, was not always successful as both participants and hosts often felt that it lacked a sense of purpose. It was later to be replaced by live problems with which management was genuinely concerned. Sometimes the entire class was involved on different aspects of the same problem. This second approach to the project was preferred by everyone because of its relevance to Company operations.

12. Kuhn (1962), Schon (1971) and Sarason (1972).

13. i.e. "ideas that are merely received into the mind without being utilised, or tested, or thrown into any new combinations" (p 1-2) or internalised as would be said today.

14. The electrical impulses carrying the messages grew weaker and weaker the further they travelled along the cable. At appropriate distances they had to be decoded by an operator and sent afresh to the next re-generating post. This "human chain" of expatriate operators was a time-consuming and expensive process. It was revolutionised by the introduction of automatic regenerators. The speed of operations increased dramatically and the need for a world-wide network of skilled manual operators was removed almost overnight. In their place a small mobile staff of skilled maintenance engineers was required to keep the new technology operating efficiently.

15.



16. HO administrative (i.e. non-technical) staff are represented by SATA (a section of USDAW); HO engineers and FI staff are represented by different sections of the same branch of ASTMS. Senior management at HO are represented by a separate branch of ASTMS which was established in 1977 as a result of the Director's pay issue. It was SATA who introduced the restrictive practices described here. These are still in operation (1981).

17. Festinger (1957).

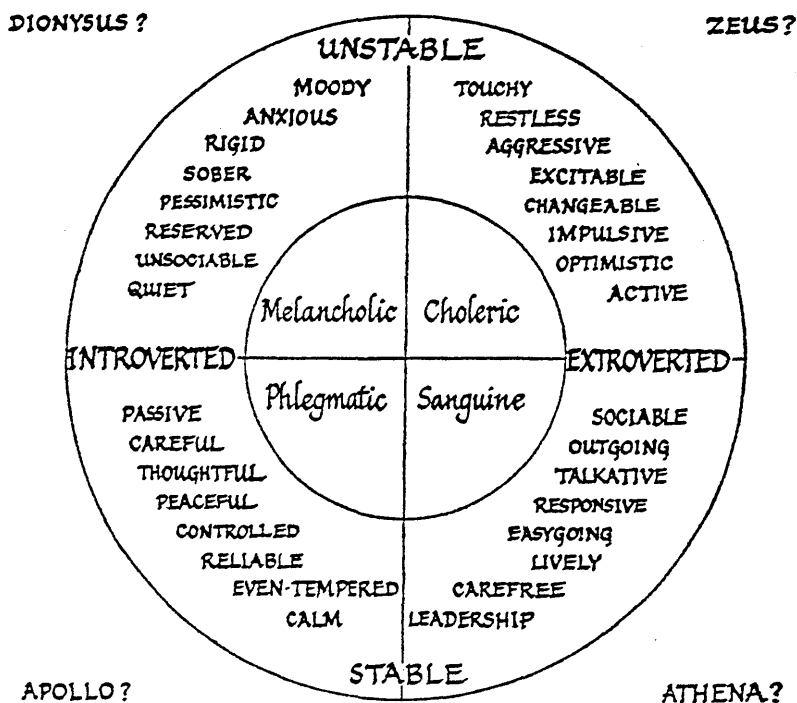
18. (Q) What personal characteristics have been required of C & W managers so far?

- | | | |
|--------------------------|-------------------|------------------|
| (A) Non-decisive | Stable | Semi-independent |
| Diplomatic | Responsive | Flexible |
| Fair, even-tempered | Loyal | Persevering |
| Conservative | Sociable | Paternalistic |
| Personnel & Admin Skills | Leadership Skills | Sympathetic |

(Q) What personal characteristics will be required of C & W managers in the future?

- | | | |
|-----------------------------------------------------------------|------------------|-----------------|
| (A) Well equipped with management skills (General and specific) | | |
| Wide Vision | Conscientious | Entrepreneurial |
| Good business sense | Optimistic | Aggressive |
| Commercially-orientated | Profit-conscious | Open-minded |
| Competitive | Result minded | Ambitious |
| Appreciate politics | Versatile | Leadership |
| Adaptable | Dynamic | Decisive |
| Independent | Analytical | Diplomatic |
| Persevering | Unscrupulous | |

19. Eysenck (1976)



20. Handy (1978). Athenians are "the new professionals in organisations" (p 67). They work in groups, value expertise and enjoy solving problems. They regard Apollonians as "useful but boring people, desiring to perpetuate the present rather than explore the potential of the future and of change ... (They) think of individuals as resourceful humans rather than human resources, regarding them as people who are responsible for their own ultimate destinies but who at the moment are available for assignment to particular problem areas" (pp 68-9).

CHAPTER 3

METHODOLOGY

This chapter is in three parts. Part I traces the negotiation process that led to a methodology which both the Company and the academic community found acceptable. The researcher discovered political validation to be as difficult to achieve as scientific validation and, in organisational research, its necessity is soon apparent. Part II discusses the final outcome of these negotiations: first in terms of the research questions being asked and the hypotheses they provoked; second in terms of the research design and strategy adopted. The final section of the Chapter, Part III, describes the way in which data was collected and analysed.

Part I: The Search for a Methodology

To conduct in-company doctoral research seemed, to the researcher, a wonderful opportunity to combine academic effort with practical application. Her enthusiasm masked a certain naivety and there were a number of disappointments to be faced before a workable research design was developed. She was aware that empirical research needed to be "flexible" but had not anticipated the continual rethinking necessitated by the introduction of new ideas and political and practical constraints.

The Research Opportunity

Over twenty years ago, Kornhauser (1957) drew attention to the reluctance of business managers to submit themselves to study by outsiders. As a result, more easily accessible and more tractable material was used and still is. Thus, studies of organisations tend to focus on non-managerial levels of the workforce whilst studies of personality,

learning and career preference tend to use college students as their subjects. Managers, then, particularly at the middle and senior level, are an elusive quarry for the researcher. However, the existence of a joint-venture in management development, such as that already described, provided a rare opportunity for research on two fronts. Firstly, little was known about the development of such a venture. Secondly, the crucial transfer process, so poorly understood, could be monitored. The Company was keen to undertake some form of long-term evaluation of the programmes, a research and development component having been built into the venture from the start. Thus, the death-blow to much organisational research, that of denial of access to vital information and individuals, was felt to be overcome in advance.

Narrowing the Field: Homing in on a Research Topic

The initial idea was to look at "the effectiveness of planned change in a major industrial organisation" (28th July 1977). Cable and Wireless was seen in its widest context, interacting with a changing international marketplace. In order to regain congruence with its environment, the Company was seen to have undertaken two deliberate strategies. The first was the creation of Private Systems Business (later called CSS) in 1970; the second was the introduction of wholesale management development for their senior and middle managers through the creation of the joint-venture with Cranfield. These two strategies, it was hypothesised, would effect sufficient organisational development to achieve congruence between organisation and environment by 1980. It was also presumed that, as a result of increased sensitivity to the changing environment, brought about by the training, the Company would be able to develop with it, thus remaining congruent. Measurement would be needed at the individual, organisational and environmental levels. It was hoped that the findings might be

generalised to other industries using similar vehicles of planned change for organisational development.

It was soon realised that the scope of study was far too broad for a single researcher on a limited budget. It was therefore decided to narrow down the area of interest to whether or not management development activities had any significant effect on the attitudes and behaviour of middle and senior managers in Cable and Wireless and whether membership of the "new" areas of the business caused certain changes to take place (18th October 1977). Measurements of the characteristics, attitudes and behaviour of random samples of managers, at regular intervals between 1977-9, was planned to provide a cross-section of managers within the Company. Some of these would, and others would not, have attended the management development programmes. Any differences between them would be shown up on the statistical analysis of the data. Of these managers, those who had been to Cranfield would be further subjected to a longitudinal study to see whether there was any difference in the effects of the programme between managers from traditional and new areas of the business. To this end, data would be collected via personal interviews, questionnaires and Personnel records.

Both these proposals involved looking at the relationship between business policy, organisational change and management development although in the second approach the emphasis had shifted to the management development dimension. During the following months the supervisor and the researcher found themselves pulling in different directions. The former increasingly emphasised the individual manager whilst the latter felt the contextual issues to be more important. Added to this they held opposing views on the way in which research should be conducted: the supervisor following the phenomenological approach, the researcher a positivist scientific approach. Compromise models were developed but discarded; neither of them could be satisfied.

A Management Development Research Proposal

The researcher was baffled as to why the supervisor apparently wished to turn the enquiry into an excursion and, in response to the requirements of the School's Doctoral Curricular Committee, who shared her views on methodology, wrote a detailed report setting forth a three-tiered proposal (21st April 1978) (1). The study was now firmly placed in the field of management development. All earlier attempts to incorporate the broader environmental issues had been abandoned as unrealistic and impractical for doctoral research. The general model is shown in figure 3.1.

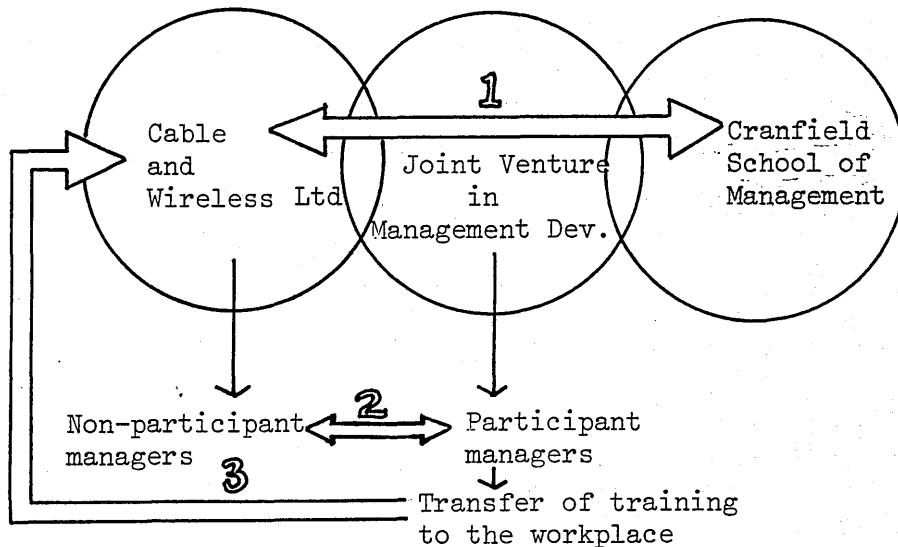


Figure 3.1 : General Model

The three areas of interest were all inter-related and represented different levels of concern as one moved from the broad view of the joint venture as a whole, to the strata of managers within the organisation, to the individual manager. Each area of interest gave rise to a general hypothesis. The first, that concerning the joint-venture, was implicit in the phrase "he who pays the piper calls the tune". It suggested that power relation-

ships might influence outcomes. The second hypothesis was more straightforward. It was that managers participating in management development programmes would be better able to cope with their job and the organisation than those who did not participate in such activities. This was essentially an evaluation of the impact of management education on managers. The third hypothesis was that the successful transfer of training to the workplace varied with the type of manager and the organisational climate. Hypothesis 1 was completely grounded in experiences gained during the previous twelve months. Hypotheses 2 and 3 were closely linked to one another and could be described as macro and micro views of the same issue. They existed in the context of Hypothesis 1.

It was planned to use a wide variety of both quantitative and qualitative methods. The researcher had by now come to terms with the value and acceptability of qualitative data but was not prepared to drop quantitative methods entirely in their favour. Collection of data for the first hypothesis was to be entirely ethnomethodological. Attitudes and behaviour within and between the two groups were to be observed and described on a daily basis. Reflective feedback might be given and its impact monitored. Data would be subjective and collected through participative observation in both organisations. If interviewed, the subjects would be aware of being researched and of credit being given to their feelings and emotions. Of particular interest would be the ways in which problems of ambiguity and conflict with regard to the management development venture were created and subsequently solved.

Participant observation in both organisations had been agreed in principle and invitations to join various groups had been forthcoming. This also provided an opportunity for first-hand understanding of the organisational culture and a context for the attitudes and beliefs expressed in

connection with Hypotheses 2 and 3.

The second hypothesis employed a mixture of qualitative and quantitative techniques with the emphasis on the quantitative and objectivity. The major limitations in this part of the study were seen as being the difficulties of defining and measuring performance and the difficulty of isolating the impact of a single educational programme amongst all the factors influencing a manager at work. The hypothesis was to be tested by a longitudinal study of 100 managers, selected at random, from within the Company. Of these, the proportion who participated in the programmes during the study would comprise the experimental group. The remaining managers would comprise the control group. At the beginning of the study (T1), the sample group would be homogeneous. By the end of the study (T2) it would have split into two distinct groups, the experimental and the control. Measurements would be taken on two occasions, immediately after selection (T1) and at the "end" of the joint venture (T2) some eighteen months on. A T3 measure in, say, five years time, would allow further opportunity for the possible verification of the results found. The experimental design was regarded with some excitement as it met the criteria of Campbell and Stanley's (1963) most strongly recommended design (2). It was also known to be extremely difficult to effect in organisational research. It was both elegant and ambitious, as shown in figures 3.2 and 3.3.

R	O	X	O	Experimental Group
R		O	O	Control Group
	T1		T2	

Key: R = Random selection
 X = Exposure to mediating variable (Management Dev)
 O = Observation or measurement
 T = Time period

Figure 3.2 : Pretest - Posttest Control Group Design

Performance would be measured by Company appraisal reports and an "effective performance indicator" which was under development by the researcher and a colleague. Perceptions of the organisational culture, future changes and the implications they had for the individual manager, were to be measured by a specially-designed questionnaire and personal interviews.

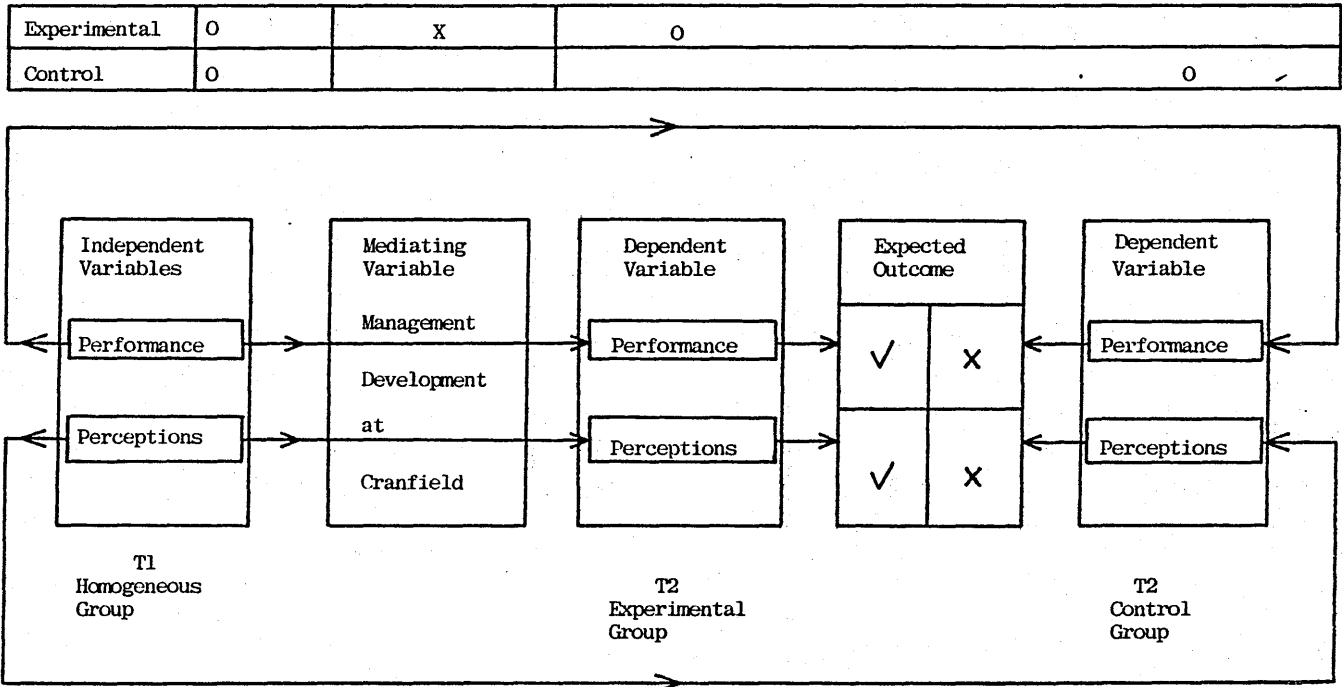


Figure 3.3 : Experimental Design for Testing Hypothesis 2

Measures from T1 and T2 would be linked by individual manager within the two groups. Differences would be sought and tested for significance.

The third hypothesis concerned the transfer of training back to the workplace. Quantitative and qualitative methods of data collection and analysis were again mixed, but this time the qualitative approach was favoured. Different "types" of participant manager were to be identified whilst at Cranfield (t1) by means of a number of questionnaires, Personnel records and personal interviews.

Managers' perceptions of the organisational climate were also to be recorded. Before leaving Cranfield (t1) they would be asked to make "resolutions" to put particular aspects of their learning into practice on their return to work. Six months later (t2) they would be followed up to see how they got on. Their self-reports would be matched against the "type" data collected in t1. Six months was chosen as it allowed sufficient time for action to have been attempted yet was not so long that the programme became remote and lost relevance.

The entire study would be complete by the end of 1980.

Some Modifications

Writing and discussing the DCC report was a useful exercise. It helped clarify the issues and drew attention to problem areas. Three major changes were made to the methodology as a result (15th May 1978). The first change was to the general model. The first hypothesis was removed from the study. This was partly to cut down the workload, which was generally agreed to be too heavy. That the load should be lightened by the removal of this particular item of study was due to the fears of some members of the DCC that the joint-venture itself was far too delicate politically and that any planned investigations in this area should be abandoned. The irony is remarkable. Academics are frequently scathing about such defensiveness on behalf of institutions into which they are seeking access.

The second change related to the second hypothesis. It concerned the measurement of performance over which no agreement as to "reliable" measures could be reached. The supervisor was the most severe antagonist on this issue which proved impossible to resolve so the variable was dropped.

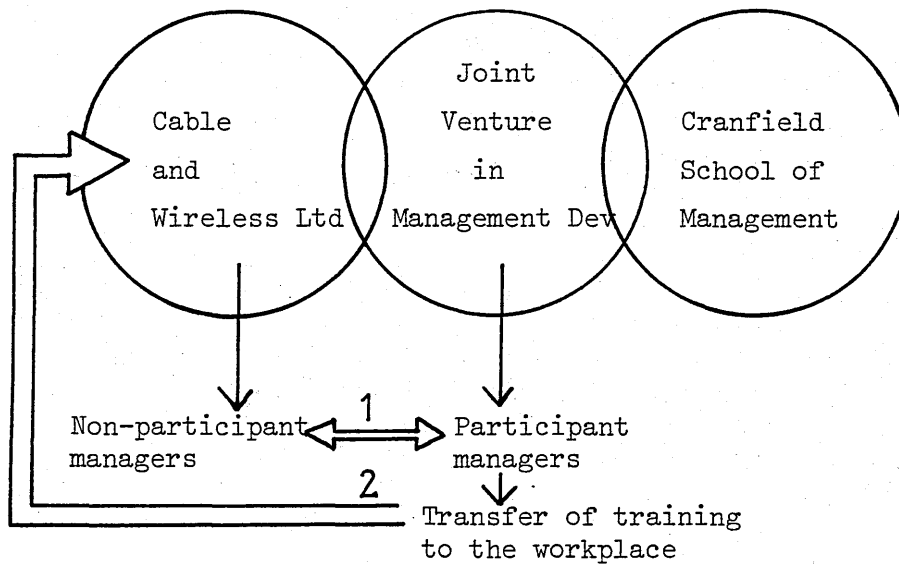


Figure 3.4 : Revised General Model

The third change concerned the problems of conducting such a large number of personal interviews - those of time, structure and content analysis - that might be solved if the interviews were replaced by Kelly's repertory grid. The suggestion was adopted and attendance at a three-day workshop on the use of grids was arranged for later in the same month.

Participant Observation

Meanwhile, there had, for some months before and to follow, been some slow negotiations to allow the researcher to undertake a period of participant observation within the Company. A three month period was agreed upon, during which, the researcher would work full-time in Head Office. Everyone in the Company who had been approached about the idea was fairly enthusiastic. However, it soon became clear that the "obvious" location for such involvement was always somebody else's department. The ideal as far as the researcher was concerned, would be some sort of exploratory task which required little specialist knowledge but afforded plenty of mobility around the organisation. It was difficult to find or create a suitable role.

To have credibility, it was agreed, the researcher would have to be attached to an operational division. Yet these tended to be technically-oriented, male-dominated and, like the rest of the Company, suspicious of inquisitive strangers. The danger was that, in order to be accepted, the researcher would have seriously to undertake a specific task of work unrelated to the research. This would direct time and energy away from the real area of interest and run the risk of trapping her in a narrow hierarchical stratum from which she could not legitimately communicate with the various levels of management. A number of possibilities were pursued but none came to anything. Perhaps with greater persistence something suitable would have been found but as the research questions being asked were focussing more on activity at Cranfield and less on that in Company, it was decided to drop further attempts to get heavily involved in the daily activity of HO. As a method of data collection it was not as straightforward as one might have expected.

The Impact of Management Development on the Individual

In September 1978 the Steering Committee of the joint-venture asked for a progress report on the research. The developments outlined above show how the emphasis had shifted onto the individual manager and away from the broader issues. The business environment had long gone, the context of the job had been removed with the performance measures and any active monitoring of the interactions between the Company and Cranfield vetoed. But the study had to be narrowed down to be practically feasible. The task had become to discover the impact of management development on the individual manager. Three questions were asked: "Who responds? How do they respond? Why do they respond in that way?" These questions were expanded as follows:

Q1. Who Responds?

What "type of Cable and Wireless manager exists? Do the different types respond in different but predictable ways? What are the important variables ... age, nationality, experience, length of service, personality, attitudes, or a particular combination of these?

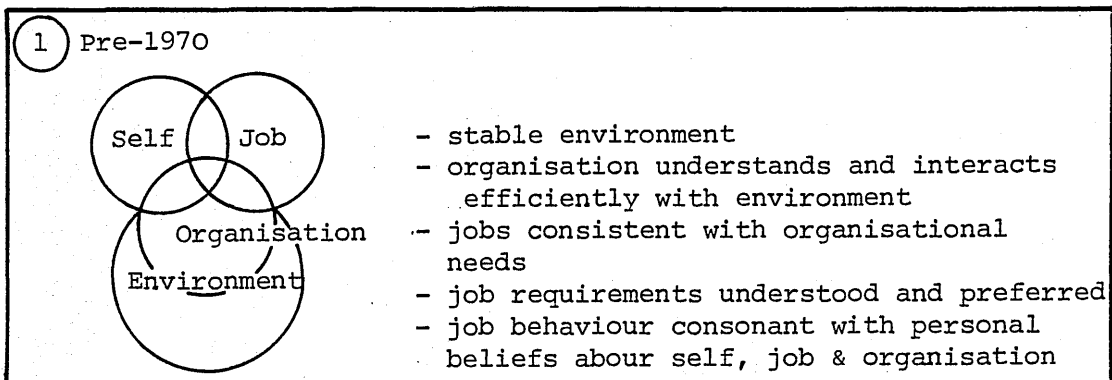
Q2. How do they Respond?

At what level does change occur? Does no change occur at all? Do perceptions change so that situations are seen in a different light? Do cognitions change, allowing the development of a new understanding and the alteration of beliefs? Does behaviour change on return to the workplace?

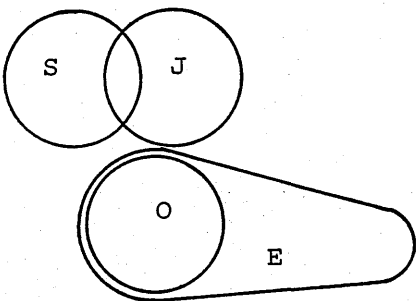
Q3. Why do they Respond in a Particular Way?

Is it because of the "type" of manager they are?
Is it because the organisational climate varies in its level of supportiveness? Is it because of coincidental factors, such as pay or new policies?

The impact of management education on C & W managers was still seen to be complicated by the changes taking place in the company itself. These are illustrated in figure 3.5 (1-6).

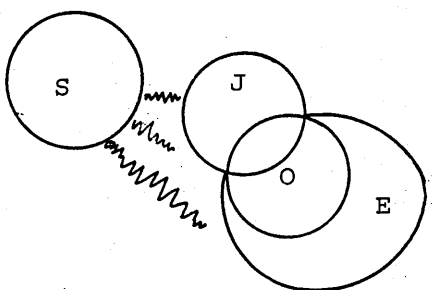


2 1970's



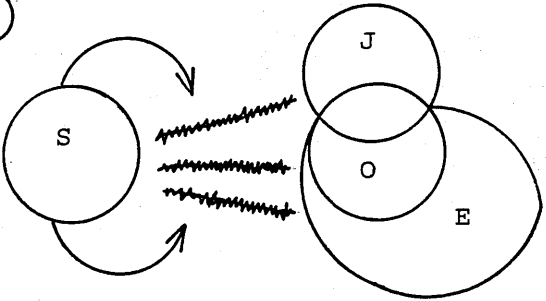
- environment starts to change
- organisation recognises this and begins to adapt

3



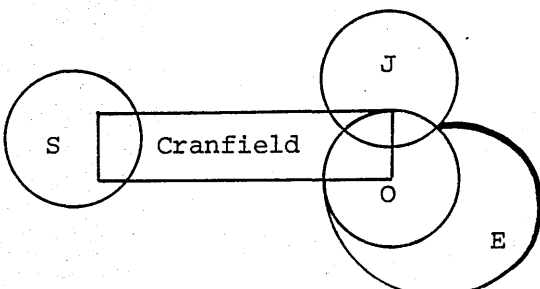
- job requirements change to match new organisational & environmental requirements
- conflict for individual because cognitions about job requirements differ from those about job behaviour. Decision to change or not leads to dissonance

4



- cognitive dissonance is psychologically uncomfortable giving rise to dissonance reducing pressures. Resistance, like dissonance itself, varies from person to person

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- management education used as a mediator to close gap and reduce dissonance

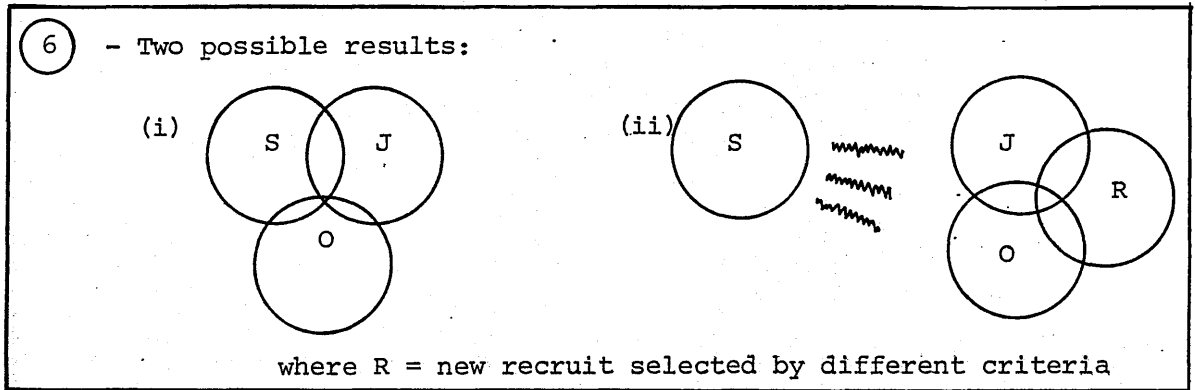


Figure 3.5(1-6) : The Impact of a Changing Environment

Because of this situation, Cranfield may have reduced existing dissonance as postulated above or, in the absence of dissonance, may have actually created it. This may have resulted from the deliberate attempts to make managers view themselves, their jobs and their organisation with greater reality or it may have resulted from the chance exchange of views with managers from other companies at Cranfield at the same time.

The Importance of Cognitive Dissonance

Cognitive dissonance was to be the theoretical rationale for the study. It was explained as being the state of mind existing when the relationship between what one believes and what one does is inconsistent. Individuals were seen to strive for "internal consistency" or harmony between knowledge and behaviour. When inconsistencies existed attempts were made to rationalise them. A failure to do so would create stresses and tensions which motivated the individual to reduce the dissonance. This would be done by either changing the knowledge (by discrediting it or by improving it) or by changing the behaviour, and thereby cognitions about the behaviour. Both of these methods would bring about greater consistency and consequent dissonance reduction. The alternative would be to allow the dissonance to continue to exist.

Why was it important? An everyday occurrence, cognitive dissonance varies in importance with the nature of the

elements involved. If the elements are relatively trivial then the dissonance can be removed or lived with fairly easily without causing undue stress. If, however, the elements are important to the individual, the stresses and tensions created can cause severe psychological discomfort. It must be remembered that cognitive elements reflect reality; indeed, they map it out in one's mind. To reject changed cognitions is to distort reality.

In the case of C & W, changes in the political, economic and commercial environment were seen to have brought about changes in the organisation and in people's jobs. The situation could easily exist whereby a manager's understanding of the Company and the requirements of the job changed but his behaviour in that job did not. He probably experienced conflict in deciding whether or not to change his job behaviour to meet its new requirements. As soon as he made the decision to change his behaviour or not he resolved the conflict but dissonance then came into existence. Whatever choice he made there were usually some arguments in favour of the alternative. These had to be handled before the dissonance could be overcome.

For example, resistance to changing his job behaviour may have involved the acceptance that he needed new skills which he might have interpreted as undermining his existing competence (e.g. "I'm a service-engineer not a salesman"). Or he might have been receiving social support to resist from colleagues, subordinates or family. Rather than change his behaviour he might have preferred to change the environment, and leave for another company altogether. Or he might have changed the new environment back to the old environment by not accepting the new cognitions (e.g. "They've only been in the company a few years, they don't know what it's all about") or by

enhancing the need for old behaviour even in the new situation (e.g. "It may cost more but will last 50 years; never mind 'changing technology'").

Social support is known to have important effects on dissonance reduction which might explain Cranfield's role as a mediator and that of a facilitative organisational climate in the successful transfer of training. Whether or not dissonance varied with "type" of manager was something that may have come out of the research.

The Experimental Design

In order to answer the three research questions it was necessary to discover how Cable and Wireless managers viewed themselves, their jobs and the organisation. The research had to explore their beliefs, their behaviour and the reality surrounding them. It also had to identify any clustering into "types".

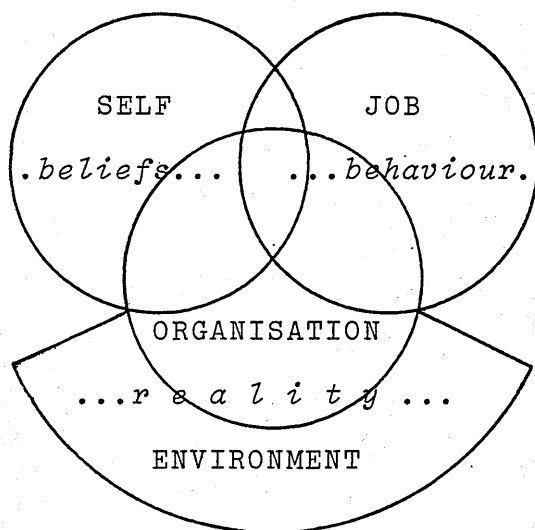


Figure 3.6 : Areas of Interest

To meet these objectives, the two closely-linked studies, already discussed, were to be conducted. The first looked at changes in perceptions, a frequent antecedent to cognitions; the second at the transfer of training.

The research into changes in perception was to be undertaken by a quasi-experimental study designed to measure a randomly selected group of managers over time. At the beginning of the study (Autumn 1978) the perceptions of 100 managers towards themselves, their jobs and the organisation would be measured. Eighteen months later (Spring 1980) the same managers would be measured again. By this time, it will be remembered, they would form two distinct groups, those who had participated in management development programmes at Cranfield and those who had not. The difference between their perceptions in Time 1 and Time 2 would be tested for statistical significance to see whether changes in perception were due to Cranfield or to chance. It was also decided to keep a diary of news and views throughout the period. This might later give some insight into why changes did or did not take place. Figure 3.7 illustrates the experimental design.

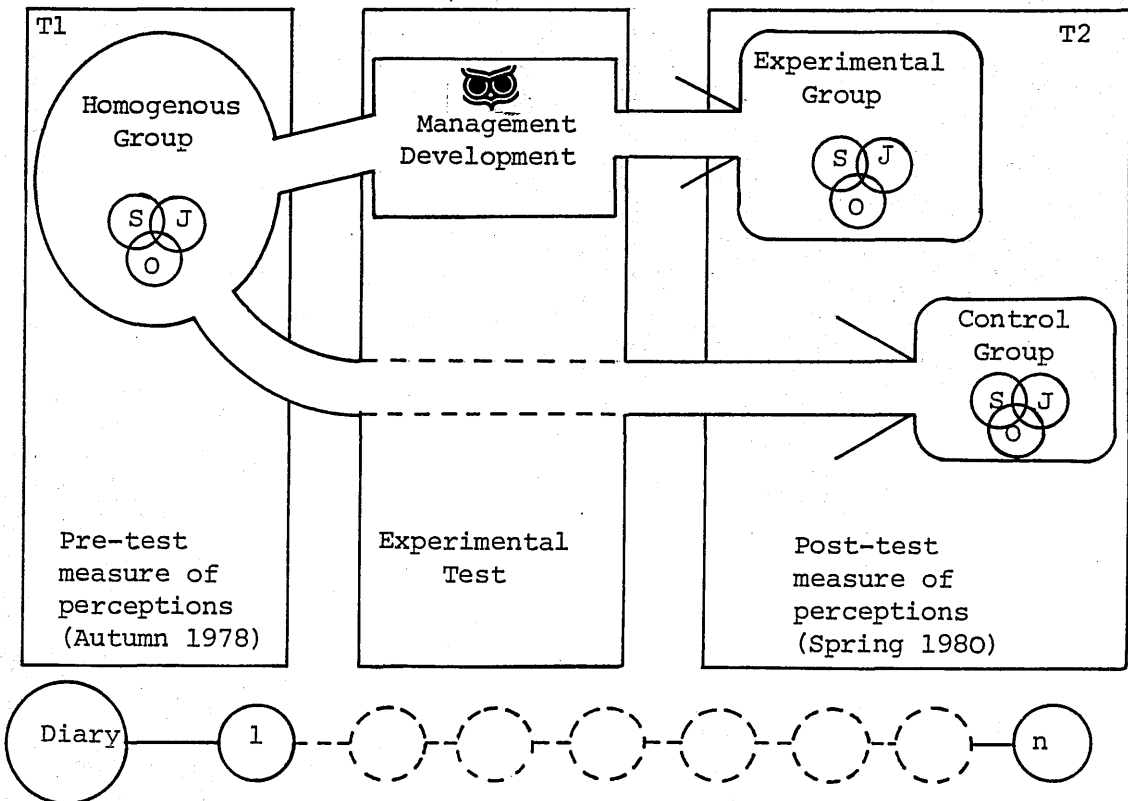


Figure 3.7 : Experimental Design for Research on Changes in Perception

The second research theme was the transfer of training. It was carried forward from the DCC report with only minor changes. Benefits from management training are recognised as accruing first to the individual manager then, if transfer takes place, to the sponsoring organisation. Hamblin (1974) suggests a chain of five links:

- 1 reaction from the participant manager for without that no benefit exists; (new perceptions)
- 2 learning occurs. New knowledge, skills and attitudes are developed in the participant and he personally benefits; (new cognitions)
- 3 new ideas are transferred to the job resulting in different behaviour; (new behaviour)
- 4 organisational change takes place;
- 5 eventually, the organisation benefits in money terms.

If any link in the chain breaks, all the benefits beyond that point are lost. Hamblin believes that evaluation can be made, with increasing difficulty, at each link point. A similar approach is made by Warr, Rackham and Bird (1970) with their three levels of outcomes (immediate 1—2—intermediate 3— and ultimate 4—5). Figure 3.8 shows the interactions between climate and manager in the transfer of training.

The research design, already agreed by Cranfield, now received the Company's seal of approval. It had taken over a year to explore and reach agreement, on the subject to be studied and the general research design within which the study would be conducted.

The Selected Methods of Data Collection

Work was already underway on the selection, design and development of the measurement instruments. It was decided to try and capture both subjective and objective measures.

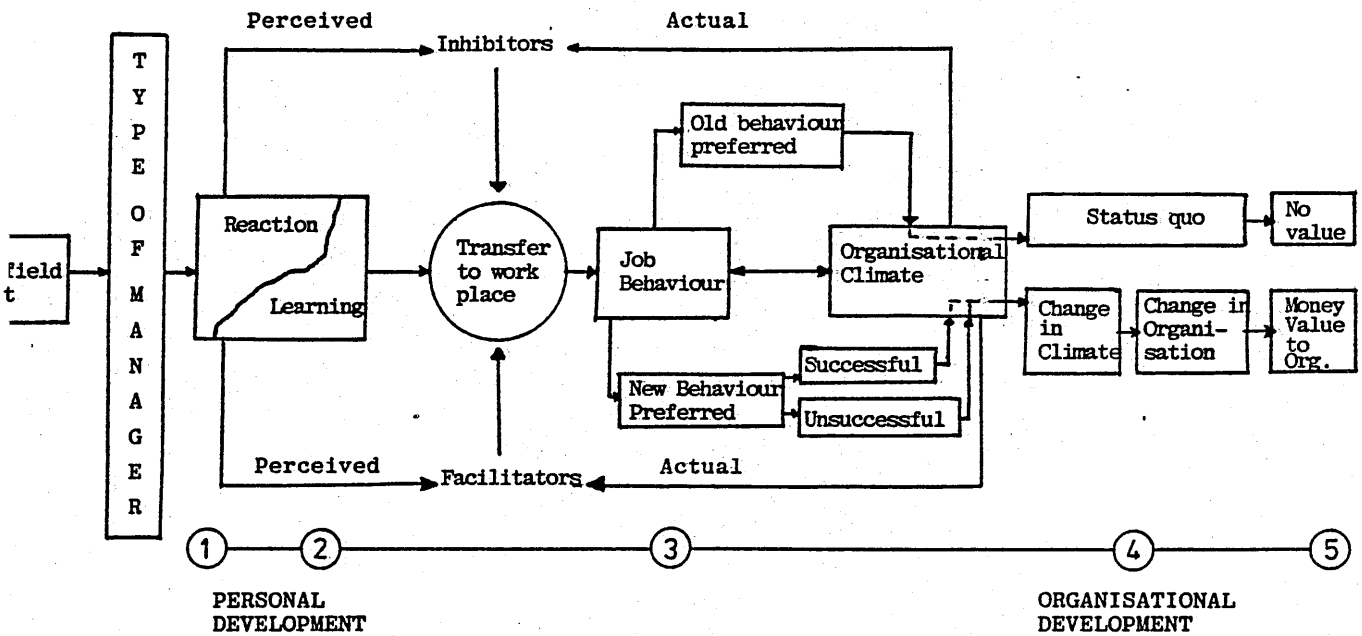


Figure 3.8 : Interactions Between Managers and Climate in the Transfer of Training

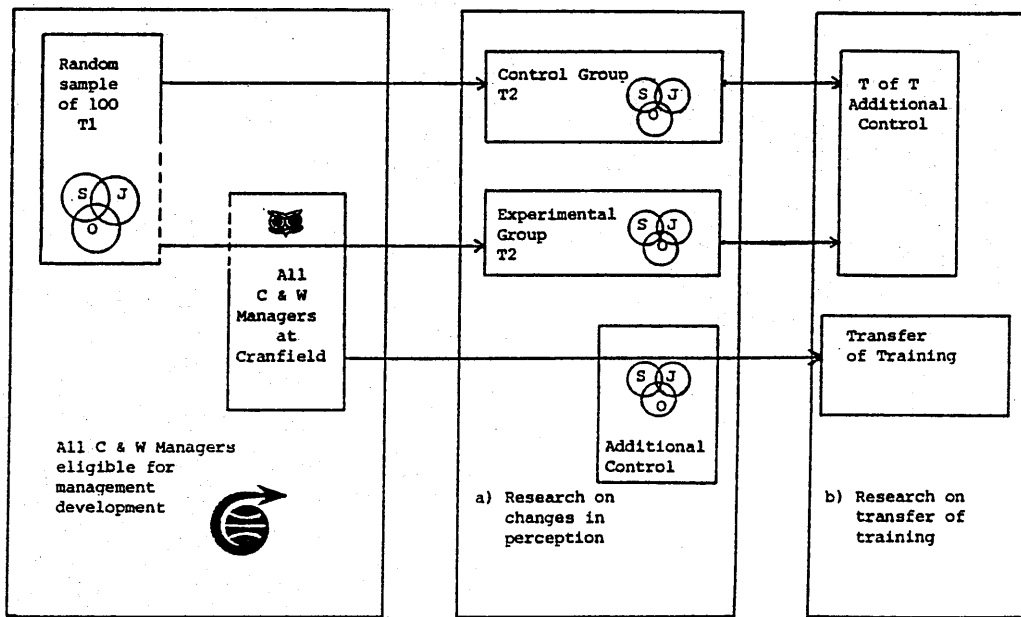


Figure 3.9 : Overall Experimental Design

Figure 3.9 illustrates how the two studies were expected to support and complement one another.

of perception. This was to be done by two booklets. The first, The Management Development Survey would comprise three questionnaires. These were Likert's world famous Profile of Organisational Characteristics; the newly developed Margerison Job Index; and the Myers-Briggs Type Indicator on work preference (3). It was believed that these three measures would give an objective "snapshot" of each manager's perceptions of the Company, his job and himself on the date he completed the questionnaire. A similarly objective "snapshot" could be taken at the end of the study. Scoring was such that before and after measures could easily be compared and so could results between managers. After managers had completed and returned the Management Development Survey they were to be sent the second set of questionnaires. These would take a subjective "snapshot" of the manager's perceptions. The vehicle to be used was a specially designed version of repertory grid that could be sent out by post and be self-administered by the subject. When returned it would be run through Slater's computer package (4) and the results would be stored for comparison with those at the end of the study and those of other managers.

Quite clearly a lot of work needed doing before these two booklets would be ready for use. The objective was to send out the Survey at the beginning of 1979, the grid three months later, and the T2 follow-up at the beginning of 1980. This meant that the experimental group could only include managers who were due to attend Cranfield during the next 12 months. These managers (about 120) had already been selected. It was agreed that an experimental group would be selected from these managers. They would be "matched", as far as possible, with managers who had been selected for the same programmes in subsequent years. This second group of managers would make up the control group. The number of managers

participating in the study would depend on the number of successfully matched pairs.

The Margerison Job Index measured the three motivational forces of need for achievement, need for power and need for affiliation and the relative distribution of these needs in a manager's current job and in his preferred job. The index was much more quickly and more easily completed than many of the other available measures of motivation. It was a potentially powerful instrument with strong face validity. Before it could be used in the C & W research it needed to be validated and piloted. An exercise to validate the wording of the questionnaire was conducted immediately on 120 MBA students during their pre-course orientation week. As a result of this a revised version was developed and tested, again on MBA students who were now in their eighth week of study. Piloting was then undertaken on Cranfield's public Senior Management Programme and incoming C & W programmes. Some 70 managers participated and further amendments were made before the Index was felt to be ready for use.

In the meantime, several drafts of the Management Development Survey booklet had been written and improved upon. The objective was to produce a document that would be both credible and non-threatening to managers of many different nationalities. The wording had to be unambiguous, the questions easy to understand and complete. The layout was important to these aims and both the Likert and the Myers Briggs questionnaires were retyped to make them more straightforward. An introductory letter explained why the research was being undertaken, how it was totally confidential, and that each manager would receive his personal results set in the context of aggregated group scores. The outcome was a 21-page, illustrated A4 booklet, spiral-bound between glossy card covers. It was hoped that this would ensure the arrival of a smart and attractive self-contained document however

far around the world it had to travel. Completion of the questionnaire demanded about an hour of concentrated effort. It was therefore important to capture a high priority rating on arrival.

A follow-up booklet was also designed to provide participant managers with feedback. It adopted the same format and was entitled Management Development Survey: Analysis and Implications. The three questionnaires already used were explained and the analysis of the individual manager's responses were given. So that the manager could interpret his own responses in the light of those of his colleagues, an analysis of their responses was given alongside. The implications inherent in the responses, both individual and group, were highlighted by six "activities" which the managers were invited to carry out (5). It was hoped that this would encourage managers to think further about the issues raised. Instead of simply sending a dry list of data, the intention was to create a lively dialogue with the managers. The tone of the Survey was highly collaborative. This was believed to be ethically sound and it also paved the way for the subjective data collection via the repertory grid.

The repertory grid is usually administered face-to-face. No postal grids were known of and a new package would have to be developed. This was done and it was piloted on a number of managers from industry who volunteered in response to a short piece in the Cranfield Management Review (6). It was also piloted amongst a number of academic colleagues. It was subsequently used as the basis of at least three different research projects (7).

Further excitement was being engendered by the project. The highly-collaborative methods of data collection were breaking new ground in the concept of "research at a distance". Distance teaching had been pioneered and

developed only a few miles away by The Open University. The researcher had worked there for three years before joining Cranfield. Many of their principles and findings had been utilized in the development of the methodology.

Some Concerns

By early Spring 1979 the project was ready to launch. Members of the Steering Committee had been kept informed throughout and at their meeting on 5th March 1979 raised their concerns. Four issues emerged. These were:

1. the necessity of "coding" the participants;
2. the manner in which the results were to be fed back to the participants;
3. the circulation of the final report;
4. the effects on other research and development work.

The replacement of the manager's name with a number was felt to be rather sinister and the explanation for it, in the introductory letter, was felt to be somewhat intimidating. The researcher explained that participants must be coded to ensure confidentiality but agreed to rewrite the explanation in a more relaxed tone. The Committee were also concerned about feedback, of such a personal nature, moving about the Company. In addition, they thought the release of generally held "group norms" inadvisable. The researcher described how the results, marked "personal and confidential" would be sent to the address (home or work) chosen by the individual manager. She reiterated her preference for sending them in the context of a general result but, if the Committee thought this unacceptable, they they would be sent in isolation. It was pointed out that although still of interest to the individual, they would be far less meaningful. As to the circulation of the final report, the researcher

agreed that as it was being written for the Steering Committee, its release should be at their discretion. The introductory letter would be changed accordingly. The final objection about the effect of this study on other research and development work was an interesting one. Was it simply the defensive reaction of an internal researcher on the Committee against the interference of external probing? It was not a problem that could be solved by re-jigging the methodology; it could only be solved by removing it. However, the researcher felt that as she was only involved with a sample of managers, rather than the entire population, her impact would not be detrimental to any similar work. Nor, did she believe, would participation in this experiment alienate managers from subsequent research enquiries. A further meeting was to be held amongst the Company members of the Committee before the proposals were presented to the Group Managing Director.

Some Problems

On 4th April 1979, the researcher was invited to meet with the Group Managing Director for what she expected to be the final seal of approval. To her surprise, several members of the Steering Committee were present and, to her even greater surprise, used the meeting as a "last ditch" attempt to raise objections and misgivings. It was decided that further reflection and discussion was needed before any final commitment could be entered into.

Five problem areas were identified:

1. Confidentiality of the findings;
2. Management Development Survey booklet - wording of the letter and the questionnaires;
3. Feeding back the results to individual managers;
4. Selection of the sample;
5. Compulsory vs. voluntary nature of the exercise.

1. Confidentiality of the Findings

There were some fears that managers would erroneously believe that the researcher was really working for top management and that she would be secretly passing on their responses and her interpretation of them. This being the case they would either refuse to participate or would do so in a distrustful (and therefore unreliable) manner. It was argued that if the researcher met the managers and was able to establish a rapport with them, then they could decide for themselves the extent to which they entrusted her with their confidences. Just to write in an introduction that data would be handled confidentially was not enough. "In Cable and Wireless" it was said, "everything is marked confidential; it really doesn't mean very much". The suggestion was made that the responses could be made anonymously. The researcher explained that this would have been possible if she had been conducting a simple survey. It was, however, impossible for a longitudinal survey which required the matching of the same person's responses over time.

2. Management Development Survey Booklet - Wording of the Letter and the Questionnaire

It was generally felt that the letter should be about twice the length, stressing the background and validity of the questionnaires and expanding on the confidentiality issue. Then, despite their having been circulated several months earlier, without an objection ever having been raised, the questionnaires themselves came under attack. They were criticised as being "too personal", "too probing", "too behavioural" and "going too far". There were requests for specific questions to be removed. Such an action, it was explained, would invalidate the findings. By this stage the mood was such that a disparaging reference was made to the Myers Briggs Type Indicator as

"psychological party tricks". Again, it was felt by the Committee that if the questionnaires were administered personally then the opportunity existed for explanation and reassurance.

3. Feeding Back the Results to Individual Participants

That participants should receive feedback at all was questioned. The researcher felt strongly that the individual managers owned the information and were, therefore; entitled to it; she also felt that they deserved it in return for the effort they had and, hopefully, would continue to put in.

The nature of the feedback was also questioned. Whether individual data should be set in the context of a group response or in isolation ... How much explanation and interpretation should be given ... The extent to which participants should be encouraged to think about the implications of the various responses ... were the issues raised. The researcher had already attempted to anticipate these concerns in her draft feedback booklet Management Development Survey: Analysis and Interpretation. Individual responses to "organisation" and "job" had been set in the context of group responses, whilst personal responses to "self" were left in isolation. She left interpretation to the individual through a series of activities and had taken pains throughout to present the material in a value-free and non-threatening manner.

However, it was still felt that the receipt of such information would be disturbing to some managers. Such managers might be living in places where counselling was either not available or not culturally acceptable. To receive personal feedback through the impersonal medium of the letterbox without the opportunity for discussion was felt to be unacceptable. Who knew what damage might be done. The

important issue of research ethics had clearly surfaced.

4. Selection of the Sample

This too was criticised. The Committee proposed a self-selected group of volunteer participants for the study. As this would have destroyed the scientific nature of the experiment, the suggestion was totally unacceptable to the researcher.

5. Compulsory vs. Voluntary Nature of the Survey

If the sample were to be fixed to those managers selected by the researcher, then, it was put forward, they must be given the opportunity not to respond. The researcher knew she could not compel anyone to respond but felt that to invite their non-response would be disastrous and probably distort the sample as much as the previous suggestion.

Some Alternative Strategies

To overcome the problems outlined above a sub-committee met on 1st May 1979. At this meeting the researcher put forward four alternative strategies. These ranged from making minor amendments to the existing proposal through to scrapping it entirely in favour of something completely different. The problems, as expressed, seemed to have a common origin. It was that of "remoteness". The researcher tried to overcome this in various ways:

1. One suggestion, the least disruptive and least expensive, was to leave the research design unchanged but amend the text to overcome as many of the objections as possible.
2. The second suggestion was to keep the research design and, in addition to the amended text, use singly or in combination, video cassettes, one with the questionnaire, another with the feedback; ex-Cranfield participants in the Company as

counsellors; telephone "surgery" with the researcher.

3. The third suggestion was to abandon the existing research design and to work on the text and the other issues raised on April 4th with about 20 C and W managers. The idea would be to develop with them a "survey" document which would be acceptable to participant managers and to academic scrutiny. This would provide valuable insights into the challenge of "research at a distance". The finished documents would then be circulated - anonymously - to all management, as a single-shot survey.

4. The fourth and final suggestion to overcome the problem of remoteness also involved abandoning the original design. Face-to-face sessions would be held with managers at their place of work. Such sessions could be linked with other in-house training activities such as job appraisal and could be conducted by a small team of Cranfield/C and W personnel on themes such as self-awareness, team-building, career development and so on. The research output would be the collection of perceptions about the individual, his job and the Company and the monitoring of the setting and, hopefully, subsequent fulfillment of action plans emanating from the workshops.

At the May 1st meeting, enthusiasm was heavily weighted towards Strategy 4 - the conducting of in-company workshops. It was agreed that the four alternatives would be put to the full Steering Committee, with a recommendation for the workshop approach, at its next meeting on 4th June 1979.

The first item on the agenda on the 4th June was the renegotiation of the joint-venture contract for the second triennium. The conflict of interests on this subject so dominated the discussions that, although the research report received airtime, no firm decisions were made. The meeting of May 1st had already reaffirmed, in the mind of

the researcher, her feelings of April 4th - that the quasi-experimental design for measuring changes in perception was not going to be possible. Given this situation she decided to concentrate her attention on the second theme of the original proposal: that of the transfer of training. She suggested that parallel research could include the in-company workshops and the process of the joint-venture. The main thrust however would be on the transfer of training. All measures would be made at Cranfield in a face-to-face situation with the opportunity for personal counselling as a readily-available facility. The managers would all be followed-up some six months later by post using the Transfer of Training booklet. They would be asked to do nothing beyond that which had already been discussed with them during their period at Cranfield. In addition, it was hoped that there would be the time and opportunity for some of the managers to be followed up more closely for an in-depth study for which their permission would be sought in advance.

It was agreed that the Transfer of Training booklet, which had already undergone scrutiny and modification, would be circulated amongst the Committee for a final look before being despatched to the backlog of managers who had attended programmes at Cranfield during the previous two years.

The transfer of training study was underway. The management development survey, with its highly prized research design, had been shelved. The researcher was beginning to understand why such designs were so rare in organisational studies.

Part II: The Research Study

The central theme of the research was now agreed; it was to be the transfer of training. The spotlight was on the

individual manager.

Research Questions and Hypotheses

The literature discussed in Chapter 1 suggests that three distinct factors influence the transfer process. These are: the learning experience; the individual manager; and the organisational climate. Different researchers have emphasised different factors. This research aims to explore these factors and attempt to clarify their relative importance. The setting of the study has been described in Chapter 2.

A number of questions spring to mind: What differences actually exist between the participant managers? How satisfied are they with their experiences at Cranfield? Does this influence their attempts at transfer? Is the organisational climate a help or a hindrance to transfer, or does it have no effect? Is perception of climate a function of the "type" of manager? Or do these "Company men" share similar views? Do they consider they have learnt anything at Cranfield worth transferring back to work? Are certain topics more readily transferred? ... the questions flow from one another apparently endless stream.

From these questions a series of hypotheses were drawn. They are phrased below as four null hypotheses and examined as such. The findings of each are discussed in Chapters 4, 5, 6 and 7.

Null Hypothesis 1: Participant managers are not significantly different from one another. (Discussed in Chapter 4).

Null Hypothesis 2: No manager is significantly more satisfied with his learning experience than any other manager. (Discussed in Chapter 5).

Null Hypothesis 3: There is no significant difference between managers' perceptions of aspects of the organisational climate in helping or hindering them to transfer what they have learnt. (Discussed in Chapter 6).

Null Hypothesis 4: There is no significant difference in transfer performance between different managers. (Chap 7).

The researcher believed that testing these null-hypotheses would provide valuable insights for the members of the joint-venture and make a useful contribution to the general understanding of the transfer process in management development. The findings should add to the existing literature and, because of the relative paucity of knowledge on the transfer of management training, lead to further hypothesis generation. This is felt by Glaser and Strauss (1967) to be as important as hypothesis testing.

Research Strategy

As a result of the negotiation process described earlier, the strategy finally arrived at was grounded in the external realities of what was regarded as viable and acceptable. It was no longer a purely intellectual blueprint to be imposed on an unwilling or apprehensive client. What was proposed and adopted was essentially a case study of the joint venture within which was set a statistical field study of the transfer of training.

The use of case studies in organisational research has been controversial for many years. They have, for instance, been criticised for lacking the control and precision necessary for scientific validity. Even their critics, however, acknowledge their value for collecting extra evidence and providing an opportunity for "total immersion" in, and understanding of, the situation being researched (Anderson and Ball, 1978). The case-study

paradigm was particularly well-suited to the study of the joint-venture as it encouraged the researcher to look deeply and widely at this partnership during a period of innovation and anticipated change. Data was transitory and subjective, as were many of the variables. Academics at Cranfield and managers from the Company were not "subjects" to be manipulated but "participant observers" who were commenting on the larger system of which they were a part. In this way they were still the source of information but in an ethically more acceptable manner than is traditionally the case. The findings of the case study research have already been discussed in Chapter 2.

The second strategy, embedded in the context of the first, would be described by Kerlinger (1973) as a "field study". It matched his definition to the letter comprising as it does "ex post facto scientific inquiries aimed at discovering the relations and interactions among sociological, psychological, and educational variables in real social structures" (p 405). This describes exactly the manner and nature of the in-depth study conducted into the inter-relationship and relative importance of the factors held to be accountable for the transfer of management training. Festinger & Katz (1954) identify two types of field study; the exploratory and the hypothesis-testing. The former seeks out the relevant dimensions and relationships, the latter enables predictions to be made. This study attempts to do something of both. In recognising that relevant dimensions have already been discovered, it seeks to put some questions about them to the test. At the same time, it hopes to further the explorations already started.

Field studies have much to recommend them. Complex and socially significant phenomena can be studied in their natural settings. Problems can be seen in their entirety whilst at the same time a wide range of variables

are available for examination. They can be systematically measured in the knowledge that their strength will be greater than would be possible in the contrived settings of a laboratory (Stone 1978, p 114). The researcher can proceed relatively unobtrusively and realism is kept high. Scott's fifteen year old statement still holds true: "Most of what we knew today about organisations and the behaviour of their members is known on the basis of field studies" (Scott, 1965, p 261).

But, that which is gained in naturalness must be set against that which is lost in control. Variables cannot be manipulated, as they can in a laboratory. Measurements are less precise because of the increased error variance and the influence of confounding variables. It is sometimes difficult to "see the wood for the trees", important variables can be missed and vast quantities of irrelevant data can be collected. Samples are frequently biased and causal inferences between variables can be highly tenuous. Runkel and McGrath (1972, p 94) summed up the fears of many academics "... with the field study strategy, the investigator ends up learning a lot about complex and meaningful behaviour systems, but he does not know with high confidence just what he has learned". Added to this, field studies can be extremely expensive and are highly dependent on the co-operation of the host institution. Even so, despite all these drawbacks, "of all types of studies" believes Kerlinger "they are the closest to real life" (1973, p.47), and it is real life, after all, that we are seeking to understand.

The Research Design

The design of the field study would undoubtedly be criticised against the conventional criteria espoused by Campbell and Stanley (1963) and later by Cook and Campbell

(1976). There is no possibility of a control group, nor are the managers selected at random. The researcher found, as did Hogarth (1979, p 17), that the demands of the classical laboratory approach are not feasible when dealing with the complexities of organisational life nor, as Hogarth suggests, is it reasonable to expect them to be so. In the notation of Campbell and Stanley, this field study, being an ex-post-facto one-group study with some time series factors, would be $X - O_1 - A - O_2$, where X = the experimental phase, A = the action phase, and O_1 and O_2 = the 1st and 2nd observation phases.

Classical experimentation is concerned with causality. For this reason a pre-test measure is required as well as a post-test measure. The experimental activity has to be isolated and controlled so that causality can be proven or not proven as the case may be. In this study the experimental phase is the management development programme attended by the manager. To isolate its effects, it would have been necessary to select the managers undergoing the 'experiment' at random and set their experiences against those of a similarly selected group of managers who did not undertake the training programme. This approach would have ensured external validity and the impact of the programme could have been objectively measured and generalisations made. However, as has already been pointed out, it was not possible to do this and besides interest is focussed not on the experimental phase alone but also the nature of the individual and the organisation climate, their inter-relationships and the transfer process after the manager has left the training programme. That phase does have a pre-test and post-test measure.

The concerns of the classical researcher are for reliability and validity. These are issues with which even non-experimental researchers must be concerned.

Reliability refers to the truthfulness of the responses elicited by the measurement instruments. How accurate are they? How stable and consistent are they? There are a number of ways that objective measures can be tested but subjective measures, such as opinions, are more difficult and often have to be taken at face value. A key questionnaire in this study was the Myers-Briggs Type Indicator. It has undergone numerous tests, is accepted as a reliable measure of the Jungian typology and is becoming increasingly widely used (8). The other measures proposed earlier had now been dropped.

Other than biographical data, all the other measurements were self-reports. These were recognised as being purely subjective. With these measurements the researcher had to assume (as did Stone, 1976) that respondents were telling the truth, as they saw it, and that the data provided was valid. Several of the measures were open-ended; those that were not - the organisational climate checklist and the activity scales - tended to be exhaustive, comprising 61 and 20 items respectively. Any respondent who was unwilling to complete them discriminatively tended to reveal himself by giving every item the same score or just not bothering to reply.

Subjective measures are, by definition, dependent on the perceptions of the individual being questioned. The many studies in cognitive mapping have shown how "reality" varies from person to person, particularly when their attitudes and values are being sought(9). With such measures, reliability testing becomes rather foolish. Baumgartel and Jeanpierre (1972) tried to overcome the problem by collecting collaborative evidence from the superiors of 46 of their 240 respondents "to provide information on the validity and reliability of the basic responses". Only 33 co-operated and few of them corroborated the responses of their subordinates. The authors were disappointed but conceded that "this discrepancy is apparently frequently discovered in research on management education -

trained managers report more take-home benefit than their bosses observe in their on-the-job behaviour" (p 682). Nienstedt (1980) found exactly the same.

Validity is defined by Runkel and McGrath (1972) as the "logical soundness of study conclusions" (p 36). It has been subdivided by Cook and Campbell (1976) into four kinds - external validity; internal validity; content validity; and statistical conclusion validity.

1. External validity. This is "the validity with which a causal relationship can be generalised across persons, settings and times" (Cook and Campbell, 1976 p 233). The most difficult of the four, Cook and Campbell describe external validity as "the Achilles heel of the behavioural sciences" (p. 237). A field study, and even more a case study, is by definition restricted in its applicability. The sample of managers may be representative of the Company from which they are drawn but they cannot be regarded as representative of all managers through time and space. Nevertheless, the independent variables are clearly described by the researcher and, although a field study is rarely replicated, differences between this and comparable studies could be identified. The findings should be able to be generalised to other managers within the Company but might be of only academic interest further afield.

2. Internal validity. This concerns the unambiguity with which conclusions can be drawn. It depends heavily on whether the experimental process is effecting its own outcome. Campbell and Stanley identify seven threats to internal validity. These are history; maturation; testing; instrumentation; regression; selection and mortality. They may occur individually or in combination with one another:

History: Outside events, taking place between the two periods of observation, may be the real cause for change or the lack of it, which might be mistakenly attributed to the experimental treatment. One of the advantages of a case study is the extent to which the researcher is familiar with other developments and their likely effects. 'History' poses little threat to internal validity in this study.

Maturation: This is "the growing older, wiser and stronger" of the respondents between the two periods of observation. Again, it could be responsible for changes rather than the experimental phase. As in this study the experimental treatment is management development, its sole aim is the speeding up of the natural maturation process. So any growth in this area should be the result of the experimental activities. 'Maturation' therefore poses little threat.

Testing: This threat arises when respondents are asked to take the same tests on a number of occasions. They may 'learn' how to answer them to get high scores. In this study there are no 'right' answers and only one 61-item checklist is repeated so there is little danger of their becoming sensitized to it. However, as many of the questions are seeking perceptions there is always the danger of a respondent seeking to please the researcher, by writing the answers he thinks she would like to read. Having read the answers, she thinks this unlikely! 'Testing' is not seen as a threat.

Instrumentation: This threat is caused by changing the measurement instrument between observation phases. Cohen and Manion (1980) draw attention to the use of human observers and judges whose skill and concentration may vary from one observation to another. This threat and the previous one (testing) tend to be mutually exclusive. Either the instruments remain the same from one observation period to the next and are threatened by the respondent's

familiarity with them, or different instruments are used and there is the danger of not measuring the same things and not, therefore, comparing like with like. In this study the questions asked in the second period of observation, with the exception of the climate checklist, depended upon the experiences back at work after the programme. They were not asked in the first observation period.

Regression. The threat, of statistical regression, like maturation, increases steadily over time. It is due to unreliable measuring instruments and/or extraneous influences operating on the respondents. It causes a regression to the mean in the second observation phase, compared with the first. The highest scores fall, the lowest rise.

Selection. This is a threat in all non-randomised studies, such as this one, because the observed differences or similarities may be caused by selection-bias rather than by experimental treatment. Bias, from this or any other source, causes systematic error to occur. All C & W managers who had attended Cranfield general management programmes were invited to participate in this transfer study. Any that selected themselves 'out' were measured separately. Those who selected themselves 'in' were measured for their representativeness of the population as a whole and were grouped in a number of different ways during the analysis. As far as original selection for attending the experimental treatment was concerned, the Company used a wide range of criteria. (The cynical might infer that a random-equivalent had been achieved!)

Mortality: This is the one threat over which the researcher can have little control. It concerns those subjects who fail to respond. This might be for a number of reasons - death, retirement, leaving the Company, apathy, deliberate non-co-operation, or simply giving the Questionnaire too low a priority for it to be returned in time. In this study the researcher attempted an analysis of the reasons

for non-response.

3. Construct Validity

This establishes that the measurements taken are pertinent to the constructs (ie the abstract variables (10)). To get the best possible match between construct and measure, it is important to define the construct and its causes and effects very clearly. This done, not only can agreement be reached on the constructs being used, but also the measures can be tailored to match them.

Cook and Campbell (1976) identify two major threats to construct validity. These are "construct underrepresentation" and "surplus construct irrelevancies". The former occurs when the researcher has not included all the different dimensions of the construct; the latter when he includes dimensions that are not relevant to the construct and are, therefore, superfluous. To thwart such threats, Cook and Campbell make a number of recommendations, the most important of which are: a precise explication of each construct before the selection of measurement tools; the use of a number of different measures and methods to "triangulate" on each construct; the selection of settings and persons who are representative of those to whom the results will be generalised; and the concealing of any hypothesis that is being tested as awareness of it can bias the response. They conclude that the field researcher will be more able to achieve the content validity of outcomes than of causes; for the laboratory experimenter, the reverse is true. This is because there is more scope in the "field" for multiple measurement and more scope in the laboratory for multiple manipulation.

In this study, the researcher has used a single method - the questionnaire - but a wide variety of measures. Each construct was discussed with the supervisor and Steering Committee for its full range of relevant dimensions and

the interpretation of those dimensions into questionnaire format. For example, in studying the construct of "self-development" she took a variety of dimensions - "selling" oneself; sorting out priorities; recognising one's own strengths and weaknesses; and doing something positive about them - and has measured them by means of a questionnaire. Ideally, she would have liked to use a variety of methods, the two most obvious in this context being to observe the effects of the training on self-development at the workplace and to interview the people with whom the manager relates, both supervisors and subordinates. Unfortunately, the costs of doing the former were prohibitive (participants go to jobs throughout the world); whilst the latter method was discouraged by the Company.

4. Statistical Conclusion Validity

To decide whether or not the management development programmes have had any effect or not, the researcher subjected her measurements to statistical testing. On the basis of the outcome, the null hypotheses are rejected or not and decisions about the programmes can be made. It is vital then, that the conclusions drawn from the statistical tests are true and free from error. Cook and Campbell (1976) point out that, unlike laboratory experiments, field studies do not allow much control over error variance so true differences are less easy to discover. They also specify that between-group comparisons are much stronger than within-group comparisons. The threats to statistical conclusion validity can come from undertaking a very large number of comparisons (leading to Type I errors i.e. that differences exist where they don't) and from very small samples and narrow hypotheses (leading to Type II errors i.e. that differences don't exist where they do). Unreliable measures will inflate errors, so too will variation in the manner in which the treatment is administered.

In this study, efforts were made to use reliable measures and although the management development programmes all differed from one another in the detail of who was teaching what, they were very similar in terms of curriculum design, physical setting, overall standards of teaching and the like. The only programme that was not, MMP9 (held in Al Ain, UAE), was excluded from the study. Overall measures of the data were made and a number of different sub-groups were formed for between-group comparison. Categorisation was based on differences found within the independent variables. For example, clusters of the 16 Jungian types as measured by the Myers-Briggs Type Indicator; the category of manager within the Company - whether he is HO, Nat or Fl staff; and the type of programme he attended - whether it was an SMP, an MRP or an MMP.

The Maxmincon Principle

In attempting to overcome the many factors that threaten the validity of the study, the researcher has kept in mind Kerlinger's (1973) MAXMINCON principle. That is to maximise systematic variance, minimise error variance and control extraneous variance. So, in constructing the design, she included relevant variables over which managers would record a wide range of responses, thus maximising systematic or experimental variance - for example, work preference measures and perceptions of the programme attended were included but intelligence measures were not. She excluded variables that were not strictly relevant and which, if included, may distort the results and hide the systematic variance that she was trying to identify.

She also tried to lessen the effects of the many potential sources of unexpected error variance by giving clear written instructions to the managers when they completed the questionnaires. Kerlinger accepts that control, under field conditions, is difficult (p 312) but believes that

constant efforts should be made to minimise these threats. He also adds that as many of the determinants of error variance interact, they have a tendency to cancel one another out.

As many of the extraneous variables could not be controlled by simply excluding them from the study (as was MMP9) nor by using only random samples of managers, Kerlinger's third and final means of controlling extraneous variables was adopted. This was to build them into the research design as attribute variables. In this way, control was strengthened and additional research information yielded.

Part III: Data Collection and Data Analysis

The Case Study

The joint-venture provided the case-study for the researcher. She was able to observe its characteristics and monitor its development over the full three years. This had the advantage that behaviour and events could be studied in their natural setting and a holistic view could be taken. She adopted a flexible approach, using a number of different methods for collecting the data. These included participant observation, semi-structured interviews and documentary material.

Participant Observation

At the policy level, the researcher attended many of the Steering Committee meetings. At the operational level, she attended a number of post-programme review sessions, both those held with the participants and those held later between the Company Training Department and the Course Tutor. She was also involved in the project tutoring and some of the lecturing, particularly in connection with the MMP. By this sort of involvement, the researcher was able to experience first hand, many of the issues that faced both

parties in the joint-venture. She was also able to witness at close quarters their behaviour towards one another over a number of years. The dangers of "going native" and losing the research perspective are recognised by Cohen and Manion (1980, p 103-5). However, the researcher felt that internal validity was maintained by using a number of other, less subjective, methods than this alone. The benefits to be accrued were a greater understanding of complex relationships and increased credibility with both parties.

Interviews

A total of 88 interviews were conducted during the study. An additional 23 interviews had already been conducted in the Spring of 1977. These had been with senior managers and Directors of the Company, who were being asked their views on the scope and content of the training programmes. The interviews lasted about an hour each and were conducted by the Director of the joint-venture (later the supervisor) and his Research Assistant (later the researcher) as part of the venture's development work. During these interviews many of the Company's underlying values were expressed and the researcher got her first glimpses of the organisation's culture.

Of the other 88 interviews, half were with participants of the MMPs during the first year of the venture (1977-8). The other half were with all those members of the Company and the School who had been involved in the joint-venture as a policymaker, administrator or lecturer. These interviews were held in the spring and early summer of 1980. All the interviews (other than one pair) were held individually, in private, and lasted between 45 minutes and two hours.

All the interviews shared the advantages and disadvantages

inherent in this method of data collection. On the positive side they allowed exploration, depth, probing and clarification. On the negative side were the dangers of interviewer bias and subjectivity. As research interviews, they tended to be fairly informal particularly those with the programme participants. The objective of these early interviews was to gain an understanding of the Company, the sort of manager it moulded, what it expected of him and how he felt about the whole situation. The style of the interview was conversational, the interviewee was encouraged to talk about his job, his past and future career, the Company, the way in which all these interacted and the problems that they raised for him. Tuckman (1972) suggests that indirect questions elicit the most frank and open responses. The researcher found herself using both indirect and direct questions as the occasion demanded. Her genuine interest in the issues raised usually led to a good rapport with the managers and she felt that their contribution was typified by sincerity and concern. With a few exceptions, they did not appear to be holding back information or feelings although there was one avoidance tactic to which the researcher soon alerted herself: it was the escape route provided by an involved explanation of the technical details of the manager's job. As engineers, they found it almost irresistible!

The second batch of interviews, held two to three years later, were more formal although responses were still unstructured. At no time did the researcher use a coded response sheet for completion, either during or after the interview. Instead, notes were taken during the interview and written up afterwards. A photocopied set was cut up for content analysis. It was a time-consuming process, the writing-up taking at least as long as the interview itself, but it was less tiresome than transcribing direct from tape recordings which is how the first 13 interviews with the participants of MMP7 had been conducted.

The focus for the second group of interviews was the joint-venture itself. To extract the greatest value out of the hour generally allocated to the interview, the researcher drew up a Buzan-style map identifying the topics she thought might be usefully considered. This map was sent in advance of the interview and served as an "agenda" throughout the discussion. It was an extremely useful device. It allowed the "control" to be shared in what was an ambiguous power relationship conducted, as it was, in the interviewee's office. It also provided sufficient structure for systematic note-taking. The full benefit of this was appreciated in the content analysis. Questions of a fairly specific nature could be identified without the interviewer having to resort to "ask" them in the interrogative style of a spoken questionnaire. The maps (11) turned out to be fairly comprehensive but were flexible to alteration by either the addition or deletion of particular topics. In this way the "questionnaire" could be tailored to the interests of the individual interviewee.

Documentary Material

This comprised all the correspondence between the two parties; memoranda concerning the venture exchanged within the School; the Reports to the Steering Committee and the minutes of their meetings; and programme reviews. Issues raised from these sources were brought up by the researcher when she interviewed the individuals who were most closely concerned.

Whilst the case study approach enabled her to present an overall picture of a complex situation, it did not permit more detailed inferences to be made. To do this it was necessary to conduct a field study within the context of the case study. The focus of the field study was the transfer of training.

The Field Study

Data was collected from all those C & W managers who attended general management programmes at Cranfield between April 1977 and February 1980. Data is still being collected from those managers who attended subsequent programmes.

The programmes were all residential at Cranfield. The MMP lasted for five weeks, the SMP and MRP lasted for two weeks each. In the data collection period, seven MMPs, four SMPs and two MRPs had been held for a total of 181 managers. Each of these managers was followed-up, back at work, to see how valuable he felt his programme had been and what progress he had been able to make in transferring his new skills and knowledge.

The Variables Being Measured

To explore the research questions and test the null hypotheses, it was necessary to measure four groups of variables. Each group comprises a number of variables. The four groups are:

1. the "type" of manager;
2. the managers' satisfaction with the programme attended;
3. the managers' perceptions of the organisational climate;
4. the managers' performance on his return to work.

The fourth variable was hypothesised to be dependent on the other three. How they varied in relative importance was hoped to be demonstrated by the study.

1. Type of Manager

This group of variables is the least likely to waver over time as they are all fixed attributes. They comprise biographical data about the managers as individuals (age,

personality) and as members of Cable and Wireless (length of service, experience within the Company and outside, previous management training, the actual Cranfield programme attended and whether they are HO, Nat or Fl staff). Two potential variables that were not included were sex and intelligence. Sex was excluded because only 1.6% of the participants and only 0.7% of the respondents were female. Intelligence was omitted because all of the participants, being from relatively narrow strata of a single company, were felt to be of one general level of intelligence.

The information was collected on two different questionnaires. Personality was measured by the Myers-Briggs Type Indicator which was administered during the programme. It categorises managers on four dimensions into 16 types (12). It is based on the lifelong work of Carl Jung and, as it gives a powerful insight into the ways managers prefer to work and make decisions, is usefully incorporated into the teaching programme (13). All the other information was gathered on a Biographical Data Collection Sheet which was sent out to the managers with the Transfer of Training Questionnaire after they had returned to work.

Together, these variables provide a comprehensive "manager profile".

2. The Managers' Satisfaction with the Programme Attended

At the end of the programme each manager was asked to evaluate each lecturer and the material he presented in terms of its overall value and any changes that might be usefully made. He was also asked to score on a five-point scale the "appropriateness" of the content and the presentation.

This commentary is made anonymously by the course participants as part of the regular end-of-programme review made for all Cranfield programmes. Summaries of the evaluations are compiled by the Programme Administrator and sent to the

individual lecturers to whom they refer. Access to this material gave the researcher an aggregate measure of the managers' satisfaction with each lecturer at the end of the programme and she was interested to know how these opinions might survive the transfer process. Some months later, managers were asked, by questionnaire, how they now felt about the subjects taught them at Cranfield. They were asked to score each subject on a five-point scale, for practical value since returning to work, for theoretical interest and for personal value. They were also asked to similarly rate the contacts they had made with other people whilst at Cranfield. Then followed two open-ended questions, one on changes they now felt should be made to the programme, the other asking how they had benefitted from attending the programme.

Two additional measures of satisfaction were made. One was the extent to which they believed the programme objectives had been met. Odiorne (1970) regards this as the "acid test" of any evaluation. Managers were asked to score the achievement of each aim out of 10. The final measure of satisfaction was less direct. The manager was asked whether he had recommended attendance to any of his superiors, peers or subordinates.

3. The Managers' Perceptions of the Organisational Climate

These perceptions were gathered by questionnaire. The questionnaire comprised a checklist of 61 items (14). All are aspects of the organisational climate which might facilitate or inhibit the transfer of a manager's training back to his place of work. Managers were asked to tick one of three boxes next to each of the 61 items. The box ticked indicated whether that item was a helping factor, a hindering factor or whether it was neither of these. The checklist was based on the findings of Vandenput (1973) and was then modified by the researcher working with C & W managers. It was administered, in its final form, to over half of

the participant managers at the end of the programme and to all of them after they had returned to work. At the end of the programme, managers were asked what they anticipated would be helping or hindering factors on their return; in the follow-up they were asked what actually happened. The checklists were pre-coded; managers were asked not to write their names on them.

The 61 variables fell into eight groups. These were:

1. The environment (7 variables)
2. Technology (3 variables)
3. Organisational structure (10 variables)
4. Values (i.e. the essential but unspoken values of this organisation) (12 variables)
5. Job characteristics (12 variables)
6. Autonomy (i.e. my autonomy at work) (4 variables)
7. People's characteristics (i.e. personal characteristics of people with whom I have contact) (8 variables)
8. Personal relations (i.e. characteristics of my relations with other individuals and groups) (5 variables)

At the end of each group was a blank for the manager to add any variable he felt had been overlooked. He was also asked to put a circle around the box of any item that was of very special importance. Wording the variables so that they could be seen as either a help or a hindrance was not always easy, particularly in the more subjective areas. Managers were reminded that the scale of possibilities was always implied even if it was not actually stated. If they found this to be too loose a framework, they were asked to annotate the wording so as to make their responses more precise.

4. The Managers' Performance on his Return to Work

This is the dependent variable and a difficult one to

measure by any criteria. This study has the additional constraints that only the participant managers themselves could be questioned and, as they were spread across the globe, this would have to be by postal questionnaire.

As "objective" measures of performance were impossible to collect, it was necessary to seek out subjective measures. Bearing in mind that the participant managers had different levels of experience when they came on the programme, different but similar inputs when they were on the programme and different jobs to one another when they returned to work, it was not possible to do other than ask the managers how much better they now felt able to undertake a range of different activities (15). They would each, in effect, provide their own control. The comparison would be between the person they were after the programme, and the person they were before the programme. Regardless of how well or how poorly they had previously performed certain activities, the programme should have helped them to improve on at least some of the items. Against each activity was provided a Likert scale with five optional answers. These encouraged clear discrimination between varying degrees of perceived change.

Twenty questions were asked of each manager, They concerned the way he related to his subordinates, his superiors, his job, the Company, and his own strengths and weaknesses. The final choice of questions was made after lengthy consideration by and discussion between the researcher, the supervisor and all the members of the Steering Committee.

In addition, managers were asked to write about what sort of progress they were making in transferring what they had learnt at Cranfield back to the workplace.

For almost half of the managers this task focussed onto particular "resolutions" made at the end of the Cranfield

programme. At the end of the programme, managers had been asked to make at least one, and not more than three, resolutions based on something they had learnt at Cranfield, to be undertaken on their return to work. They had also been asked to identify any aspects of the organisational climate that may help or hinder them in fulfilling this resolution. Again their responses were identified by code number only.

Together these questions provided both quantitative and qualitative data on the way individual managers perceived themselves to be performing differently at work, as a result of having attended a management development programme at Cranfield.

Construction of the Questionnaire

The follow-up questionnaires for programme satisfaction, organisational climate and performance variables were bound together into a Transfer of Training booklet. The Biographical Data Sheet requesting personal data for the manager profile variables was inserted as a loose-sheet into the booklet (16).

The booklet was designed in the same style as the Management Development Survey. It was a 20-page A4 spiral-bound booklet in glossy card covers with an introductory letter bound-in. Care was again taken with the phrasing of the questions and with the layout of each page. It was felt and, indeed, Hoinville and Jowell (1978) and Cohen and Manion (1980) confirm, that "clarity of wording and simplicity of design are essential." They feel, as did the researcher, that "the appearance of the questionnaire is vitally important. It must look easy and attractive ... with plenty of space for questions and answers". With a postal questionnaire it is imperative to maximise the co-operation of respondents. This is best achieved by

explaining , in a straightforward manner, why the research is being conducted, why the respondent has been selected and what is going to be done with the results. It is also important to stress the confidentiality of the research and, if possible, to describe the mechanism by which this will be upheld (17). The researcher felt that she did this first at Cranfield and later in the covering letter . The letter was further personalised by a photograph to remind respondents that there was a real person at the other end as well as a computer!

The first section of the questionnaire was about the programme they had attended. Question 1 referred to the inputs made at Cranfield; question 2 to the changes that could be made to the programme; question 3 to the outputs that managers had experienced back at work; and questions 4 and 5 looked at future management development activities. The second section was devoted entirely to the transfer of training. The first activity was the checklist of 61 items, identical to that completed by many of the managers at the end of the programme. Then followed the actual resolution that the manager had made at the end of the programme. He was asked to describe what progress he had been able to make with it, paying particular attention to those factors that had, and possibly still were, helping or hindering him. He was reminded that lack of success did not mean "failure" - the researcher was just as interested in the process as the result. Those who didn't submit a resolution had the more difficult task of describing how they had got on in a more general way.

The Transfer of Training booklet was coded with a number in the back inside cover; the Biographical Data Sheet was coded with a different number. Envelopes were enclosed for the questionnaires to be returned separately if desired and the researcher provided her home and office addresses and phone numbers for responses and queries. Current addresses for all managers were supplied by the

Company but all questionnaires were mailed direct to the managers from Cranfield by first class mail in the UK and Air Mail overseas. The envelopes were marked "PERSONAL". The booklets were individually tailored in that resolutions were written in for certain managers, but they also varied in that different versions were sent to managers who attended the MMPs, the MRP, and the SMPs. The differences were that the introductory letter and the pages relating the subjects taught and the aims of the programme varied according to the type of programme.

Hoinville and Jowell (1978) dispute the belief that postal questionnaires invariably yield only a low response. They forecast that a carefully-planned postal survey should obtain a 40% response rate and that well-designed reminders should push it up to the 70% level. The Office of Population Censuses and Surveys recommends the use of three reminders. In this study, the researcher sent out one major reminder - a letter and another copy of the questionnaire and then, shortly afterwards, another reminder in the lighthearted but pressing form of a humorous postcard. (These are shown in Appendix C).

The majority (18) of empirical organisational studies rely on questionnaire responses, yet as Salancik(1979) observes, response rates in reported studies can be as low as 25%. The findings of such investigations can only reflect the views of self-selected sub-groups rather than the intended sample. The researcher was determined not to suffer such distortion to her results.

The Timing of the Collection of Transfer Data

How long should elapse between a manager leaving the programme and receiving the questionnaire was, and still is, an issue open to debate. There was little guidance in the literature where "follow-ups" varied: 80 days (Golembiewski

et al, 1971); three months and 18 months (Hand and Slocum, 1972) six months (Davies 1976); six months (Nienstedt, 1980); up to four years (Baumgartel and Jeanpierre, 1972). Six months was thought to be a sensible time. It gave managers time to settle into their frequently new jobs, the novelty of having just returned from a management course would have passed, and yet the experience would not be too distant to be recalled.

However, the follow-up material was not sanctioned by the Company until summer 1979, so all the Senior and Middle programmes held by then were mailed on the same date, 4th August 1979. Subsequent programmes (with the exception of the first MRP) were followed up six months later as originally agreed. This meant that participants were being questioned anytime between 4 months and 2 years 4 months after completing the programme. This is shown in figure 3.10. Just how the time lag might influence responses was not known.

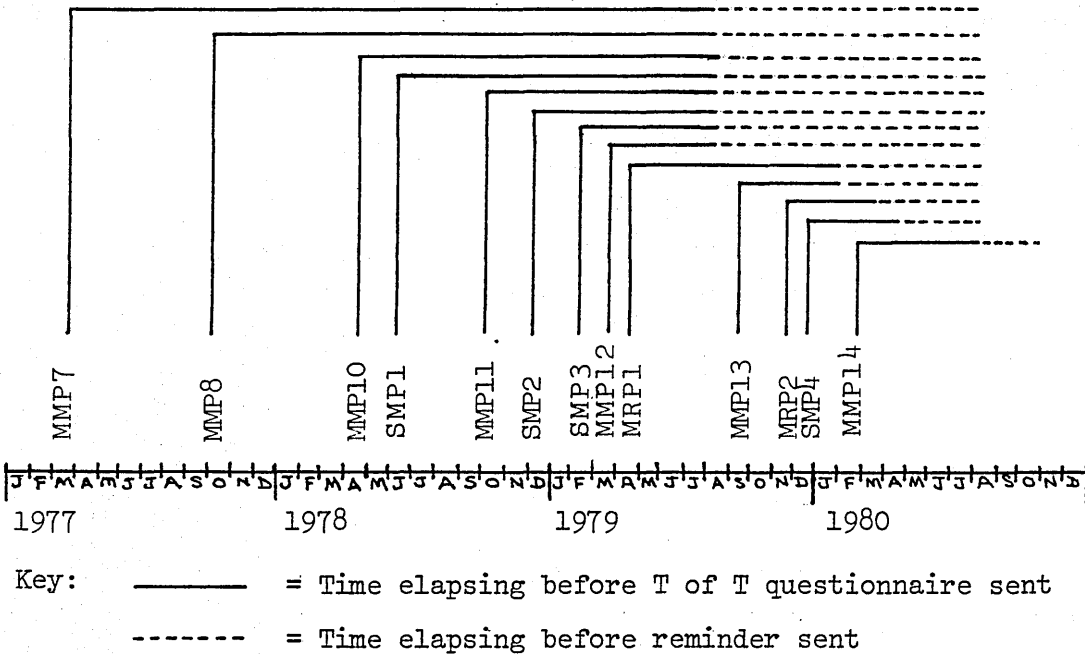


Figure 3.10 : Timing of Field Study Data Collection

Handling the Data

Once collected, the large volume of data had to be described, analysed and any findings had to be tested for significance. Qualitative information was content analysed and some of it was categorised and coded in the same way as the quantitative information. Quantitative data, systematically collected via the questionnaires, was readily coded. This done, it was punched onto computer cards and run through the appropriate sections of the Statistical Package for the Social Sciences (SPSS).

The main constraint in selecting the statistical tests within SPSS lay in the type of measurement scale against which the data had been collected (19). The convention that discrete measures use non-parametric statistical analysis and continuous measures use parametric statistics (Siegel, 1956) was adopted by the researcher. The nature of each variable used in the study is shown in Appendix D.

The Institute's Computing Centre had an ICL 1903T which was used for the initial analysis. During the research period a new computer was installed, a DEC-VAX-11/780, and all the data was transferred onto that. The "VAX" provided high-speed interactive hardware and utilised a more sophisticated version of the SPSS software.

Descriptive Statistics

The first task was, as Nie et al (1975, p 181) recommend, "to determine the basic distributional characteristics of each of the variables to be used in the subsequent statistical analysis". This was done using the SPSS subprogram FREQUENCIES. A total of 11 statistics (20) were computed together with frequency tables and histograms. For nominal level data only the mode, frequency table and histogram could be used; for interval level data the mean was probably the most useful additional statistic.

Within each variable group the descriptive statistics formed the basis for a written summary of overall findings. They also highlighted the key variables for further analysis.

Inferential Statistics

The null hypotheses are essentially concerned with equality between managers and equality between aspects of the climate in which they work. To confirm or reject the null hypotheses necessitated partitioning the respondents in different ways to establish whether or not differences exist. Two tests were used to do this. They were chi-squared (X^2) and one-way analysis of variance (ANOVA) with the F test. Both can handle more than three variables or classes of variable but they do not measure differences in the same way as one another. X^2 is concerned with distribution frequency whilst ANOVA is concerned with means. Selection of one of them rather than the other depends on the data. If both variables are measured at the nominal level, only X^2 can be used as it is based entirely on categorisation; if the independent variable is nominal but the dependent variable is interval, ANOVA can be used. Both were used extensively in this study: X^2 on the SPSS subprogram CROSSTABS: ANOVA on SPSS subprogram BREAKDOWN. In addition, the Sign Test was used. This measures changes in two related samples using plus and minus signs rather than quantitative measures. It was accessed by the SPSS subprogram NPAR TEST.

Testing for Significance

Significance tests (in this study, X^2 , the F test and the sign test) establish whether the results differ "significantly" from indifference or chance occurrence (Kerlinger 1973, p 167). Significance, in this context, does not mean "important" but "beyond the likelihood of chance" (Langley 1970, p 148). Statistical significance gives

assurance that a real difference exists between variables but whether or not this difference is educationally, managerially or organisationally significant must be decided separately. Fitzgibbon and Morris (1978, p 38) suggest a "so what?" criteria be posed by the researcher and Kerlinger (1973, p 200) warns that "very small differences, although statistically significant, must be treated with scepticism". He does, however, acknowledge that "what appears to be a very small difference may, upon close examination, not be so small" (p 199).

Statistical significance is only concerned with chance not with value or importance. For this reason a "significance level" against which test results can be assessed must be decided upon. The .05 level is traditionally regarded as a fair benchmark for social science research (21). It means that the observed results will occur by chance no more than 5 times in 100. In this study, results reaching the .05 level of significance are awarded one star; results reaching a level of .025 (i.e. occurring by chance only $2\frac{1}{2}$ times in 100) are awarded two stars; those with a level of .01 (1 in 100) three stars and those reaching a level of .005 (5 in 1000) four stars. When conducting true experiments, the significance level, like a bet, should be specified in advance, but when the nature of the research is exploratory this is not necessary. Results not achieving statistical significance (ie at least .05) are dismissed from further consideration as they could have occurred by chance more easily than the researcher was prepared to risk. Some researchers (22) regard the arbitrary cut-off point at .05 as too stringent, particularly for field studies and recommend reporting "non-significant" results. In this study, non-significant results are not reported.

Significance tests tell of the existence or non-existence of a relationship but they do not describe its strength nor do they imply causation (23). Arguments for causation must

be built up by accumulating evidence from a variety of sources but the strength of a relationship can be assessed through correlation measures.

Correlation

Different measures of correlation were calculated for the various levels of data. When both variables were interval level, the Pearson's product-moment correlation coefficient r (rho) was used; when both variables were ordinal level, Spearman's rank order correlation coefficient r_s (rho) or Kendall's rank order correlation coefficient T (tau) was used; and when one or more of the variables were at nominal level, the Contingency coefficient (C) was used.

The various correlation coefficients are summary measures which represent the degree of association between the variables (i.e. the strength of the relationship). The range for r , r_s and T is +1 to -1. The nearer to 1 the greater the association, the nearer to 0 the smaller the association. The plus and minus signs show the direction of the association; r^2 shows how much of the total variance in the dependant variable is accounted for by the independent variable.

The power (24) of the various coefficients decreases with the level of the data. The most powerful is r ; r_s and T are only 91% as efficient as r (25). As r , r_s , T and C cannot be compared with one another (26), and as even two C s cannot be compared unless they are from the same size contingency table (27), their value is less far-reaching than might be hoped. In addition to the level of measurement criterion, r and r_s require a minimum sample of 30. T can be used for smaller samples (28) and is also preferred to r_s if there are a large number of tied ranks (29). These coefficients were calculated manually or selected from the statistics available on the various SPSS sub-programmes.

They are all linear, expressing only straight-line relationships. For non-linear measures Kerlinger recommends the use of eta (E); E^2 is interpreted in the same way as r^2 .

Notes to Chapter 3

1. Drake's Progress : DCC Report April 1978, 43pp
2. The untreated control group design with pre-test and post-test, randomly assigned.
3. The Myers Briggs Type Indicator (MBTI) is a 166-item questionnaire taking about 45 minutes to complete. It identifies a manager's "work preference". A full explanation is given in Appendix A.
4. Slater, P. Grid Analysis Package (GAP), University of Manchester (1974). GAP comprises six programmes. The one to be used was DELTA. which compared two grids elicited from the same person on different occasions.
5. For example, following the feedback from the Margerison Job Index, the following questions were posed:

"Given your response, what are the implications for the way you manage your job?"

"Given the group response, what are the implications for the Company?"
6. Cranfield Management Review, Vol.2,2,1978,pp iv - v.
7. Topics were wide-ranging: consumer preference, teaching effectiveness and export marketing.
8. As a methodological instrument, the MBTI has been tested for content, construct and predictive validity and for reliability.

VALIDITY : Laney (1949), Saunders (1957,1960), Myers (1962), Stricker & Ross (1962,1964a), Madison et al (1963), Bradway (1964a), Webb (1964) Stricker et al (1965), Conary (1966), Ross (1966), Goldschmid (1967), Richek & Brown (1968), McCaulley & Natter (1974), Steele & Kelly (1976).

RELIABILITY : Myers (1962), Stricker & Ross (1962, 1963, 1964b), Webb (1964), Wright (1966), Stalcup (1968), Richek (1969), Levy et al (1972) Hoffman (1974), Caskadon (1977).

Mendelsohn (1965) relates how MBTI scores "relate meaningfully to a large number of variables including personality, ability, interest, value, aptitude and performance measures, academic choice and behaviour ratings" (p 322). Carlyn (1977) concludes her review on the many assessments of the MBTI with the verdict that " the Indicator appears to be a reasonably valid instrument which is potentially useful for a variety of purposes" (p 471).

9. "Persons differ from each other in their construction of events"
Bannister & Fransella (1971, p 22,202).

10. Abstract variables, such as motivation or intelligence, are known as "constructs". Nunnally (1967, p 85).

11. These are shown in Appendix B.

12. The four dimensions are:

Extravert	_____	Introvert
Sensing	_____	Intuitive
Thinking	_____	Feeling
Judgemental	_____	Perceptive

The 16 types are permutations of the dimensions:

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP
ESTP	ESFP	ENFP	ENTP
ESTJ	ESFJ	ENFJ	ENTJ

A full explanation of the dimensions and the types is given in Appendix A.

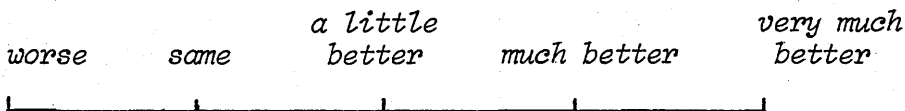
13. As colleagues frequently chose to include the MBTI in their class-room sessions, the researcher did not always collect this data herself. Using the instrument in class also guaranteed a very high response rate.

14. The Organisation Climate Checklist is shown in Appendix C.

15. For example:

"How much better do you now feel you would undertake the following activities?
Circle the appropriate point on the scale.

(i) "selling" yourself



(v) sorting out priorities

(ix) conducting a performance appraisal

(xix) recognising your personal strengths and weaknesses

The same scale was repeated for each activity. A full list of activities is shown in Appendix C.

16. The Biographical Data Sheet is shown in Appendix C.

17. Three randomly selected code numbers were used for each participant (one for the data collected during the programme; one for the Transfer of Training Questionnaire; and one for the Biographical Data Sheet).

Raw data was kept separately in code number order. When quantitative data was transferred to the computer a fourth code number was allocated to each participant against which all their data was set.

18. 31 out of 36 empirical articles reported in ASQ were based on interview or questionnaire data. Of them, 5/6 were from a fraction of the intended sample (Salancik, 1979, p. 639).

19. There are four possibilities: nominal, ordinal, interval and ratio. The first two are discrete measures, the last two are continuous. Nominal data can be separated into categories, but no category is better or worse than any other. For example, C & W managers are either HO, Nat or FI staff. Ordinal data is also put into categories but these can be ranked against some subjective criteria. For example, those aspects of their organisational climate that managers feel will help them most and those that will help them least. Interval data can be categorised and ranked but it is measured on a continuous scale against criteria which display equal distances between each score on the measuring scale. For example, the questions which ask the managers to rate themselves on a 5-point scale for how well they would undertake various activities. The fourth and final type of measurement scale is ratio. Such scales have a fixed zero so any score can be measured in relation to that and can, therefore, be compared with any other score from the scale. An example of ratio data is the age at which a manager attended the Cranfield programme.

These four measurement scales are hierarchical. Progression from nominal to ordinal to interval to ratio enables the researcher to take more and more precise measurements. The more accurate the basic measurements, the more sophisticated the analysis. Conversely, the cruder the measure, the cruder the analysis. If two or more types of data are being compared with one another then the method of analysis must conform with the crudest of the sets of data. So, for example, if the extent to which a manager feels able to sort out priorities (interval data) is correlated with whether or not he has an engineering background (nominal data), the tools used must be those for nominal data only. The danger of not doing this is that conclusions may be drawn for which there is insufficient foundation. The temptation for doing this is two-fold. Firstly, the more sophisticated methods of analysis are the most powerful ones and their results carry greater credibility. Secondly, much social science data is only nominal or ordinal.

20. Mean, standard error, median, mode, standard deviation, variance, kurtosis, skewness, range, maximum, minimum.

21. Kerlinger (1973, p 170).

22. Walker & Lev (1953, p 52), Rozeboom (1960, pp 416-28), Nunnally (1960, pp 641-50), Fitzgibbon & Morris (1978, p 94).

23. Kerlinger (1973, p 227), Fitzgibbon & Morris (1978, p 38)

24. The "power-efficiency" of a test is linked with the stringency of its assumptions. Parametric tests have stringent assumptions and results from a relatively small sample can be generalised from. In this way they are efficient in their use of research effort. Non-parametric tests have less stringent assumptions and need larger samples to give their results

equal power with the parametric. This makes them less efficient. For every 9 subjects for r , 10 would be required for r_s or T (Siegel, 1956, p 21). An OU Course Team suggests that a 5% increase in N should make r_s or T as powerful as r (MDT 241,1974,7.2.1. p 21).

25. Hotelling & Pabst (1936).

26. Siegel (1956, p 219).

27. Siegel (1956, p 201).

28. Siegel (1956, p 239).

29. Nie et al (1975, p 289).

CHAPTER 4

DIFFERENCES BETWEEN MANAGERS

The personal characteristics of individual managers were examined for differences and similarities for two important reasons. First, to ensure that the self-selected sample of respondent managers was representative of all participant managers. Second, to test the first null hypothesis: that participant managers were not significantly different from one another. The first issue is discussed in Part I of this chapter, the second in Part II.

Approach Adopted

In order to make objective comparisons, the managers were partitioned in a number of ways. These were by:

1. Type of programme attended (SMP, MRP or MMP).
2. Age at date of programme (a. actual age; b. age group: 39 and under; 40-9; 50 and over).
3. Length of service with C & W at date of programme (a. total number of years; b. groups: 15 years or less; 16 - 25 years; 26 years and more).
4. Professional background (telecommunications engineering or not).
5. Cable and Wireless staff category (F1, Nat and HO with an occasional fourth group taken from the HO managers i.e. the former F1s who had become permanent HO staff. A fifth group, Marine, was incorporated into the F1 staff).
6. Centre for Creative Leadership (CCL) categories (Traditionalist, trouble-shooter, catalyst, visionary)(1).

When testing the representativeness of the sample, a number of additional partitions were made:

7. Actual programme attended (e.g. SMP1, SMP2, SMP3 etc).
8. Geographical location of managers (e.g. Hong Kong, West Indies, Middle East etc).
9. Sixteen Myers-Briggs types (e.g. ISTJ, ESFP etc)(1).
10. Four Jungian dimensions (i.e. extraversion-introversion; sensing-intuitive; thinking-feeling; and judgemental-perceptive)(1).

Constraints

As all of the managers came from a relatively narrow stratum of a single company, a high level of homogeneity was expected amongst them. This likelihood was heightened in the case of C & W which has been shown to be a Company preferring to recruit young men and then to mould them throughout their careers.

Part I : The Representativeness of the Sample

Three-quarters of all managers responded to the follow-up questionnaire. To ensure the representativeness of the respondent sample, it was necessary to compare it in detail with the total participant population from which it came. Ideally, it should also have been compared with a random sample of managers from the Company but this was not permitted (2). Indeed, a comparison between the participant population and the random sample would have tested whether the Company's selection procedure was singling out managers with particular characteristics or whether, in fact, a broad cross-section of managers was being sent to Cranfield.

But, the crucial relationship, as far as this research was concerned, was that existing between those who did and those who did not respond to the follow-up questionnaire. If the differences were too great, the sample of managers from whom perceptions were drawn would not be typical of the sort of manager likely to undergo management training.

The various types of managers are gathered into four groups for discussion. These are:

1. The programme attended.
2. Age, length of service, other training and job experience.
3. C & W staff category and geographical location.
4. Work preference.

In addition to testing for representativeness, this section gives a general description of participant managers which should provide a backdrop for later interpretation.

1. The Programme Attended

Of the 181 managers in the study, 62% attended MMPs, 25% attended SMPs and 14% attended MRPs as shown in Figure 4.1.

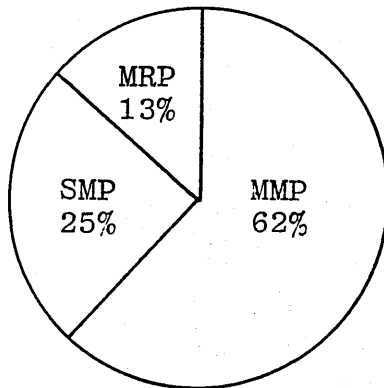


Figure 4.1 : Programmes Attended by Managers in the Study
(n = 181)

Participants of the Middle and Refresher programmes had a response rate of 80% and 78% respectively as against one of 63% for the participants of the Senior programmes. There was also variation between individual programmes. SMP responses ranged between 58% and 75% and MMP responses between 62% and 95%. Figure 4.2 shows how closely the respondent sample fits the total population when measured by type of programme attended. A small shortfall (4%) from SMPs is largely compensated for by the extra response from MMPs.

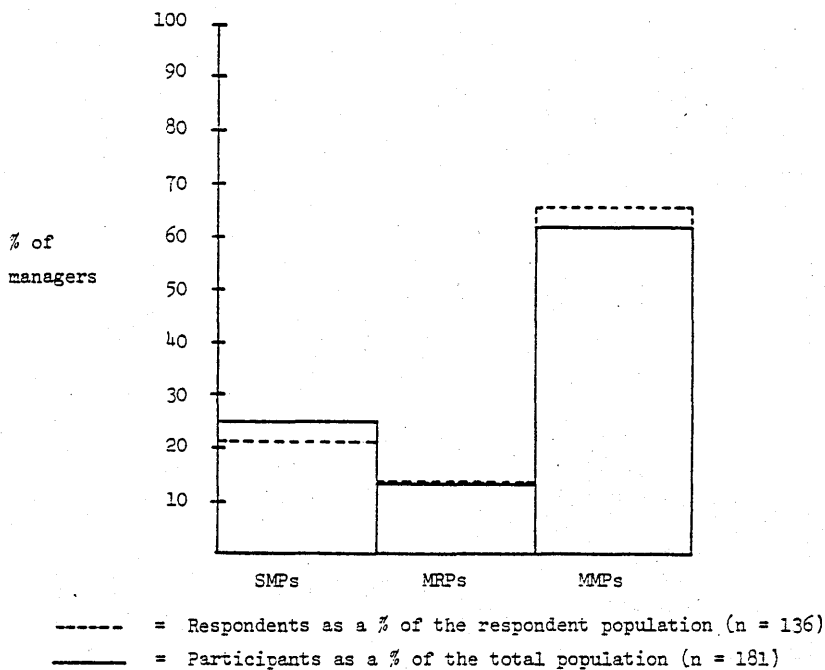


Figure 4.2 : Representativeness of the Sample by Type of Programme Attended

When the same comparison is repeated for individual programmes, the full extent of the compensation between them is shown up. Figure 4.3 illustrates how three of the SMPs and two of the MMPs are under-represented whilst four of the MMPs and one MRP are over-represented.

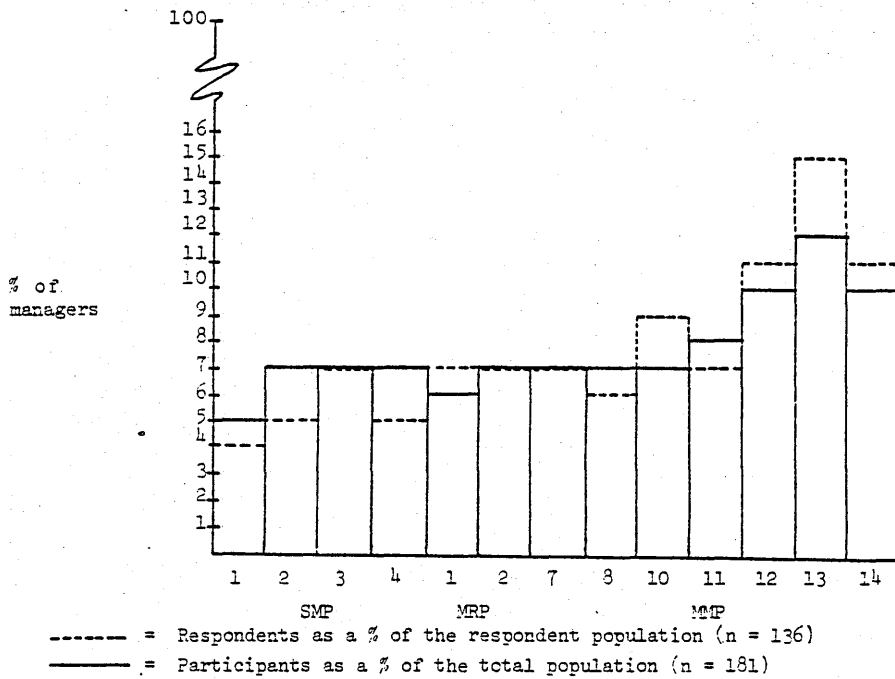


Figure 4.3 : Representativeness of the Sample by Actual Programme Attended

2. Age, Length of Service, Other Training and Job Experience

The average age of the participants was forty-two, spanning almost thirty years from managers in their late twenties to those in their mid-fifties. The average manager had been with the Company for twenty years. This average represented a spread of thirty-six years, ranging from one year through to thirty-seven years service. However, fewer than 10% of the respondents had been with the Company under five years whilst more than two-thirds had between eleven and twenty-nine years experience with C & W.

The average age for the respondents was also forty-two years (3). The length of service for non-respondents was not known so an overall measure could not be made, nor a comparison taken.

Previous Management Training

Over half the managers responding to the questionnaire had already attended the Company's two-week Introductory Management Programme (IMP) run by the Middlesex Polytechnic and/or the Company's in-house Administrative Programme. The former concentrated on the basic principles of management whilst the latter emphasised Company policy and procedure. In addition, almost 10% had been on some other MMP and just under 5% held a DMS or degree in management. This left 28% who had never been exposed to any formal general management training.

About one-third of the respondent managers had attended short-courses in specialised areas of management. Personnel and industrial relations were most frequented (11%) followed by marketing (7%) and computers/OM (7%). Over 5% of the managers held a Diploma in finance and/or accounting. Even, so, this left two-thirds of the respondent managers who had never participated in specialist management programmes.

Work Experience

C & W, as a career company, helps its personnel to gain experience by moving them from job to job and, in the case of F1 staff, around the world too. The average number of posts held by the respondents was seven, the range was 1 - 17, with almost three-quarters falling into the 3 - 12 band. Combined with the average number of years service, this would suggest a change of job about every three years. Many of the respondents (60%) had only ever worked for C & W although a number (17%) had also spent some time (either during the Second World War or on National Service) in H.M. Forces. The relevant details of a further 19% were unknown to the researcher. Of the remainder, just under half (9% of the total) had worked for only one other company and just over half (11% of the total) for more than one other company. Clearly, the vast majority of C & W

managers had no business experience outside that afforded by the Company itself.

Professional Background

Given the nature of the business, one would expect a high proportion of the programme participants to have an engineering background. Indeed, over 80% had a telecommunications engineering background. The crucial "crossover" point in a person's career when the managerial component of his job exceeds the technical component (Margerison, 1979) had already been faced by many of them. The evidence on this next point is rather sketchy but it seems that of the respondent managers, 80% were from managerial jobs, 13% were from engineering only and 6% were from non-engineering and non-managerial (administrative, personnel, union, sales, accounts, management services etc). After the programme, when the same managers were followed up, 87% were in management jobs, 6% in engineering only and 6% in non-engineering/non-managerial jobs. So, 12% of the participants were still not being given the opportunity to "manage" nor to transfer and put into practice some of the skills and knowledge they had been taught at Cranfield. It would appear that engineers rather than non-engineers, stood a better chance of making the transition into management.

3. C & W Staff Category and Geographical Location

Of all the managers in the study, almost half were F1 staff and just over one-third were from HO. Of the HO staff, over one quarter were former F1 staff who had transferred to permanent jobs in Head Office. National staff, all of whom attended the MMP, made up 18% of the total participants. The breakdown is shown in Figure 4.4.

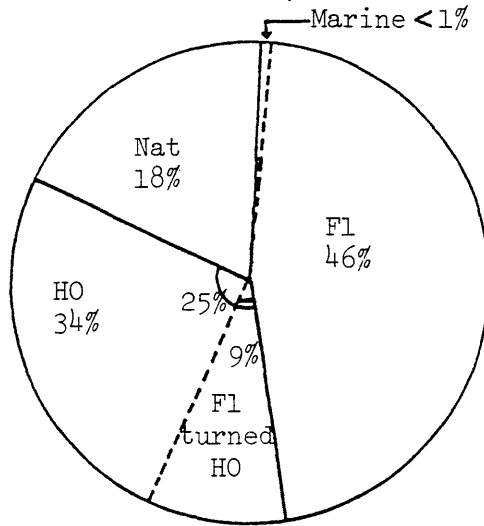


Figure 4.4 : C & W Categorisation of All Managers Attending Cranfield (n = 181)

Before they arrived at Cranfield, the managers had been located throughout the world. After the programme, HO and Nats returned to their permanent jobs but F1 staff generally started a new job. They were usually sent to Cranfield between postings. Locations prior to and following the programmes are shown in Figure 4.5.

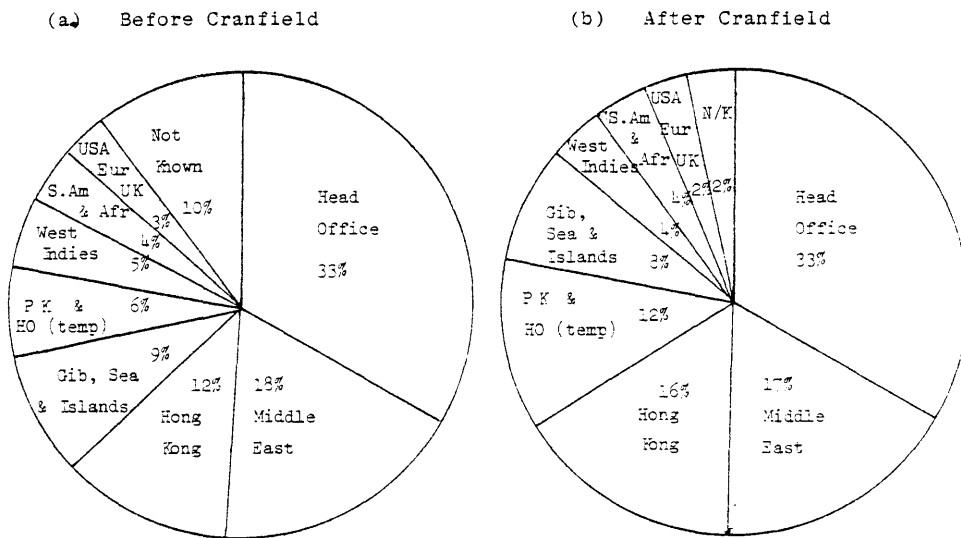


Figure 4.5 : Location of Managers Attending Cranfield (a) Before and (b) After Their Programme (n = 181)

Two interesting features emerge. The first is that the number of managers holding temporary posts in HO, doubles from 6% to 12% of the total. Many managers find it demotivating to be "shelved" in this way, for frequently it gives them little opportunity to transfer their training and undermines their confidence in the Company's ability to plan ahead and use its resources efficiently. The second feature is the increase in the number of managers working in Hong Kong. This implies a gravitation of trained managers to the biggest profit-making sector of the Company.

Geographically, the highest response rates were from Hong Kong (93%), South America and Africa (100%); the lowest were from the Middle East (65%) and the West Indies (63%). As far as the C & W category of manager was concerned, it was interesting to note that the highest and lowest responses both came from HO. The highest (94%) from those F1 managers who had become permanently based in London, the lowest (67%) from regular HO staff. National staff were exactly half way between them (81%), closely followed by the expatriate F1s (76%).

The representativeness of the sample by geographical location of the managers after their return to work is shown in Figure 4.6. There is a close fit apart from the under-representation of the Middle East. This is more than made up for by the surfeit of responses from Hong Kong. One might expect this to cause a difference between the F1 and Nat responses. It does, but the numbers involved are too small to be important.

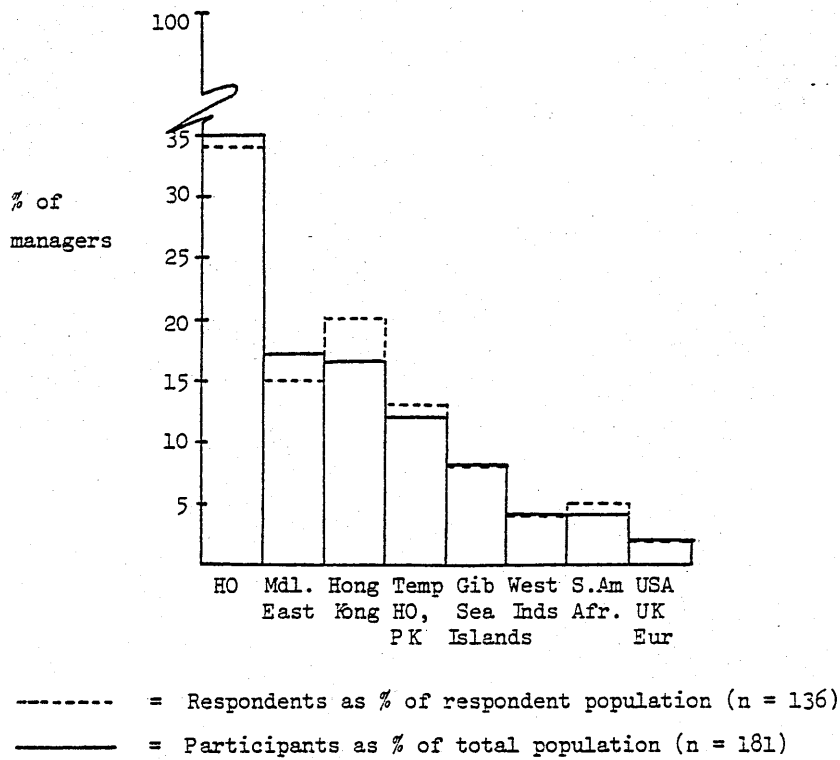


Figure 4.6 : Representativeness of the Sample by Geographical Location of Managers After Leaving Cranfield

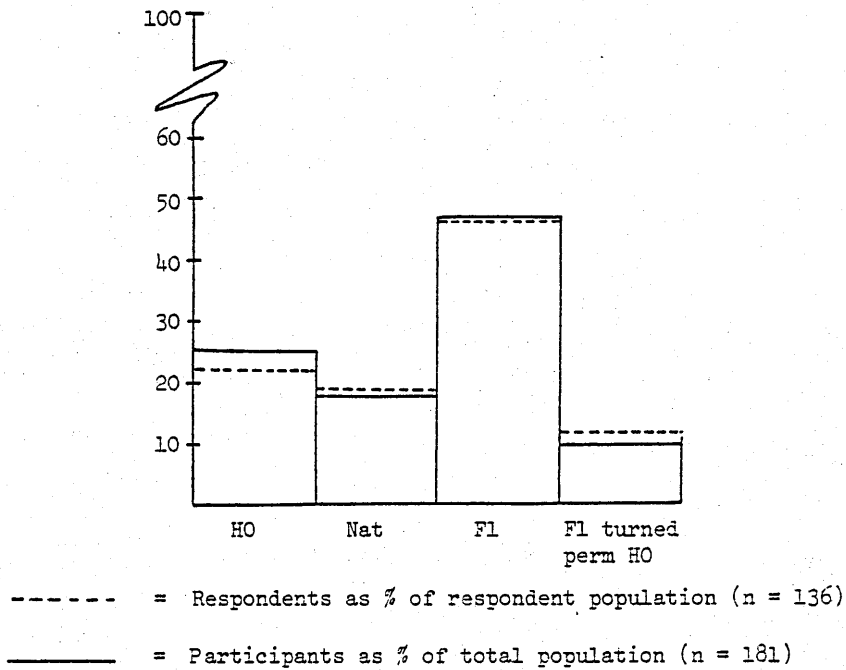


Figure 4.7 : Representativeness of the Sample by C & W Category of Manager

4. Work Preferences

These are founded on the results of the MBTI. They are expressed in three ways:

1. by the scores given on each of the four dimensions;
2. by the distribution amongst the 16 possible types;
3. by the clustering into the four groups identified by the Centre for Creative Leadership (CCL).

The "typical" C & W manager is ISTJ (introverted, sensing, thinking, judgemental). Over one-quarter of C & W participants share this combination of work preferences. ISTJ is also the most frequently occurring type amongst Cranfield managers in general (4). Compared with the average manager attending Cranfield programmes, the C & W manager is 10% more introverted and 5% more sensing, 5% more thinking and 5% more judgemental (5). There is a significant difference in the distribution of the 16 types even though none represent more than a 4% change ($X^2(15) = 31.81, p < .01$ ***). When clustered into the CCL groups, C & W managers clearly have a preference for the Traditionalist type as shown in figure 4.8. Any differences with Cranfield are no longer significant ($X^2(3) = 4.36, p > .05$).

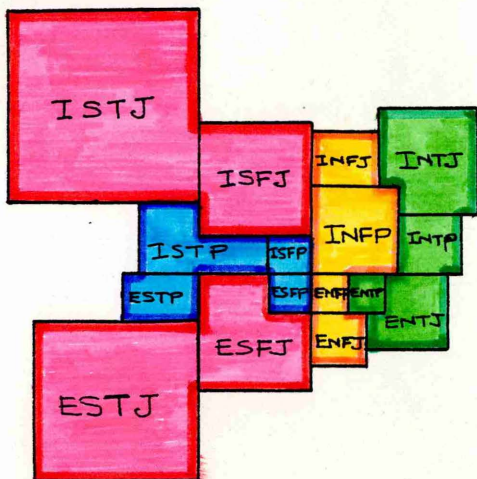


Figure 4.8 :
C & W Managers
distributed by
their CCL types

Scale:

= 1% of managers

C & W have more traditionalists and fewer visionaries than would be expected from the previous Cranfield studies (6). This should give them a relative advantage in technical efficiency but a relative disadvantage in relating with their environment and and planning for the future. C & W also has more introverts and fewer extraverts than would be expected from the general Cranfield figures - of which they comprise a substantial proportion (7) and should, therefore, bias the results towards themselves.

When the C & W distribution between the 16 Myers-Briggs types is compared with that of the managers attending the Ashridge Management College (8) (n = 981), even greater differences arise than with Cranfield. ($X^2(15) = 35.51$, $p < .005$ ***). Figure 4.9 shows how C & W have a higher (hi) or lower (lo) proportion of managers in some of the 16 cells than do (a) Cranfield and (b) Ashridge:

ISTJ	ISFJ	INFJ	INTJ
hi	hi		
ISTP	ISFP	INFP	INTP
hi		hi	
ESTP	ESFP	ENFP	ENTP
lo			
ESTJ	ESFJ	ENFJ	ENTJ
lo	hi		lo

(a) Cranfield managers
(n = 849)

ISTJ	ISFJ	INFJ	INTJ
hi	hi	lo	lo
ISTP	ISFP	INFP	INTP
hi	lo	hi	lo
ESTP	ESFP	ENFP	ENTP
	lo	lo	lo
ESTJ	ESFJ	ENFJ	ENTJ
	hi		

(b) Ashridge managers
(n = 981)

Figure 4.9 : Myers-Briggs Distribution of C & W Managers Compared with Managers Attending Cranfield and Ashridge

In comparison with managers at a comparable level in other companies, C & W would appear to be rather high on traditionalists and rather low on trouble-shooters and visionaries.

The CCL differences between C & W and Ashridge are also more marked than they were with Cranfield managers but this time the difference is statistically significant ($X^2(3) = 18.74, p < .005$ ***). Figure 4.10 shows how the distributions vary.

Traditionalists 57%	Catalysts 10%	Visionaries 22%
Trouble-Shooters 11%		
Traditionalists (as above)		

Cranfield managers (n=849)

Traditionalists 45%	Catalysts 16%	Visionaries 25%
Trouble-Shooters 14%		
Traditionalists (as above)		

Ashridge managers (n=981)

Traditionalists 63%	Catalysts 12%	Visionaries 16%
Trouble-Shooters 10%		
Traditionalists (as above)		

C & W managers (n=172)

Figure 4.10 : CCL Distribution of Managers from C & W, Cranfield and Ashridge.

Differences between Cranfield and Ashridge were also tested for significance. On the 16 types, $X^2(15) = 56.93, p < .005$ *** and on the CCL types, $X^2(3) = 31.69, p < .005$ ***. Cranfield is higher than Ashridge on traditionalists and lower on catalysts and visionaries. This may reflect the type of industry from which managers come, their level within their organisations or a number of other factors. It looks an interesting area for further research. C & W managers would appear to be more typical of Cranfield managers than of Ashridge managers and, therefore, are probably better placed for management development with Cranfield.

The occurrence of very few managers in several of the 16 MBTI categories meant a response rate ranging from 50% to 100%. However, leaving these aside, two were exceptionally low; they were ESTJ and ISFJ which had a 58% and 59% response rate respectively. The fact that ESFJ had one of the highest rates (93%) confounds logical explanation for the observed difference. When grouped in the CCL clusters, catalysts have the highest response rate (85%), followed by visionaries (81%), trouble-shooters (76%) and lastly traditionalists (73%).

Personality, as measured in terms of work preferences, is the last major area on which the sample must reflect the population as a whole. All four dimensions exhibit a close fit between the respondents and the full complement of managers. When categorised into the 16 types, there are some small variations but these are not significant (X^2) and, on clustering, tend to cancel one another out. Worth noting is the poor response of the ESTJs. The variations are shown in Figures 4.11 to 4.13. The respondent and non-respondent profiles were tested against one another and the profile for all managers for any systematic variation. However, there were no significant differences between any of them (X^2).

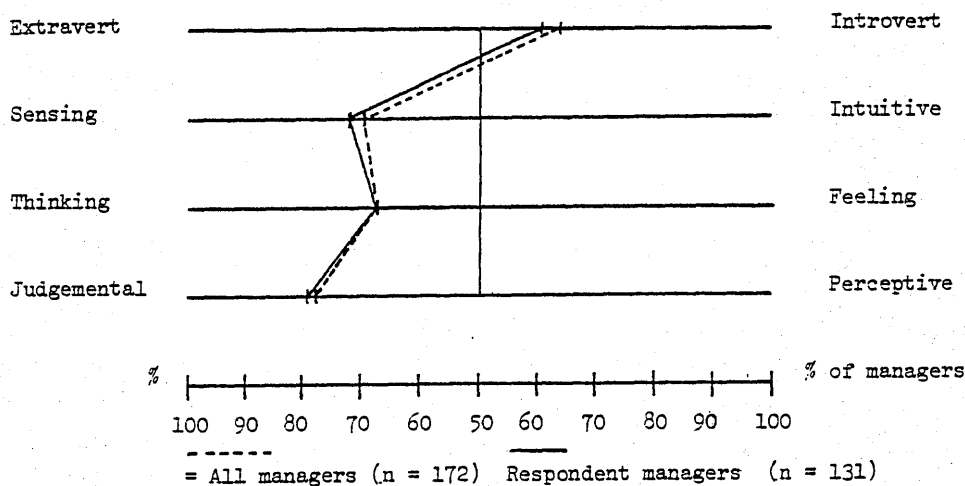


Figure 4.11: Representativeness of the sample by work preference profile

ISTJ 26%(28%)	ISFJ 10%(8%)	INFJ 3%(3%)	INTJ 7%(8%)
ISTP 5%(7%)	ISFP 1%(1%)	INFP 6%(7%)	INFP 3%(3%)
ESTP 2%(1%)	ESFP 1%(1%)	ENFP 1%(1%)	ENTP 1%(1%)
ESTJ 18%(14%)	ESFJ 9%(11%)	ENFJ 2%(2%)	ENTJ 5%(5%)

x% = managers as a % of the total population (n = 172)

(x%) = respondents as a % of respondent population (n = 131)

Figure 4.12 : Representativeness of the sample by the 16 Myers-Briggs types

Traditionalists 63% (60%)	Catalysts 12% (13%)	Visionaries 15% (17%)
Trouble-shooters 10% (10%)		
Traditionalists (as above)		

x% = managers as a % of the total population (n = 172)

(x%) = respondents as a % of respondent population (n = 131)

Figure 4.13: Representativeness of the sample by CCL categories

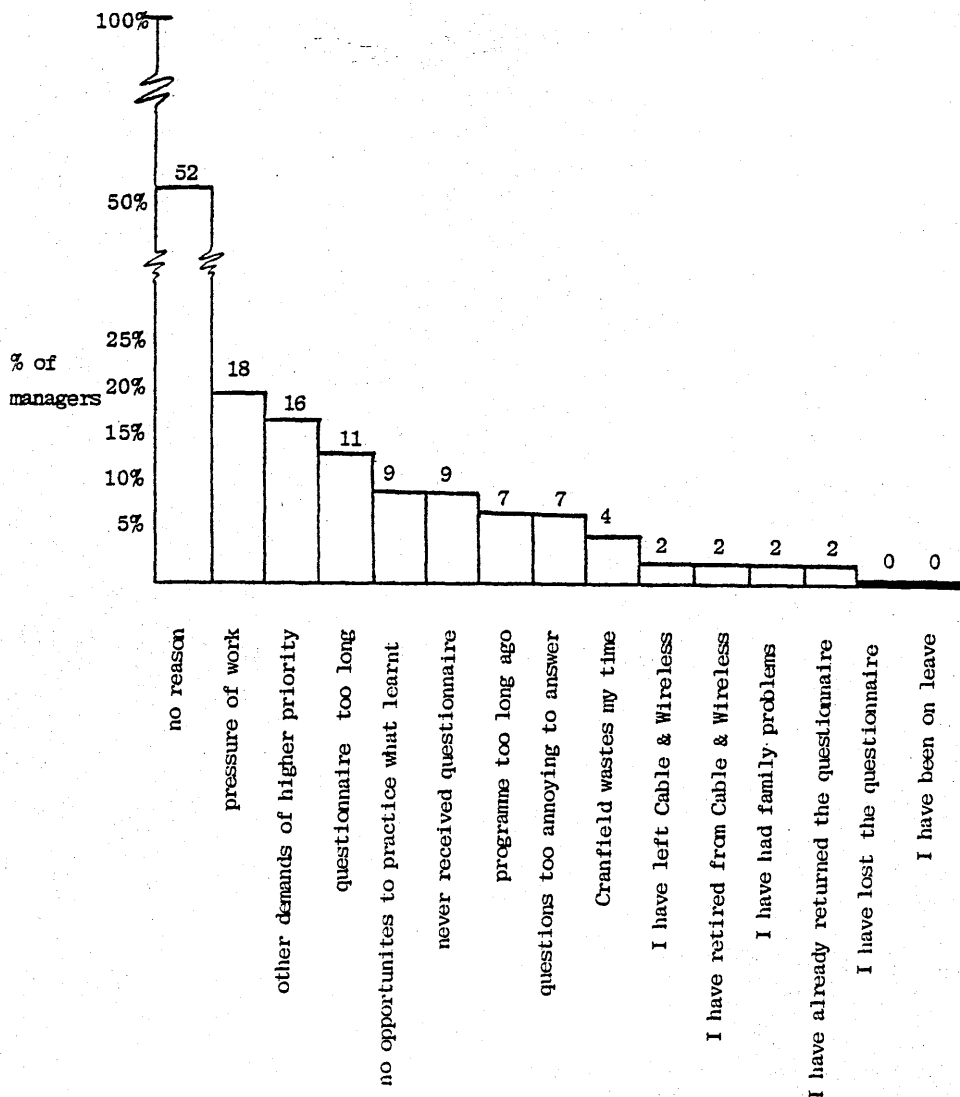
Summary

In conclusion, it is clear that the sample of managers responding to the Transfer of Training questionnaire were representative of the C & W managers attending General Management Programmes at Cranfield. The perceptions and opinions expressed by the respondent group may be safely regarded as being a true reflection of the views held by all the participant managers.

Why Some managers did not respond

The non-respondent managers were sent a short questionnaire (9), asking why they had not replied to the Transfer of Training follow-up questionnaire. Some possible explanations were put to them based on unsolicited remarks made to the researcher and they were asked to make any additional comments. Virtually half (48%) of the non-respondent managers sent in a reply. These are shown in Figure 4.14. The most frequent responses referred to the pressure of work and other priorities.

Figure 4.14: Reasons that non-respondent managers gave for their non-response



Part II : Testing Null Hypothesis I : That Participant Managers Were Not Significantly Different From One Another

To discover whether or not there were significant differences between various types of manager, a number of X^2 tests were conducted. The results are summarised in Tables 4.1 and 4.2 and discussed under broadly the same four headings as in Part I:

1. The programme attended.
2. Age, length of service and professional background.
3. C & W category of staff.
4. Work preference.

Characteristics of Managers	1	2	3	4	5	6
1. Type of programme attended	-	****	***	-	-	-
2. Age at date of programme	****	-	r****	****	-	*
3. Years of service at date of programme	***	r****	-	****	**	***
4. Professional background	-	****	****	-	-	-
5. C & W category	-	-	**	-	-	*
6. CCL category	-	*	***	-	*	-
Total	2	4	5	2	2	3

Key :

- = X^2 not significant
- * = X^2 significant @ .05 level
- ** = X^2 significant @ .025 level
- *** = X^2 significant @ .01 level
- **** = X^2 significant @ .005 level
- r**** = Pearson's rho significant @ .005 level

The higher the number of stars, the greater the statistical significance

Table 4.1 : Summary of Significant Differences Between Managers

Characteristics of Managers	1	2	3	4	5	6
1. Type of programme attended	-	.31	.31	-	-	-
2. Age at date of programme		-	r.74	.34	-	.20
3. Years of service at date of programme			-	.43	.28	.27
4. Professional background				-	-	-
5. C & W category					-	.19
6. CCL category						-

r = Pearson's rho; all others = C

Table 4.2 : Summary of Correlation Coefficients Relating to Table 4.1

1. Type of Programme Attended

Differences between managers attending the three types of programme resulted entirely from the Company's selection procedure. The most obvious difference between them was the exclusion of Nats from all but the MMPs. This invalidated a full X^2 test but when it was run without them, no significant differences were found between the distribution of F1 and HO staff.

Two other differences also resulted from the selection procedure. These were the age and the length of service of the managers. The MMP had a higher proportion of managers under the age of 40 and the MRP and SMP had a higher proportion of managers over 40 than would have been expected by chance ($X^2 (2) = 18.2, p < .005$ ****). The majority of participants on the MMPs (55%) and SMPs (63%) were in their forties; on the MRPs they were over fifty (61%). Less than 5% of MMs were older than fifty and less than 5% of the MRs were younger than 40. This reflected the deliberate policy of the Company in matching participants and programmes. The inter-relationship between age and programme attended is shown in Figure 4.15.

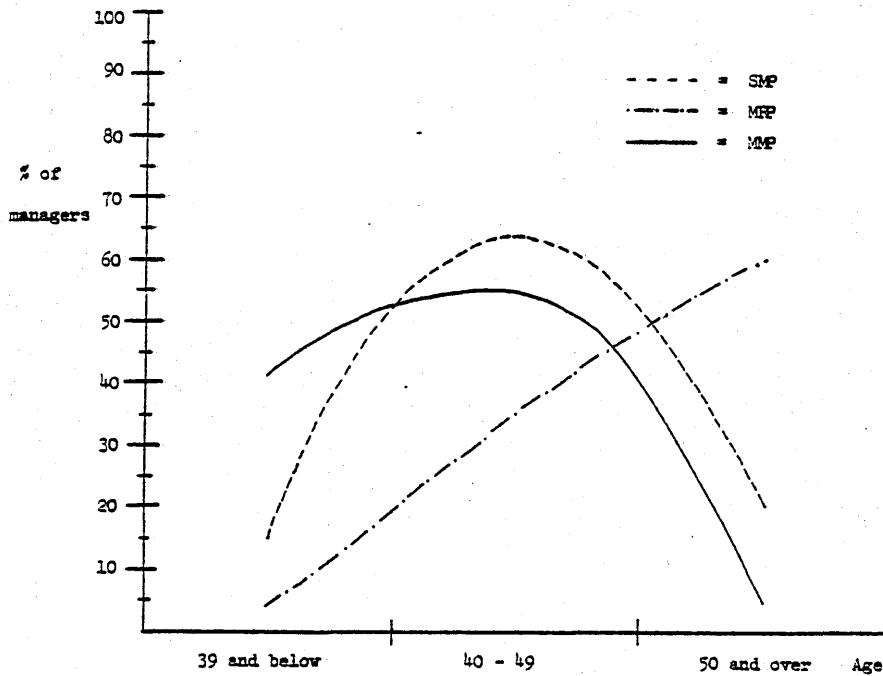


Figure 4.15 : The Inter-relationship Between Age and Type of Programme

Length of service with the Company was also interesting in that the distribution of managers as a whole formed a near perfect normal curve. However, when partitioned by programme attended, the distribution for MMPs was skewed to the right. Most of the managers had been with C & W for more than fifteen years (two-thirds of MMPs and four-fifths of SMPs and MRPs) but over half of the MRPs had over twenty-five years service with the Company. The majority of SMPs (52%) and MMPs (51%) fell into the sixteen - twenty-five years service band. The difference between the distributions was statistically significant ($X^2 (4) = 14.7, p < .01 ***$).

2. Age, Length of Service and Professional Background

The extent of the link between age and length of service suggested in the above findings and, in a career company, to be expected, is illustrated in Figure 4.13 ($r = .74, p < .005 ****$).

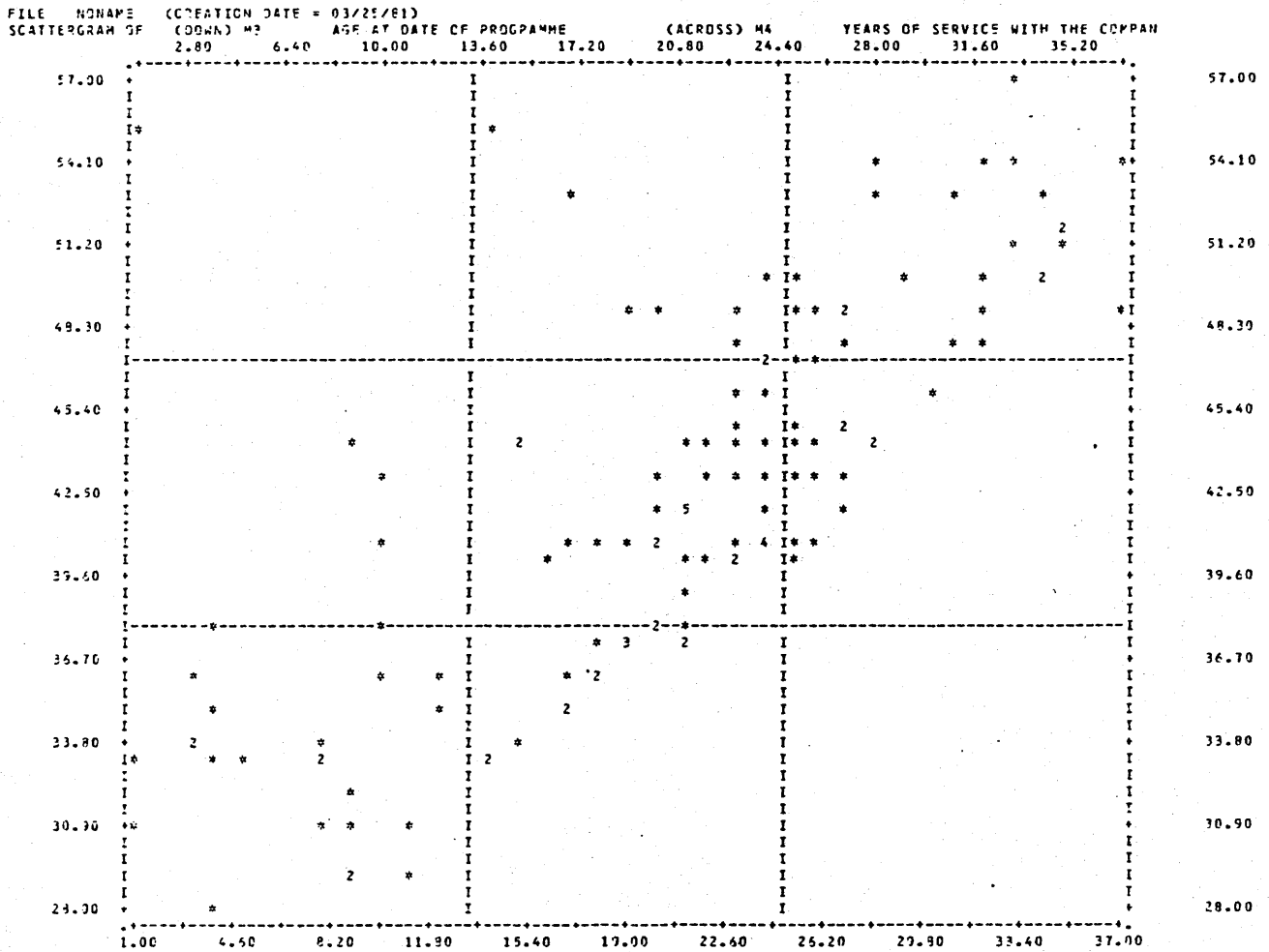


Figure 4.16 : The Inter-relationship between age and length of service (n = 133)

There was a consistent 80/20 split on all types of programme between managers with an engineering or non-engineering background. When, however, this professional background was set against age, a major difference emerged. The split of engineers to non-engineers below the age of 40 was 60/40; the split for those in the older age groups (40 - 9 and 50+) was 90/10. ($X^2 (2) = 16.79, p < .005$ ***). The difference was even more marked when professional background was set against length of service ($X^2 (2) = 30.15, p < .005$ ***). This either shows a change in recruitment policy over the last 20 years or is a warning to non-engineers about their likely future development. Those

managers who have been with the Company for 15 years or less are fairly evenly split, 53% have an engineering background and 47% do not. Of those managers who have been with the Company for between 16 and 25 years, 92% have an engineering background; and for those managers who have been in the Company for more than 25 years, 97% have an engineering background.

3. C & W Category of Manager

There was also a significant difference between the C & W category of manager and the number of years service. ($\chi^2(4) = 11.5, p < .025 **$). Almost two-thirds of all F1 staff had between 16 - 25 years experience in the Company whilst only one-third of HO and one-third of Nats fell into this category. The distribution is shown in Figure 4.17.

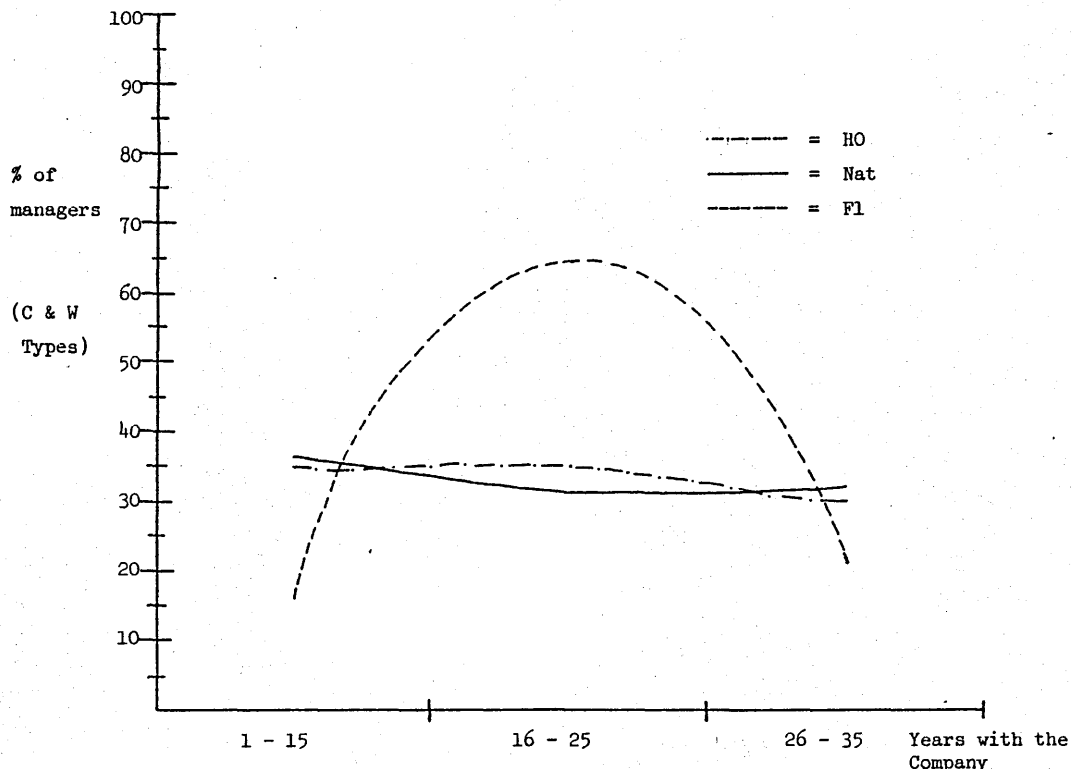


Figure 4.17 : The Inter-relationship Between Length of Service and C & W Type of Manager (n = 134)

4. Work Preferences

The distribution of managers between the CCL categories was heavily in favour of the traditionalist type (63% of all managers). This meant that the expected frequencies of the other three types were too small for significance tests to be conducted. When they were combined as non-traditionalists and set against the traditionalists, significant differences could be seen between age groups, years of service and C & W categories of managers. Nats accounted for most of the variance between the C & W categories; 83% of them were traditionalists as against 57% of all FIs and 58% of all HO staff ($X^2 (2) = 6.41, p < .05 *$).

Managers in their fifties were spread between the traditionalist and non-traditionalist preferences in the proportions one would expect given the distribution for the population as a whole. This was not the case with managers in their forties, an unexpectedly large proportion of whom were traditionalists. Nor was it the case with the managers in their thirties, an unexpectedly large proportion of whom were non-traditionalists ($X^2 (2) = 6.67, p < .05 *, C = .20$). However, it was not age but length of service that was to provide the most interesting and most significant results. There were a few more traditionalists than one would expect amongst the group with 16 - 25 years service; many more amongst the group with over 26 years service; and very many fewer amongst the group with less than 15 years service ($X^2 (2) = 9.73, p < .01 ***, C = .28$). The inter-relationship is shown in Figure 4.13. The number of trouble-shooters was fairly constant over time, so they can be left out of the argument. Catalysts and visionaries move through time in remarkably close association with one another. The great variation is between them and the traditionalists.

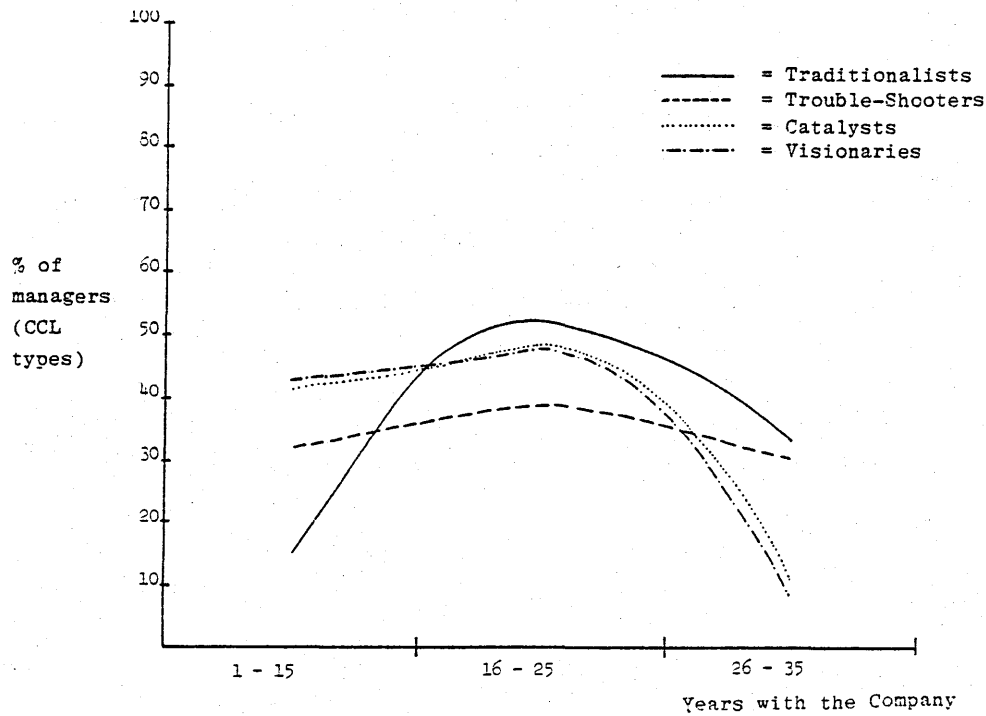


Figure 4.18 : The Inter-relationship Between Length of Service and CCL Type of Manager

Figure 4.18 shows very clearly that there is a tremendous decline in the proportion of catalysts and visionaries when plotted against time spent in the Company. This decline is matched by a rise in the proportion of traditionalists. The difference is not simply a function of age which was shown to be less significant. What it does suggest is that either the socialising influence of the Company over the years turns managers into traditionalists or that over the last 15 years, the Company has been recruiting a different type of manager, from the CCL point of view.

Jungian theory, and that of Myers, holds that whilst the environment helps the individual to develop his preferences it cannot change the fundamental choices made. However, there is a dearth of longitudinal studies to provide empirical proof of this assertion. Whatever the reason for the differences between managers in this study, a number of questions must be asked - and answered - regarding the freedom given to managers to operate according to their work preferences.

Summary

There are a number of differences (as well as similarities) between the C & W managers attending the Cranfield programmes. Statistically significant differences occurred on all the variables but most frequently on length of service with the Company. The differences reflected Company policy. The most obvious differences (e.g. age and C & W type) reflected selection criteria for programme attendance; the less obvious (e.g. CCL types, professional background) the recruitment policies of the Company. Length of service was perhaps so important because it varies directly with both sets of decision-making criteria.

On the findings described in this chapter, the null hypothesis that "participant managers are not significantly different from one another" can be rejected. They are, quite clearly, different from one another in a number of respects.

Notes to Chapter 4

1. For a full description, see Appendix A.
2. Access was limited to participants of Cranfield programmes and managers who had been involved in the programmes as visiting speakers, administrators or members of the Steering Committee.
3. The average age of all participants was 42 years 4 months; that of the respondents, 42 years 2 months.
4. n = 343. Lewis (1979), table 1.
5. n = 343. Lewis (1979), figure 2.
6. Margerison and Lewis (unpublished research).
7. About 30%.
8. Lewis and Levene (unpublished research).
9. See Appendix B.

CHAPTER 5

MANAGERS' SATISFACTION WITH THE LEARNING EXPERIENCE

The concern of this chapter is the testing of Null Hypothesis 2 : that no manager was significantly more satisfied with his learning experience than any other manager.

Testing this null hypothesis necessitated measuring the extent of satisfaction with the learning experience. This perception was not an easy one to pin down. It was feared that it might well change over time and that it might vary with the criteria against which learning experience was defined. In the attempt to build up a comprehensive view, the null hypothesis was tested in six different ways. The first test was at the end of the programme, before the managers returned to work. The other five were at a later date by questionnaire.

Six Tests of the Null Hypothesis

The six tests were briefly as follows:

1. The first examined managers' end-of-programme perceptions.
2. The second test focussed on managers' retrospective perceptions of the value they had gained from those Cranfield sessions in which they had participated.
3. The third test was Odiorne's 'acid test', the extent to which managers felt that the stated aims of their programmes had been met.
4. In the fourth test, the null hypothesis was set against the perceived value of the people with whom managers had interacted whilst at Cranfield.

5. The fifth test rested on a more indirect measure of satisfaction; managers being asked whether or not they had recommended attendance on a Cranfield programme to any of their colleagues.
6. The sixth, and final, test differed from all the others in that it was a purely qualitative measurement. The perceived benefits of the programmes were sought in respect of current job, future career and any other effects.

Each test is described and its findings are reviewed in turn.

Test 1. Managers' Perceptions at the end of their Programme

Approach Adopted

At the end of their programme, the managers were asked to rate each lecturer on the appropriateness of his overall contribution (1). Two scores were elicited for each lecturer, one emphasising the content of what he had taught, the other emphasising his style of presentation. A five point scale was provided, although the lowest score was rarely used.

Constraints

These are threefold and stem from the manner in which data was collected.

1. The data used was based on 182 means, each of which represented the average score given to each lecturer by an entire programme. The individual comments contributing to the means were made anonymously by a maximum of 155 managers. Few lecturers were commented on by every manager on a programme. The motivation for managers making assessments on some, but not other, lecturers is not known. Some managers may only have commented on lecturers about whom and sessions about which they felt strongly; some may have commented on

all; some on none; and some, no doubt, only on those days when they were reminded by the programme administrator. In fact, the response from two middle management programmes, MMP8 and MMP10, were not included as too few managers had submitted assessments for the means to be regarded as representative of the programme participants as a whole.

In the results that follow, almost half the data used came from MMPs (46%), well over one-third (38%) from SMPs and the remainder, (16%) from MRPs. No more than 12% and no less than 5% of total evaluations came from any one of the 11 programmes.

2. All lecturers were assigned, by the researcher, to one of four academic subject areas. These were:

1. Finance and Accounting;
2. Business Environment and Marketing;
3. Operations Management;
4. Interpersonal and Organisational Skills. (IPOS)

The first group is self-explanatory. The second comprised Business Policy, Economics, Marketing, Corporate Planning, Business Games etc. The third group was made up of management techniques (e.g. Forecasting, Network Analysis, Statistics), Computing and Project Management. The fourth and final group covered Organisational Behaviour, Personnel Management and a wide range of interpersonal managerial skills.

The number of assessments received by a subject group depended on the number of lecturers used to teach that subject. This included single sessions given by C & W lecturers. As a result, 37% of all assessments went to IPOS, 35% to Business Environment and Marketing, 14% to Operations Management, and 14% to Finance and Accounting.

3. Although Cranfield lecturers undertook the bulk of the teaching load, the split between the assessments is only 56%

for Cranfield as against 44% for C & W. The proportion of teaching sessions taken by C & W lecturers working alone varied from 4% to 22% of the programmes. The proportion of shared sessions ranged from 2% to 46%. This is shown in Figure 5.1.

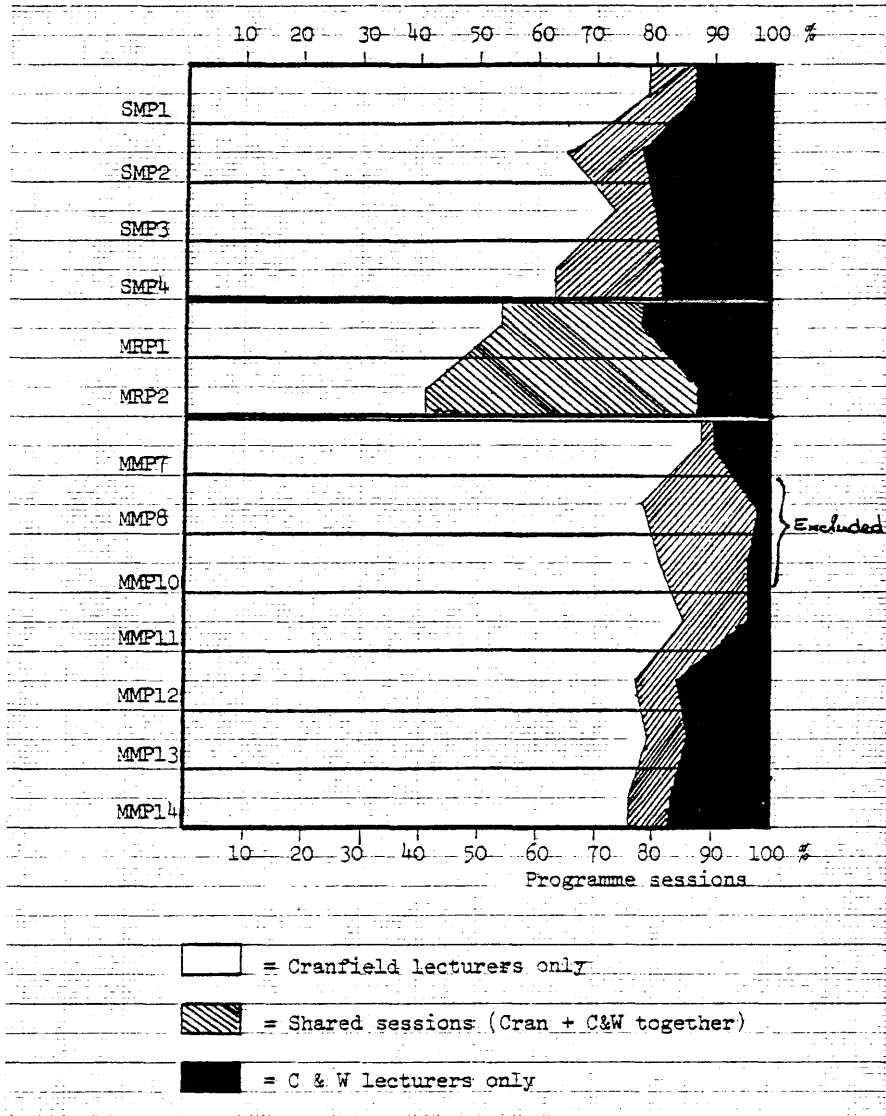


Figure 5.1: The proportion of the programme sessions taught by Cranfield and/or C & W lecturers.

This left Cranfield lecturers solely responsible for between 41% and 88% of the teaching sessions on any one programme. There is, therefore, a bias in the results towards the scores given to C & W lecturers. As these tended to be lower than those given to Cranfield lecturers, the results are artificially depressed.

Results and Discussion

The overall perception of managers at the end of their programmes is a very positive one. There is strong agreement that both the content of what had been taught and the way in which it had been presented was appropriate to their needs. Only 5% of the comments considered the content as inappropriate; 3%, the presentation. And, as Figure 5.2 shows, the bulk of participants considered both the content and presentation of the programmes appropriate or very appropriate.

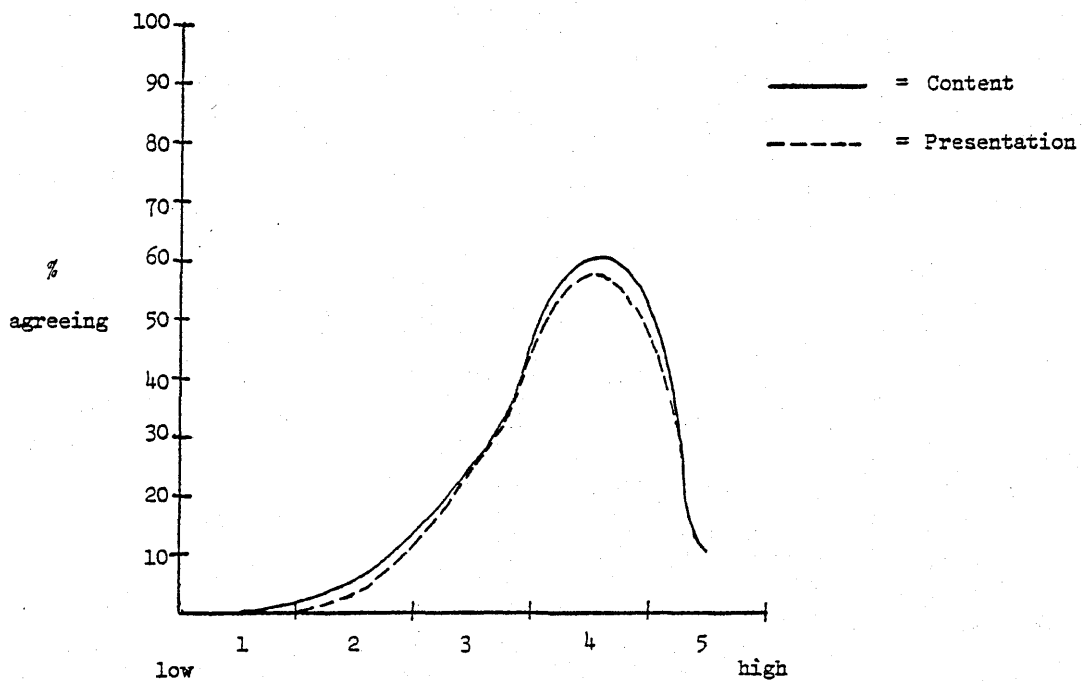


Figure 5.2 : Perceptions of all managers at the end of their programmes regarding the appropriateness of the content and the presentation of the teaching sessions.

The overall response did mask some differences between subgroups. Given the constraints of the data, there were four possible approaches to its analysis. These were by type of programme; by specific programme; by academic subject and by lecturer. A summary of significant differences is given in Table 5.1 and each group is discussed in turn.

Dependent Variable Independent Variable	Content		Presentation	
	X ²	F ratio	X ²	F ratio
1. Type of programme attended	-	-	-	-
2. Actual programme				
All	-	*	N/A	-
SMPs	**	N/T	-	N/T
MRPs	-	N/T	-	N/T
MMPs	N/A	N/T	-	N/T
3. Subject area	-	-	-	-
4. Type of lecturer	*	****	****	****

Table 5.1 : Summary of Significant Differences Between End of Programme Perceptions

Key : **** significant @ .005 level
 *** significant @ .01 level
 ** significant @ .025 level
 * significant @ .05 level
 - not significant @ .05 level
 N/A not applicable, data unsuitable for testing
 N/T not tested

1. End of programme perceptions by type of programme attended

There were no significant differences between the mean responses of the three types of programme, SMP, MRP and MMP, for the appropriateness of either content or presentation. All share similar ratings which are well above the half-way mark that the programme organisers might regard as a yardstick of acceptability. When the same comments were looked at in terms of their overall distribution, some apparent differences emerged between MMPs and MRPs and X² tests were run to establish the significance of any differences. Unfortunately, the expected values of some cells were so small that categories had to be merged. But, even so, no significant differences were observed between types of programme. MMs were in greater agreement in their

perception of the appropriateness of the content than were the MRs, 14% of whom thought it inappropriate to their needs compared with only 1% of MMs and 4% of SMs. The full extent of their responses is shown in Figures 5.3 - 5.5.

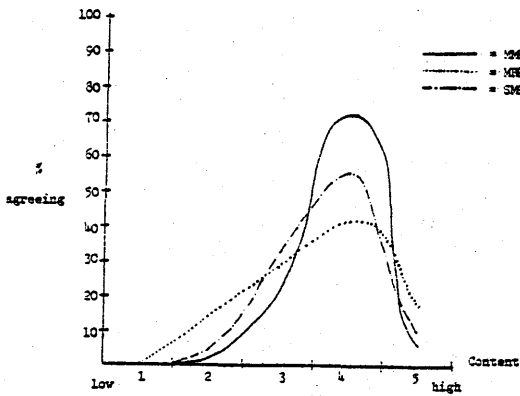


Figure 5.3 : End of programme perceptions of content by type of programme attended.
 $\chi^2(4)=8.98, p > .05$

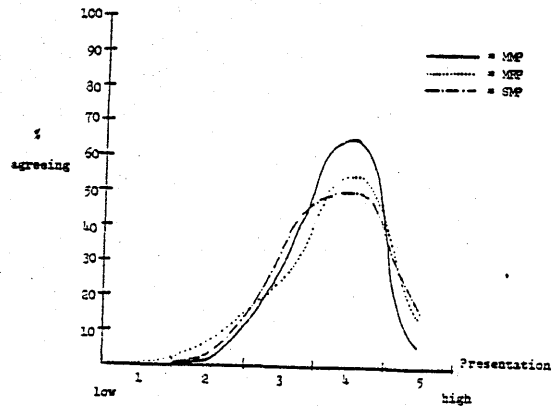


Figure 5.4 : End of programme perceptions of presentation by type of programme attended.
 $\chi^2(6)=8.20, p > .05$

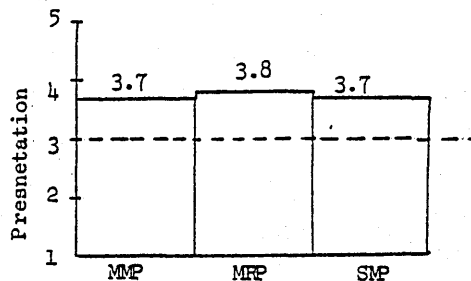
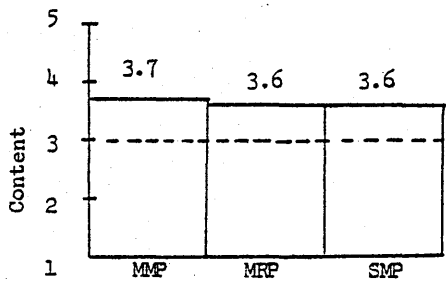


Figure 5.5 : End of programme perceptions by type of programme attended
 Content : $F(2,179)=1.04, p > .05$
 Presentation : $F(2,179)=0.15, p > .05$

2. End of programme perceptions by specific programme attended

When managers' perceptions were looked at by the mean scores of individual programmes, the differences became more marked; the variations being significant with regard to content but not to presentation. These are shown in figures 5.6 and 5.7.

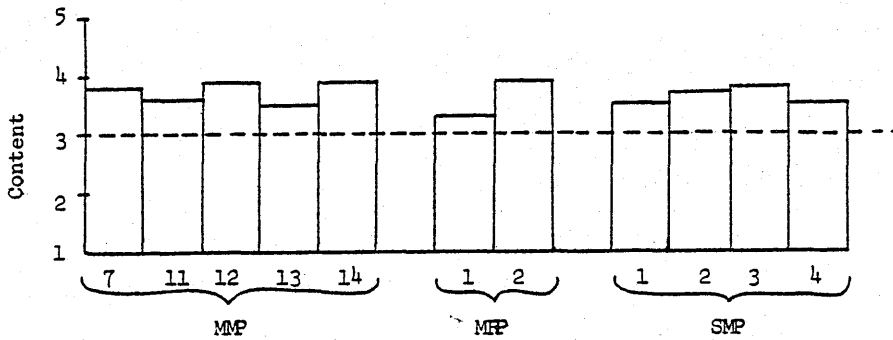


Figure 5.6 : End of programme perceptions of content by individual programme
 $F(10,171)=2.031, p < .05 *$

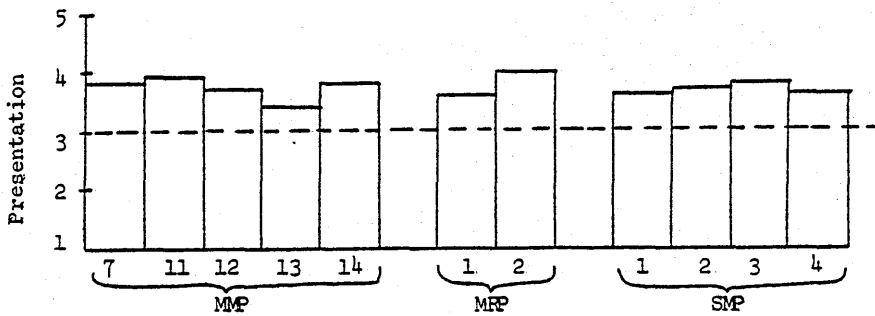


Figure 5.7 : End of programme perceptions of presentation by individual programme
 $F(10,171)=0.579, p > .05$

When the frequency distributions were plotted by individual programme, some interesting differences, particularly in the perceptions of content, showed up between the four SMPs and between the two MRPs. The MMPs seemed to share their perceptions much more closely than the other groups. Again the expected frequencies were too small to run X^2 tests for significance unless the categories were merged into 2 + 3 against 4 + 5. In this format a significant difference was found between the SMs ** but not between the MRs. The MMs were still too concentrated on point 4 of the scale to make a statistical comparison. Figures 5.8 - 5.13 show the breakdown by individual programmes.

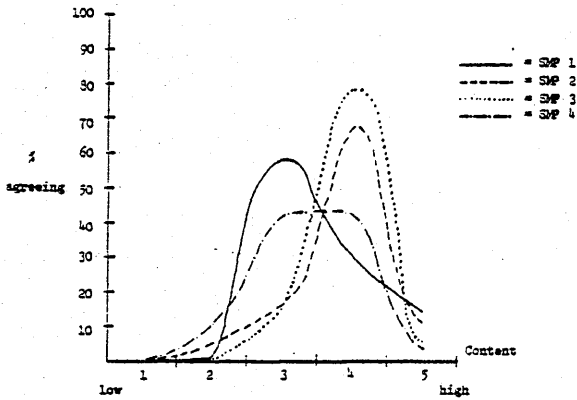


Figure 5.8 : End of programme perceptions of content by actual programme
 $\chi^2(3)=9.37, p < .025$

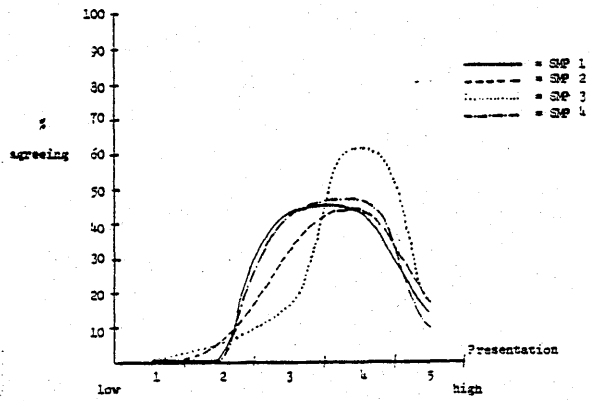


Figure 5.9 : End of programme perception of presentation by actual programme
 $\chi^2(3)=2.64, p > .05$

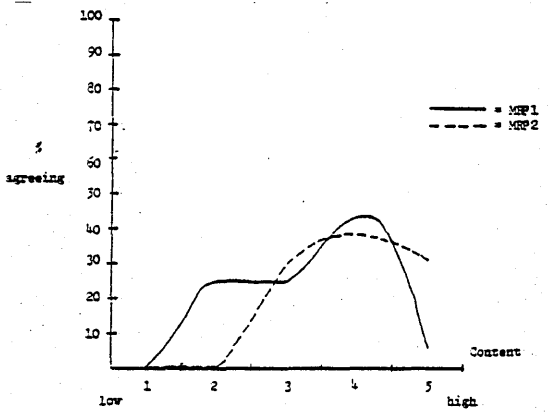


Figure 5.10 : End of programme perceptions of content by actual programme
 $\chi^2(1)=0.58, p > .05$

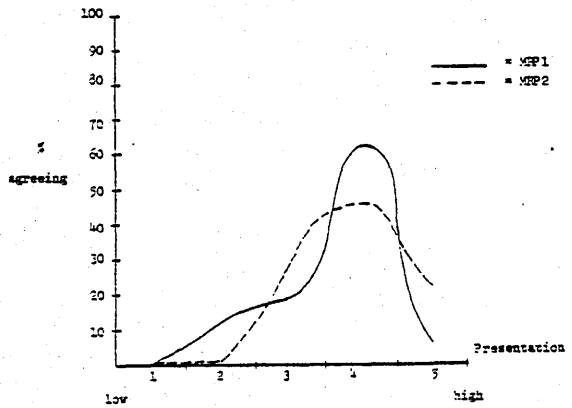


Figure 5.11 : End of programme perceptions of presentation by actual programme
 $\chi^2(1)=0.0, p > .05$

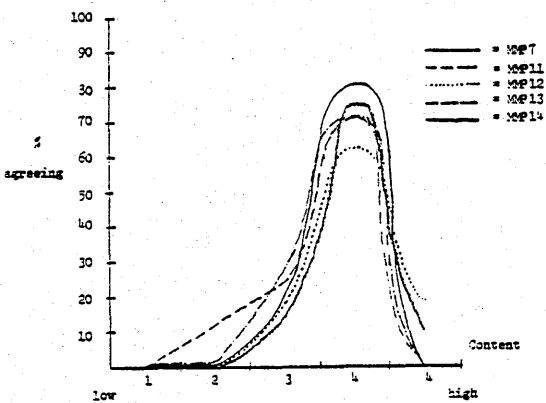


Figure 5.12 : End of programme perceptions of content by actual programme
 χ^2 N/A : (E) too small

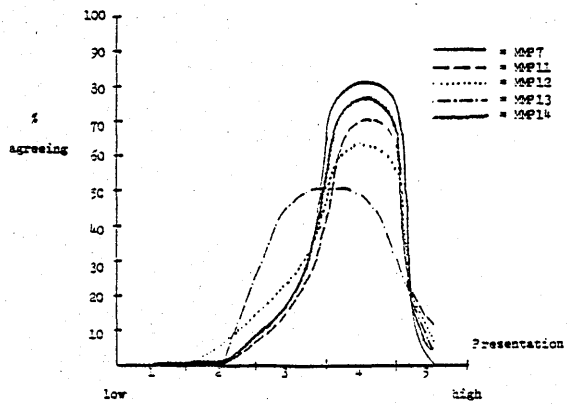


Figure 5.13 : End of programme perceptions of presentation by actual programme attended
 $\chi^2(4)=6.3, p > .05$

3. End of programme perceptions by academic subject areas

All lecturers were assigned to one of the four academic areas described on page 237. When the managers made their assessments of the appropriateness of content and presentation at the end of their programmes they reported no significant differences between the subject areas. The mean scores given to each subject were uniformly high and the distribution of scores were very similar, as shown in Figures 5.14 - 5.16.

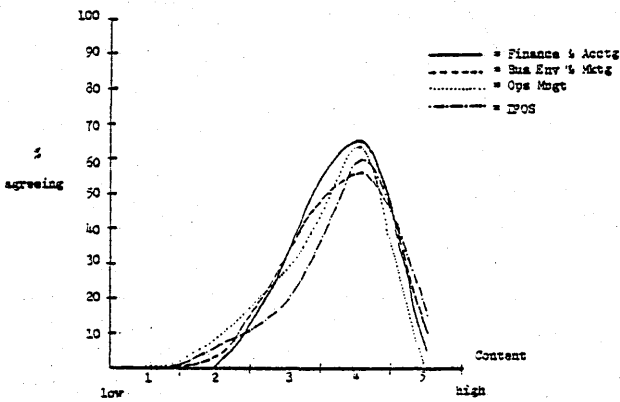


Figure 5.14 : End of programme perceptions of content by subject area
 $\chi^2(9)=9.46, p > .05$

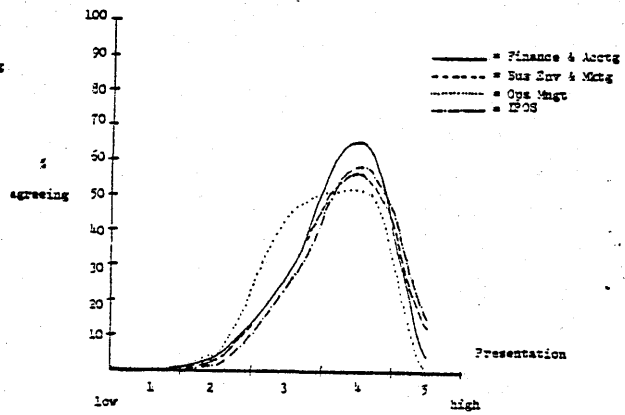


Figure 5.15 : End of programme perceptions of presentation by subject area
 $\chi^2(9)=18.84, p > .05$

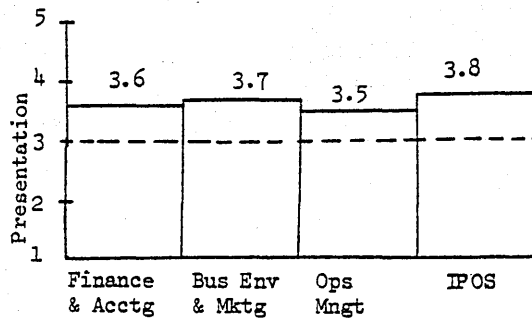
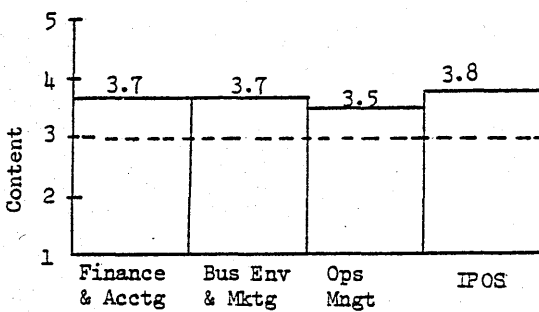


Figure 5.16 : End of programme perceptions by subject area

Content : $F(3,178)=1.01, p > .05$
 Presentation : $F(3,178)=1.98, p > .05$

4. End of programme perceptions by type of lecturer

Lecturers were divided into those supplied by Cranfield and those supplied by the Company. With a few exceptions, they were full-time employees of each organisation. The Cranfield academics were professional lecturers whilst those from C & W were full-time managers with little or no lecturing experience. A significant difference might then be expected to emerge between these two groups, given their different levels of skill. If there was no difference then either the Company did not need to go to the trouble and expense of employing Cranfield lecturers or the joint working relationship between the lecturers had developed to such a high level that differences between them were imperceptible. In the event, significant differences were reported between the lecturers, the variations being greater for presentation than for content. Fewer C & W lecturers were given the top score for the appropriateness of the presentation of their sessions (only 4% compared with Cranfield's 16%) and again for content (only 4% compared with Cranfield's 12%). There were also fewer Cranfield lecturers whose presentation was assessed inappropriate or only fairly appropriate (1% and 23% as compared with C & W's 5% and 38%). The full breakdown is shown in Figures 5.17 - 5.19. The mean scores show that despite these differences, the Company lecturers were still perceived as performing at an above adequate level.

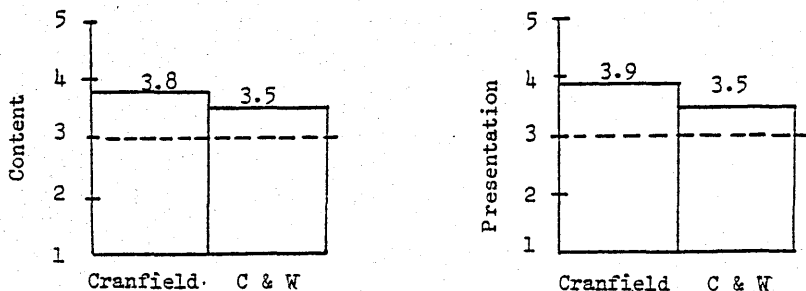


Figure 5.17 : End of programme perceptions by type of lecturer

Content : $F(1,180)=8.59, p<.005$ ****
Presentation : $F(1,180)=15.98, p<.005$ ****

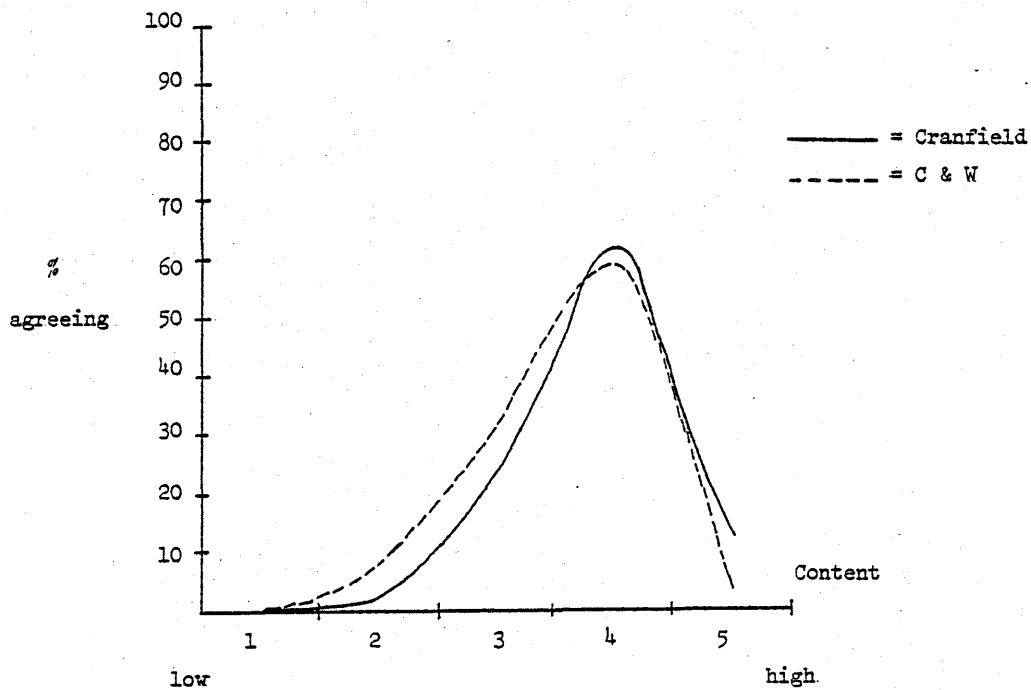


Figure 5.18 : End of programme perceptions of content by type of lecturer
 $\chi^2(1)=4.45, p < .05 *$

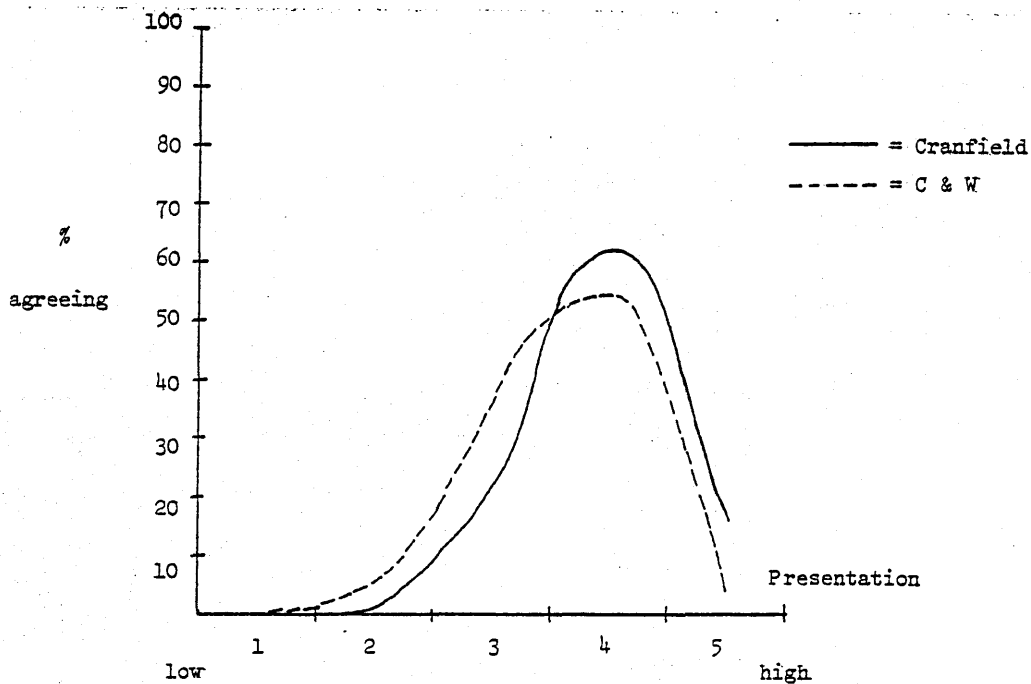


Figure 5.19 : End of programme perceptions of presentation by lecturer
 $\chi^2(2)=11.44, p < .005 ****$

Conclusion

At the end of the programme, the null hypothesis that "no manager is significantly more satisfied with his learning experience than any other manager" could only be rejected in terms of small differences in perceptions of content within the type of programme: the four SMPs did not agree with one another, nor did the two MRPs. MMs were equally satisfied with the content of their programmes and all managers were equally satisfied with the presentation of their programmes.

All managers were equally satisfied with the appropriateness of both content and presentation of the different subject areas and all identified a significant difference between the lecturing skills of Cranfield and C & W personnel.

On balance, the null hypothesis was confirmed at the end of the programme. In other words, all the managers felt similarly about the learning experience at the end of the programme, before they returned to work.

Test 2. Managers' Perceptions of their Programme after their return to work

Approach Adopted

After their return to work, managers were sent a questionnaire in which they were asked to rate the subjects taught on their programme on a five-point scale for practical value, theoretical interest and personal value. They were also asked whether there was anything on the programme they would like to see changed, added or omitted (2). The first of these questions was purely quantitative, the second purely qualitative.

Constraints

1. To cope with the variety of subjects taught and changes that had occurred during the development of the programmes, it was necessary to group the scores into key teaching areas. To facilitate comparison with end of programme perceptions, the same four subject areas were used. These were:

1. Finance and Accounting
2. Business Environment and Marketing
3. Operations Management
4. Interpersonal and Organisational Skills (IPOS)

2. Managers were asked to make three separate assessments for each topic taught on their programme. These were:

1. Practical value
2. Theoretical interest
3. Personal value

Each was rated on a five-point scale:

- 5 = of great value
- 4 = of some value
- 3 = of occasional value
- 2 = of little value
- 1 = of absolutely no value

Practical value concentrated attention on the utility of the new skills and knowledge gained from the programme; theoretical interest focussed on the intellectual stimulation afforded by the programme; and personal value considered individual growth such as an increased feeling of well-being, heightened self-awareness and confidence.

3. The results are based on a total of 2,268 separate assessments made by 136 managers.

Results and Discussion

Managers, looking back on the programmes, had clearly found them intellectually stimulating but their secondary value was of a personal rather than a practical nature. The most frequently reported assessment scores from the five available were four for theoretical interest; four for personal value; and three for practical value. The associated means were 3.4, 3.2 and 2.9 respectively. The distribution of assessments is shown in Figure 5.20.

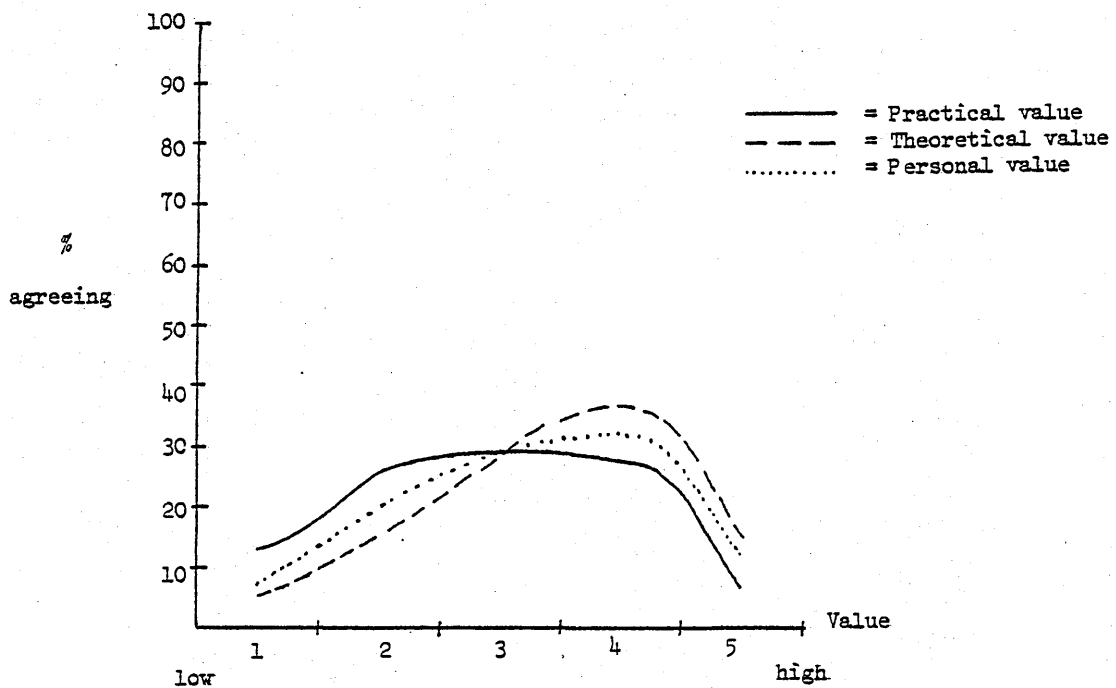


Figure 5.20 : Satisfaction looking back by type of value

An immediate and recognisable benefit at the personal level is the usual experience of post-management training evaluations (Warr et al 1970, Hamblin 1974). Indeed, it has been argued that not until this has occurred can new behaviour at work emerge. Byham and Rackham (1977), for instance, emphasise the personal value of training as the key to transfer. They believe the new found confidence to be crucial to the successful implementation of meaningful change at the workplace.

To put the null hypothesis to the test, the levels of satisfaction (measured by perceived value scores) were compared as between different groups of managers. There were a substantial number of significant differences between them. These are shown in Table 5.2.

Managers' assessments were divided first by type of programme attended (i.e. SMP, MRP, MMP) and then by the actual programme (i.e. SMP1, SMP2, etc). Significant differences arose between all of them. The managers' assessments as to the practical value, theoretical interest and personal value of the programmes were also compared by subject grouping and type of lecturer. Again, significant differences became evident.

Dependent Variable / Independent Variable	Practical Value (X^2)	Theoretical Interest (X^2)	Personal Value (X^2)
1. Type of programme	****	****	****
2. Actual programme	****	****	****
SMPs	****	****	****
MRPs	-	-	**
MMPs	****	****	****
3. Subject grouping	****	***	****
4. Type of lecturer	****	****	****
Total	6	6	7

Table 5.2 : Summary of Significant Differences Between Perceptions After the Return to Work

1. Satisfaction Looking Back by Type of Programme

There were important differences in satisfaction according to the type of programme a manager attended. These differences were of equal statistical significance for all three criteria of "value" ****. The MMs were the most

satisfied, the MRs the least satisfied.

Practical Value

Half of MRs found their programme to be of little or no practical value after their return to work as compared with one-third of MMs and SMs. Only 1% of MRs found their programme of great practical value compared with 8% of MMs and 10% of SMs. Or, to look on the brighter side, half of the MRs and two-thirds of the MMs and SMs reported their programmes as having had at least occasional practical value back at work. The distributions are shown in Figure 5.21.

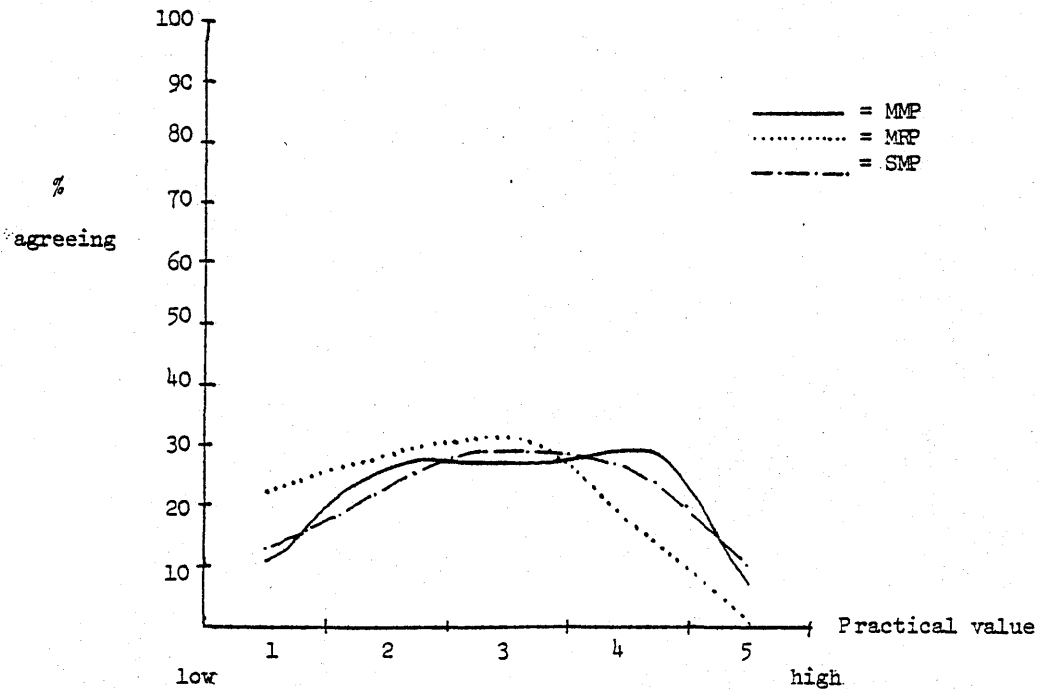


Figure 5.21 : Satisfaction looking back (practical value) by type of programme

$\chi^2(8)=59.77, p < .005$ ****

Theoretical Interest

From the theoretical point of view there were again differences, the MRs trailing once more behind the MMs and SMs. Even so, the general level of response was more positive. Only 18% of MMs, 21% of SMs and 28% of MRs found

the programmes to be of little or no theoretical interest. This left between 72% and 82% of all managers reporting, after their return to work, that their programmes had been of theoretical value. Again the SMs had relatively more of their members finding the programmes to be of great value: 20% as compared with 16% of MRs and 14% of MMs. Two-thirds of the MM vote was given to occasional interest and some interest scores. The distributions are shown in Figure 5.22.

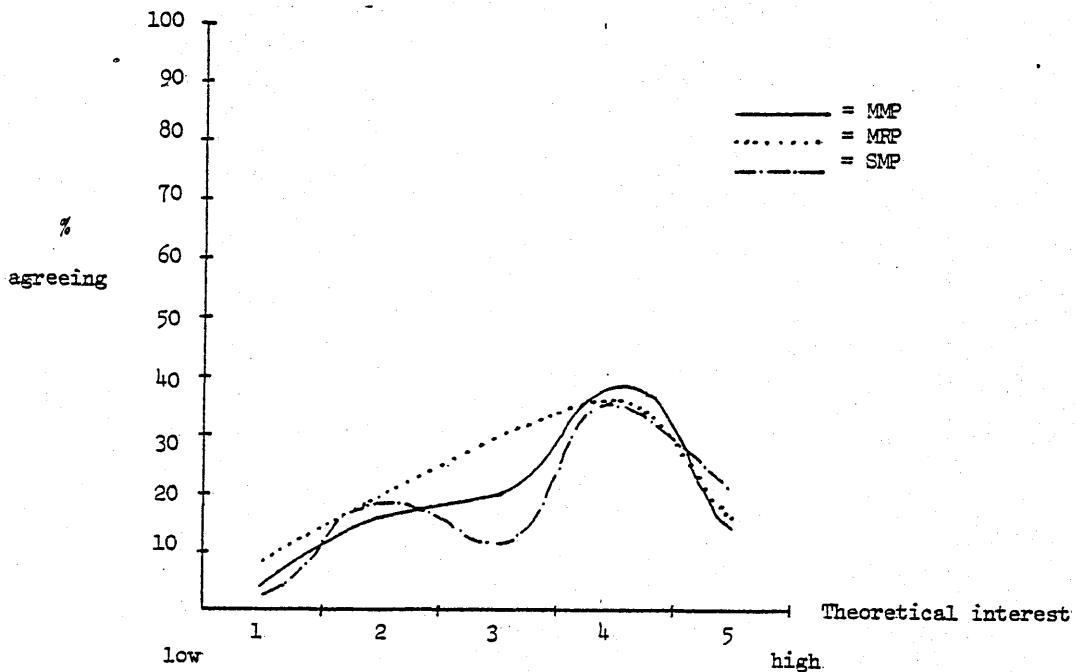


Figure 5.22 : Satisfaction looking back (theoretical interest)
by type of programme
 $\chi^2(8)=38.72, p < .005$ ****

Personal Value

The personal value derived from having attended the various programmes was felt to be greater amongst MMs and SMs than it was amongst MRs. Over one-third of MRs found the programme to have been of little (25%) or no (11%) personal value. This compared with a total of 30% of SMs and 25% of MMs. At the other end of the scale, only 3% of MRs felt their programmes to have been of great personal value against 14% of SMs and 13% of MMs. These different frequency distributions are shown in Figure 5.23.

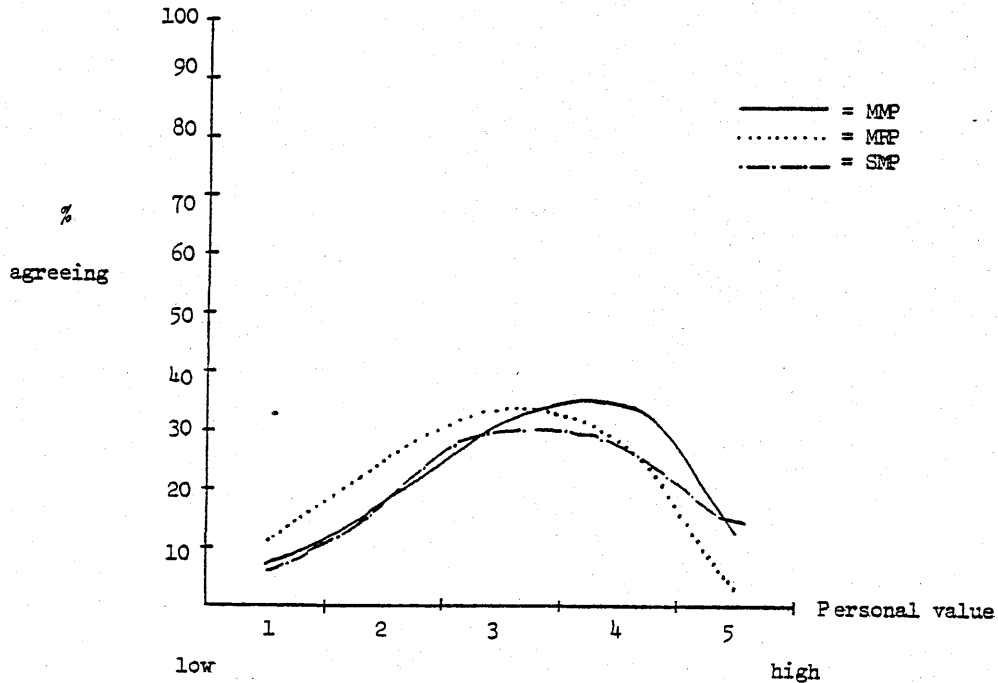


Figure 5.23 : Satisfaction looking back (personal value)
by type of programme
 $\chi^2(8)=48.51, p < .005$ ****

Comments on Satisfaction by Type of Programme

When managers gave qualitative rather than quantitative responses to Q2 - "looking back on the programme, are there any parts you would like to see added or omitted?" - there were a number of suggestions upon which they agreed. These related largely to the amount of pre-planning on both sides and to the use of C & W examples. Their views on the curriculum design and mix of lecturers are discussed later. The SMS, MRs and some MMs would have preferred more notice that they would be attending the programme and to have been supplied with pre-programme study material. Some SMS felt that the Cranfield lecturers could have "done their homework" on the Company more thoroughly and MRs suggested that a well-indexed manual be supplied for them to use on their return to work. There were managers at all levels asking for the involvement of managers from other companies - as both participants and speakers; at the same time there were numerous requests for teaching materials to be even more

closely linked to "live" examples from C & W. The two tend to be mutually exclusive and both suggest a recognition of the next stage in the transfer process but a reluctance to face it alone.

When the many comments made are divided by type of programme attended some interesting trends emerge. The SMS are more environmentally-oriented than the others; the MRs are more job-oriented; and the MMs are more people-oriented. The central concern of the SMS is the changing economic, political and technological environment in which the Company is operating. They wanted more finance, law, marketing and economics, all at an international level. They wanted in-depth discussions on their competitors; a case-study on ITT or AT & T for example. The MRs felt the scope of their programme had been too wide and would have preferred greater emphasis to have been placed on concrete skills that could be applied to their jobs. They also expressed a strong interest in computers and their application. This was a subject on which they would have liked more advanced tuition. The MMs were relatively well pleased with their programmes and, because of the wide range of participants, enthusiastically requested "more" of everything. However, from amongst all this came a persistent MM request for more on industrial relations, especially negotiating skills and working in groups.

2. Satisfaction looking back by Actual Programme Attended

Differences in perceived satisfaction were also a result of the actual programme attended. When the programmes were compared en masse significant differences were apparent for practical value ****, theoretical interest **** and personal value ****. When these same responses were compared within the programme types, most of the differences still remained.

Senior Management Programmes

Amongst the SMPs there was considerable variation. Of those who attended the first programme, the majority felt it to be of little practical or personal value and of only occasional theoretical interest. The second and third programmes however, showed marked improvements on all dimensions. They were of progressively more practical value, the proportion of favourable assessments doubling from 40% to 80% of the total from SMP1 to SMP3. On the fourth and final programme, this positive momentum was halted and the perception of practical value slumped back. The managers on SMP4 had found it of high theoretical interest but had mixed feelings about its personal value. The differences are shown in Figures 5.24 - 5.26. The graphs for practical and personal value do bear a resemblance, in a collapsed form, to that for the SMPs' perception of content at the end of their programmes (see Figure 5.8).

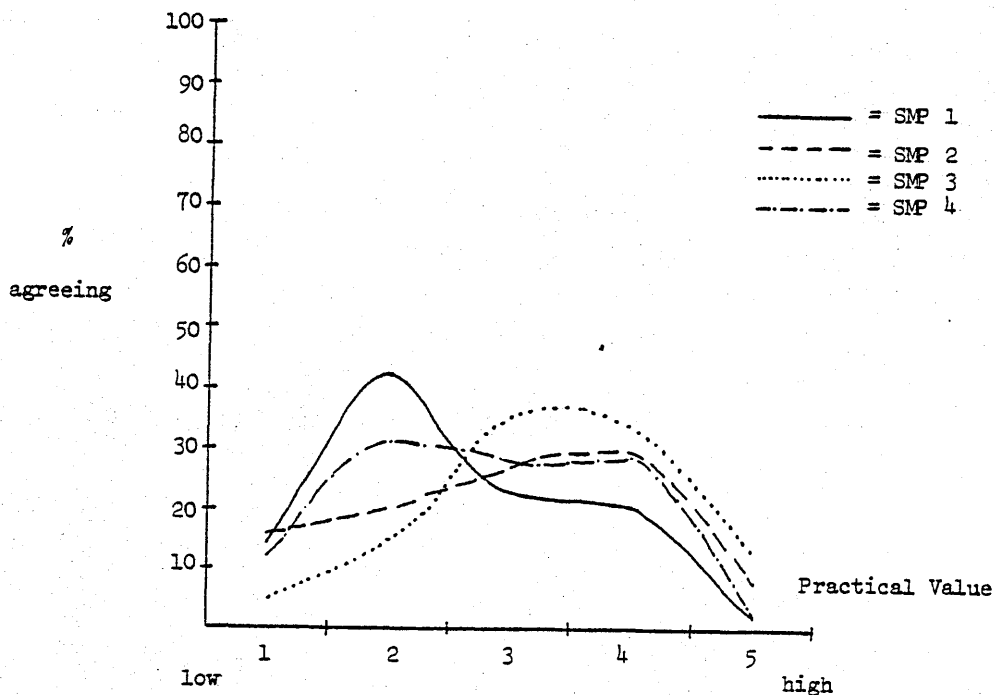


Figure 5.24 : Satisfaction looking back (practical value)
by actual programme

$\chi^2(12)=48.41, p < .005$ ****

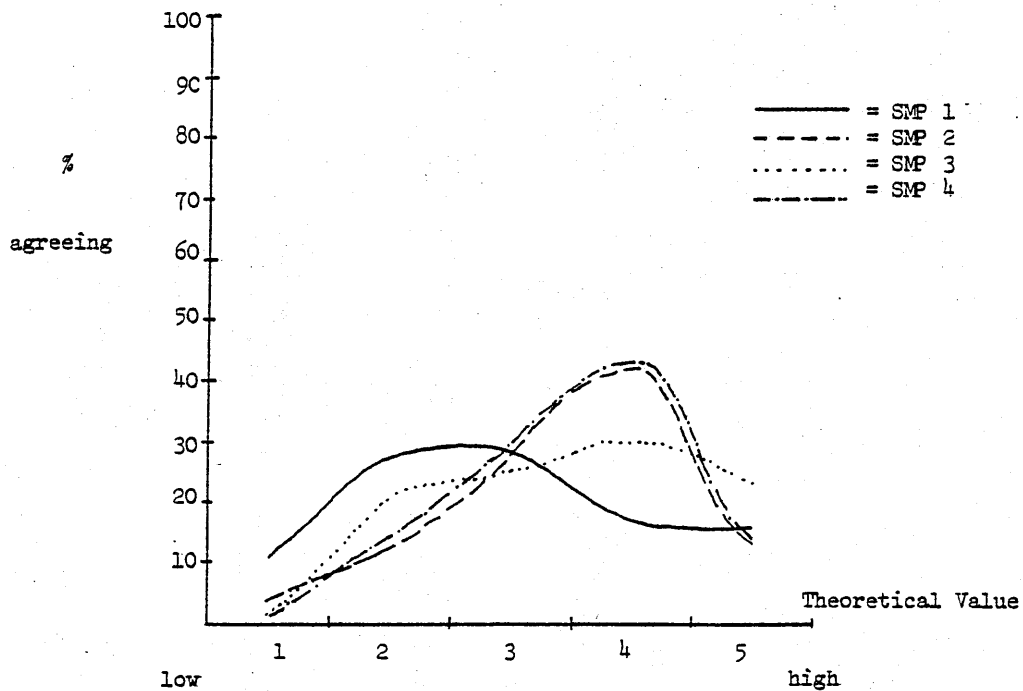


Figure 5.25 : Satisfaction looking back (theoretical value) by actual programme
 $\chi^2(9)=31.28, p < .005****$

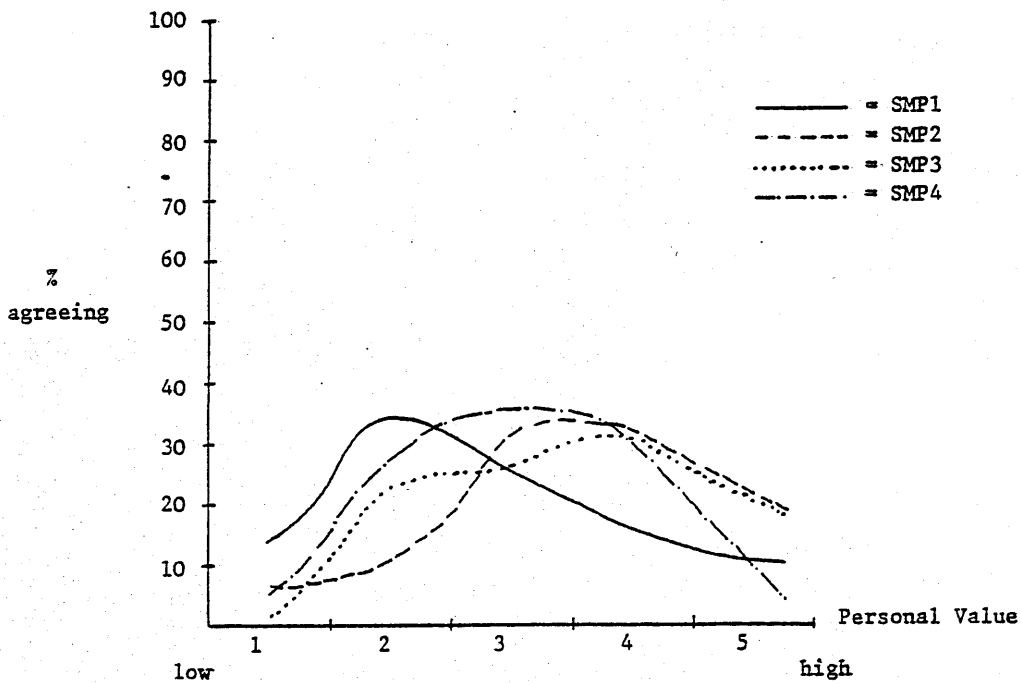


Figure 5.26 : Satisfaction looking back (personal value) by actual programme
 $\chi^2(12) = 45.23, p < .005 ****$

Management Refresher Programme

The MRP showed fewer differences in their assessments. Back at work, members of both programmes looked back on their experiences as being of theoretical interest, but neither felt they had gained much in the way of practical value. Nor, indeed, did either report much personal value although this varied between the two programmes, the first MRP reporting significantly more personal value than the second **. Figures 5.27 - 5.29 show the relationships. There is no similarity with the end of programme perceptions.

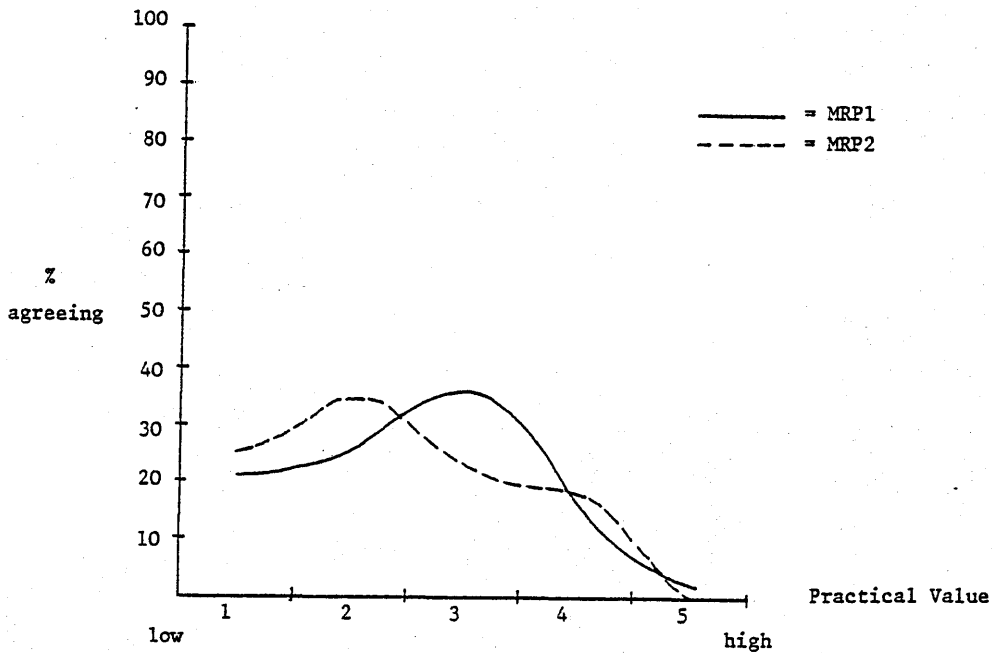


Figure 5.27 : Satisfaction looking back (practical value) by actual programme $\chi^2(3) = 6.33, p > .05$

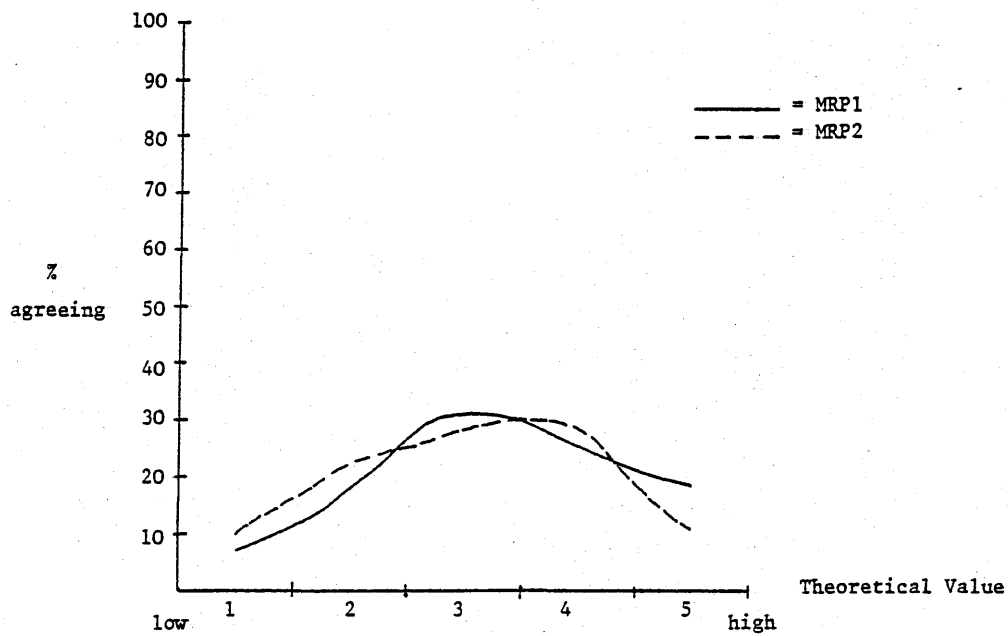


Figure 5.28 : Satisfaction looking back (theoretical value)
by actual programme $\chi^2(4) = 4.21, p > .05$

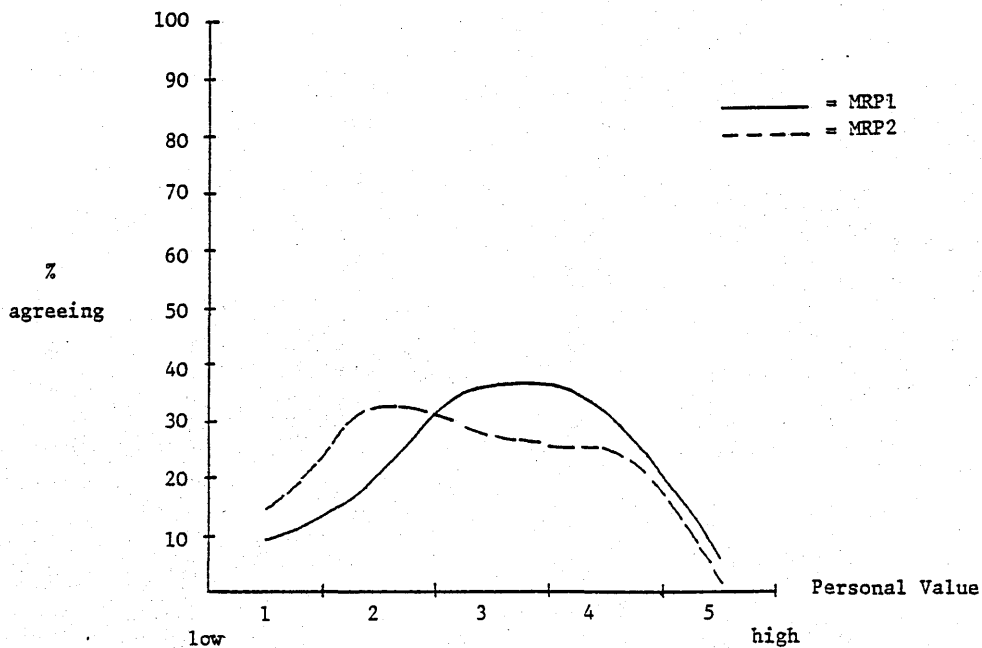


Figure 5.29 : Satisfaction looking back (personal value) by
actual programme $\chi^2(3) = 9.36, p < .025 **$

Middle Management Programmes

The differences between MMPs are shown in Figures 5.30 - 5.32. Although all programmes contributed to the overall differences, the very first one, MMP7, stood out. The participants on MMP7 perceived themselves as having received less value from their programme than did other participants. This was especially the case for practical value. A number of programmes had a bimodal distribution on the issue of practical value. For MMP11 and 13 the emphasis was on little value; for MMP8 and MMP14 it was on some value. Only MMP10 and MMP12 showed a more normal distribution pattern. This is clearly an area for further investigation - the opportunities available to the individual manager at work may provide a link. There was considerable variety amongst perceptions of personal value and, to a slightly less extent, amongst those pertaining to theoretical interest. On all three, differences were significant ****.

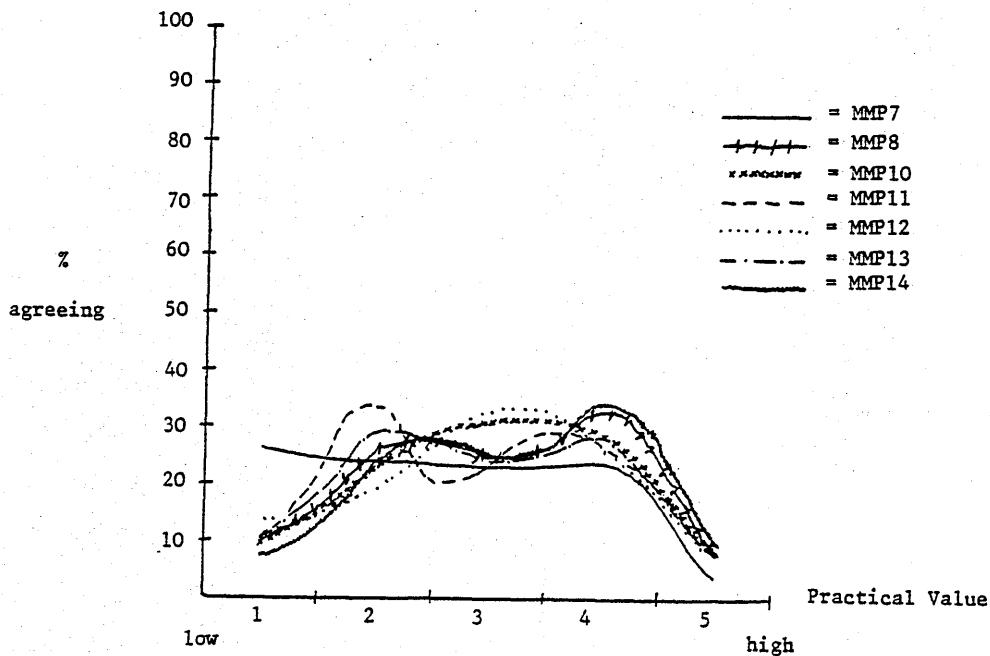


Figure 5.30 : Satisfaction looking back (practical value) by actual programme $\chi^2(24) = 67.92, p < .005$ ****

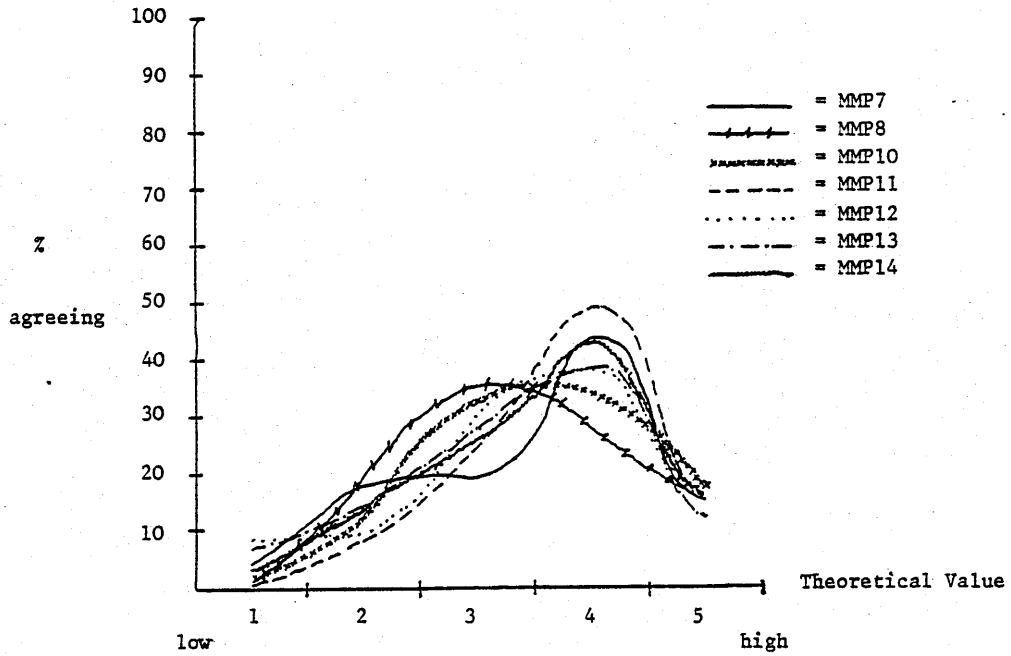


Figure 5.31 : Satisfaction looking back (theoretical interest) by actual programme $\chi^2(24) = 64.14, p < .005$ ****

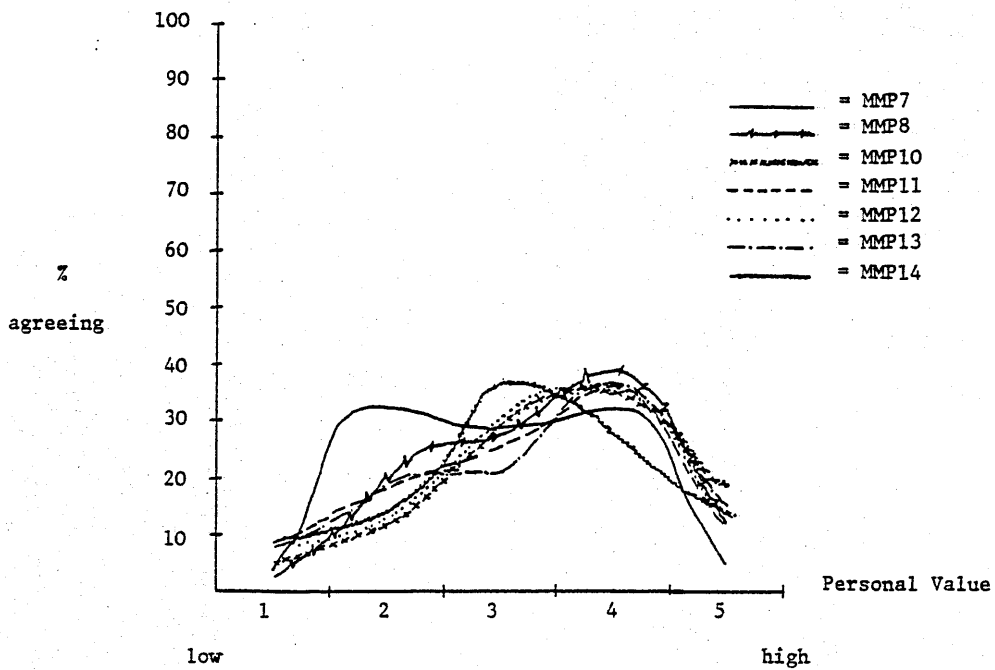


Figure 5.32 : Satisfaction looking back (personal value) by actual programme $\chi^2(24) = 67.7, p < .005$ ****

Mean Differences between Programmes

When the mean scores for each programme were compared, the differences between programmes showed up yet again. These are shown in Figures 5.33 - 5.35. The programmes which were most out of line were SMP1, MRP2 and MMP7. The least variation occurred on perceptions of theoretical interest; ten of the thirteen programmes having a mean of either 3.4 or 3.5.

When the mean scores were ranked, the same three programmes shared the bottom three rankings every time. These were SMP1 and the two MRPs. SMP3, on the other hand, was always in either 1st or 2nd place.

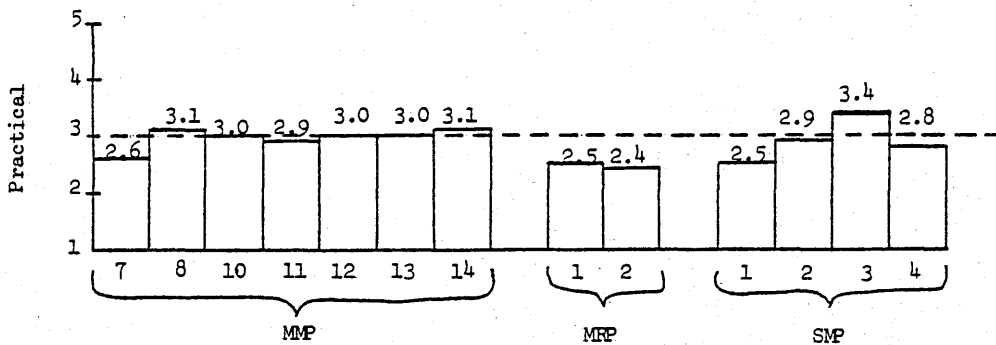


Figure 5.33 : Satisfaction looking back (practical value);
Mean scores by actual programme attended

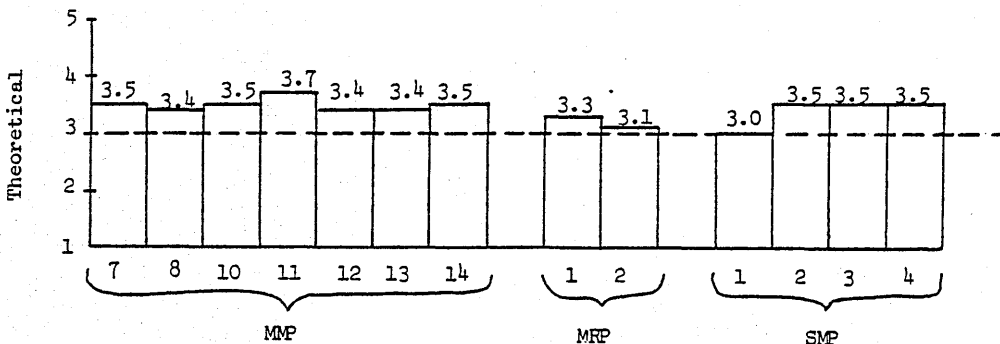


Figure 5.34 : Satisfaction looking back (theoretical value);
Mean scores by actual programme attended

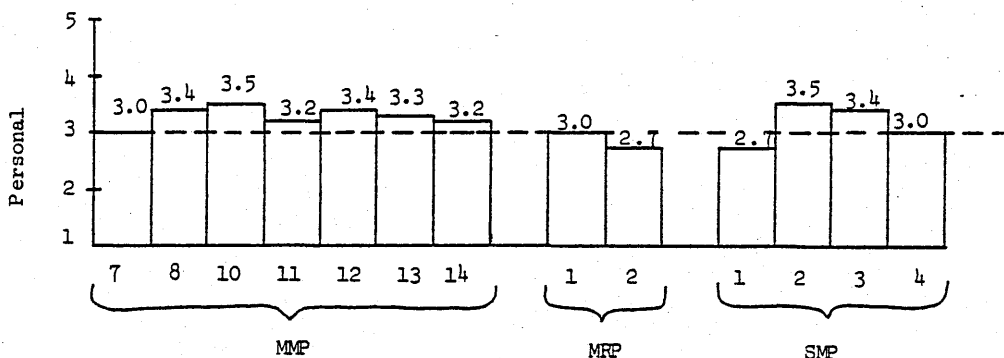


Figure 5.35 : Satisfaction looking back (personal value);
Mean scores by actual programme attended .

3. Satisfaction looking back by subjects taught

The differences in the values of the four subject groupings after participant managers had returned to work were significant in all three aspects - practical ****, theoretical **** and personal ****.

The IPOS component was responsible for the bulk of the difference, Operations Management and Business Environment taking second place on different occasions. Only Finance consistently matched up to its expected frequency distributions (3). These distributions are shown in Figures 5.36 - 5.38.

Practical Value

The Finance response confirmed expectations and its distribution came closest of all to approximating a normal curve. This said, fewer managers than expected found the subject of no practical value. The Business Environment and Marketing response was disappointing. Nearly half of all managers found it to be of little or no value on their return to work and only just over a quarter found it of some or great benefit. The Operations Management response was interesting in that it displayed a bimodal pattern of distribution, the majority of managers finding it either

of little or of some practical value. This presumably depended on the opportunities available for its application. The most dramatic response related to the IPOS group of subjects. Fewer managers than expected found it of little or no value and many more than expected found it of some or great value. These many differences between the practical value of the subjects shown in Figure 5.36, were statistically significant ****.

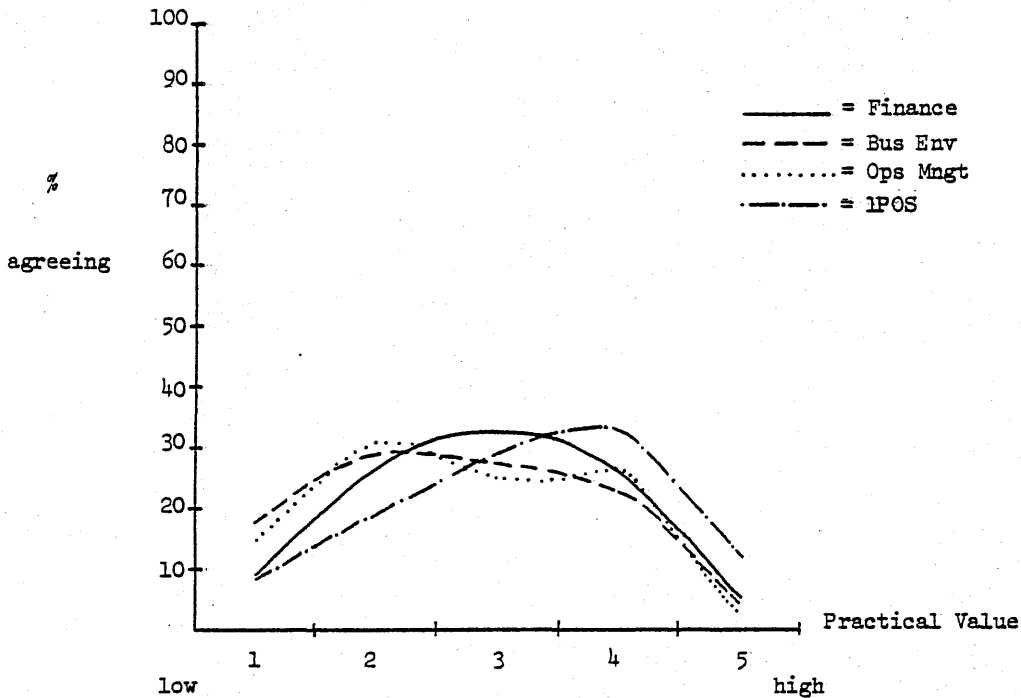


Figure 5.36 : Satisfaction looking back (practical value)
by subject area $\chi^2(12)=109.86, p<.005****$

Theoretical Interest

All four subject areas showed the same favourable distribution of responses. The majority of managers had found them all of some theoretical interest. However, expectations were not met for Operations Management where fewer managers found it of great interest and more managers found it of no interest. The opposite was the case with IPOS. Fewer managers found IPOS of no or little interest; more of them found it of great interest. The differences between these subject areas, shown in Figure 5.37, were statistically significant ***.

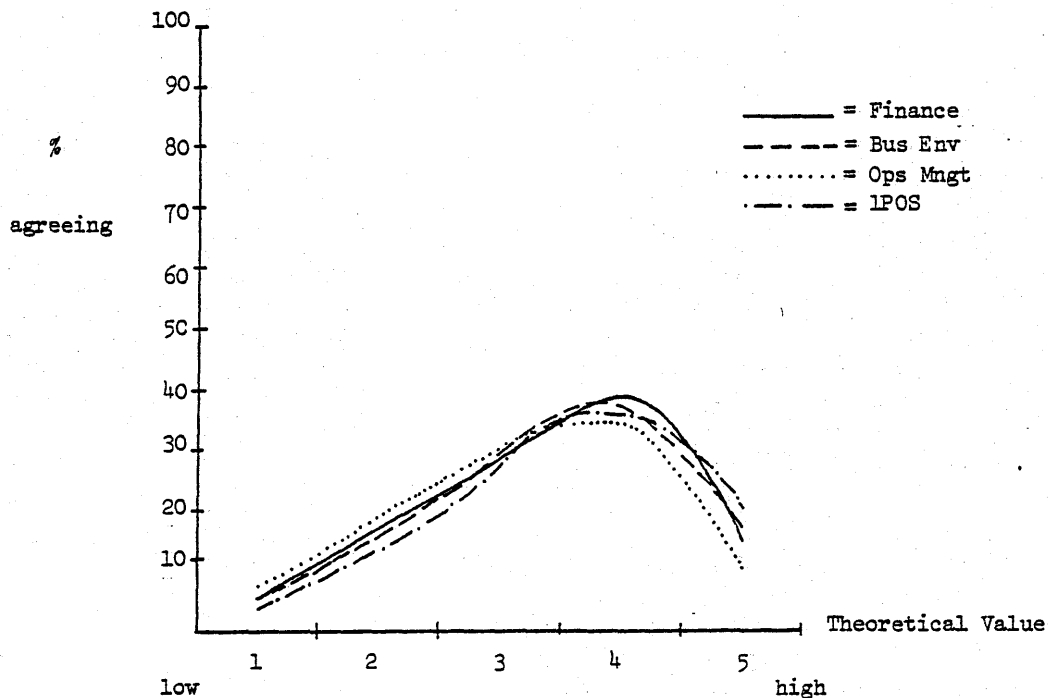


Figure 5.37 : Satisfaction looking back (theoretical interest) by subject $\chi^2(12)=27.55, p < .01***$

Personal Value

Whilst the majority of managers again shared the opinion that all subjects had been of some personal value, important differences emerged at the top and bottom ends of the scale. More managers than expected found both Business Environment and Operations Management of little or no personal value but very many fewer than expected found IPOS of little or no value. At the other end of the scale, fewer managers than expected found Finance, Business Environment or Operations Management of great personal value but very many more found IPOS to be of great personal value. The differences shown Figure 5.38 were again statistically significant ****.

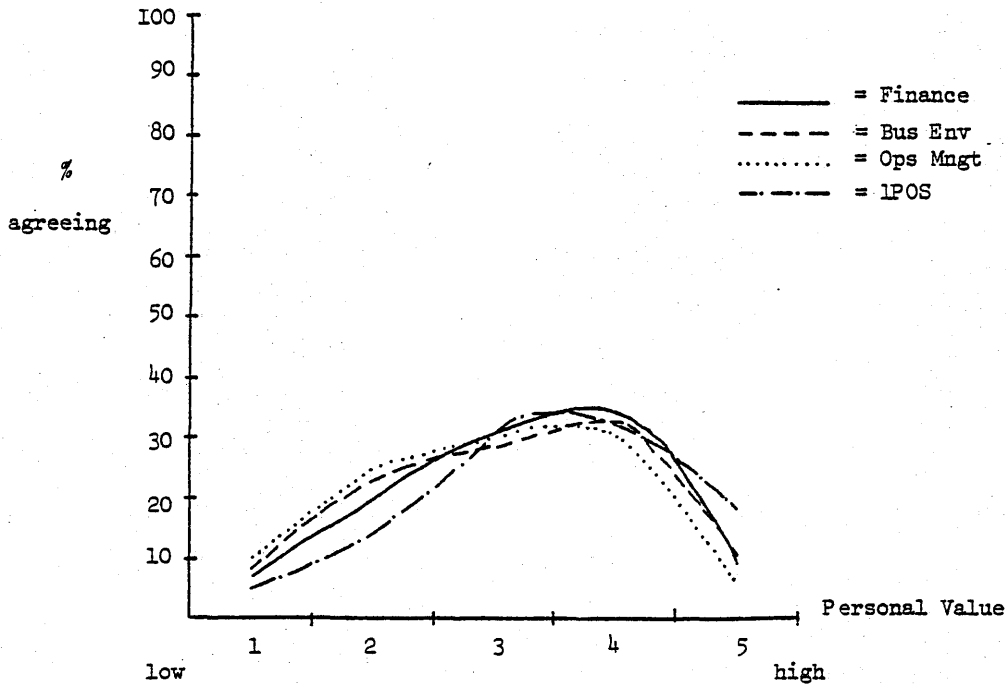


Figure 5.38 : Satisfaction looking back (personal value) by subject area $X^2(12)=68.23, p < .005****$

Mean Differences between Subjects

When the managers' responses were looked at for their mean scores the differences were again highlighted. IPOS had the highest mean score of all practical, theoretical and personal values. Finance took second place for practical and personal value and third place for theoretical interest. Business Environment was second in theoretical interest but only third for personal value and last for practical value. Operations Management took third place for practical value and fourth for both theoretical interest and personal value. The differences are shown in Figures 5.39 - 5.41.

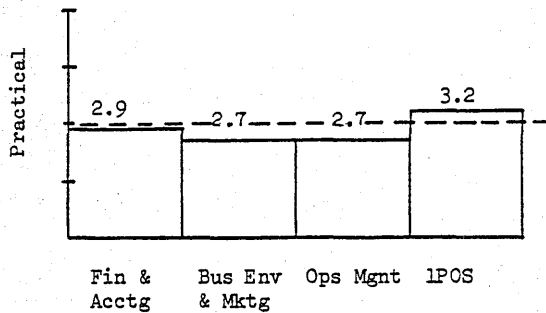


Figure 5.39 : Satisfaction looking back (practical value); Mean scores by subject area

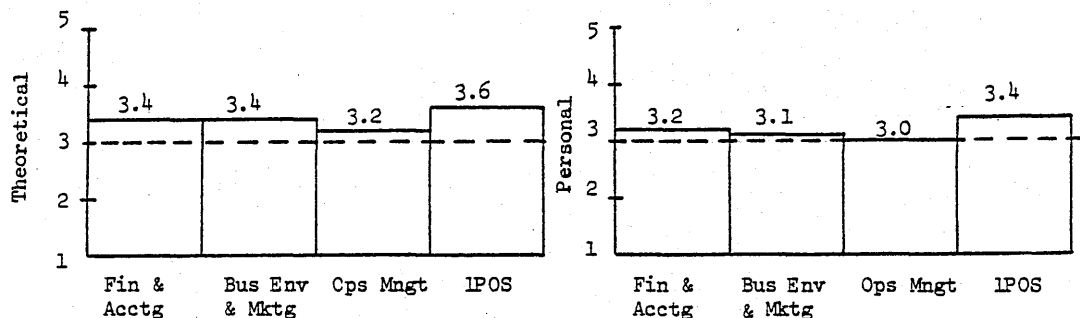


Figure 5.40 and 5.41 : Satisfaction looking back (theoretical and personal values); mean scores by subject area

Figures 5.40 and 5.41 : Satisfaction looking back (Theoretical and Personal Values); mean scores by subject area

When a half-way line is drawn through the means, as was done with the end-of-programme responses, it is interesting to see how many subjects again reached an "acceptable" level.

Only IPOS came through on all three counts. The others met the criteria for being interesting and of personal benefit but failed when assessed for practical value.

Written Comments on the Subjects Taught

Overall, the greatest "loss" against end-of-programme responses was sustained by Business Environment and Marketing. This is reinforced by the fact that managers made 50% more qualitative comments on this than on any other group of subjects. Disappointment lay largely in the subjects' lack of relevance or the lack of opportunities for application on their return to work. This was particularly so for marketing and a number of practical suggestions were made as to how the situation might be improved.

No concessions were made on the MMP to the possible differing cultural values of National staff. They were treated solely as "Company men." One Hong Kong Nat remarked on how few of the Cranfield staff seemed to understand "how the Chinese mind works." This is undeniable and causes one to wonder whether the reverse is also true! Another comment "and my only criticism of this course, was that it was too strongly biased towards management skills whilst a manager's moral responsibility to his staff and the society in which they live was not dealt with": a criticism which reflected a fundamental difference in value systems.

4. Satisfaction looking back by type of lecturer

Significant differences were reported between type of lecturer for all interpretations of value ****. They showed that greater practical, theoretical and personal value were derived from Cranfield lecturers than from Company lecturers. Such a finding was somewhat surprising from the point of view of practical value as it would have been reasonable to suppose that speakers from within the Company would have selected topics that were more relevant and have made recommendations that had more practical application than would the Cranfield academics. Yet more managers reported getting little or no practical value from the C & W lecturers than from the Cranfield lecturers. This is very clearly shown in Figure 5.42.

What does not show up so obviously is the fact that more managers than expected found the Cranfield staff to be of great practical value whilst fewer of them than expected found this of the C & W staff.

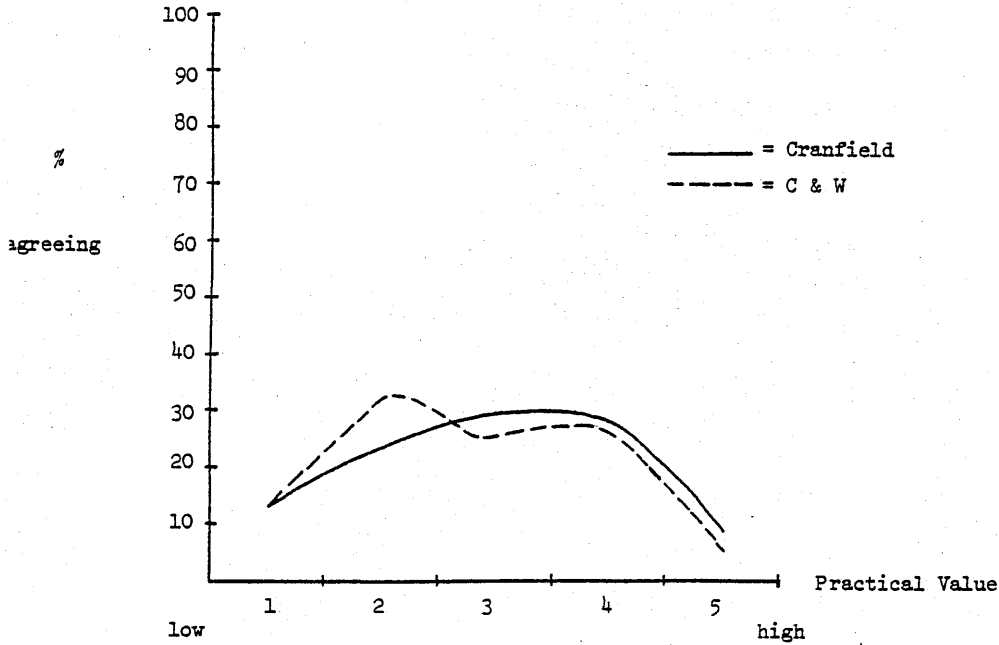


Figure 5.42 : Satisfaction looking back (practical value)
by lecturer $X^2(4)=30.86, p<.005$ ****

When theoretical value was considered, the difference between the type of lecturer was even more marked. Cranfield lecturers were felt to be of far more intellectual interest than the Company speakers. In addition, discussing issues with the academics was reported as of greater personal benefit by the participants than were similar opportunities with Company spokesmen.

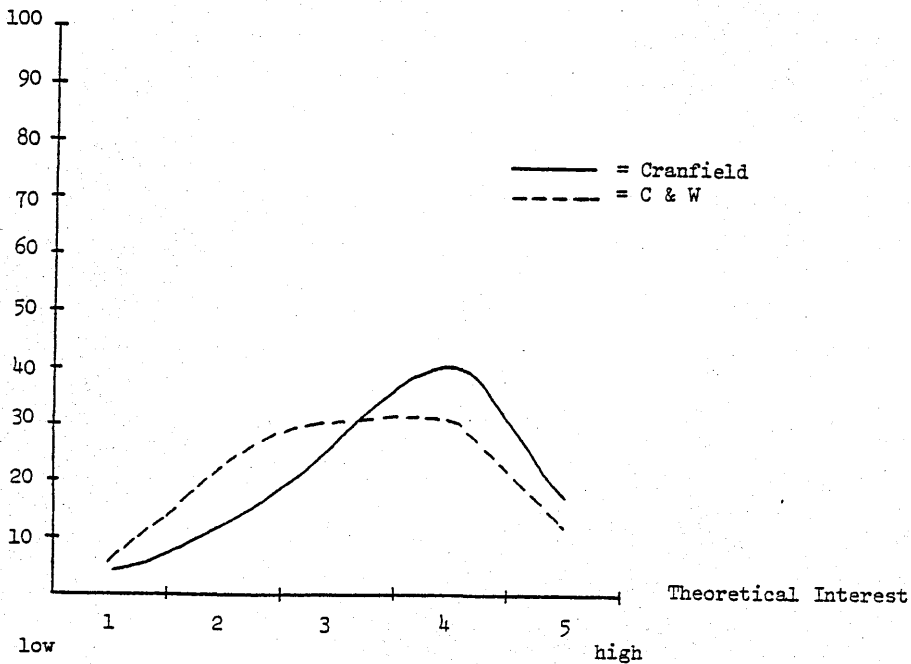


Figure 5.43 : Satisfaction looking back (theoretical interest)
by lecturer $X^2(4)=67.55, p<.005$ ****

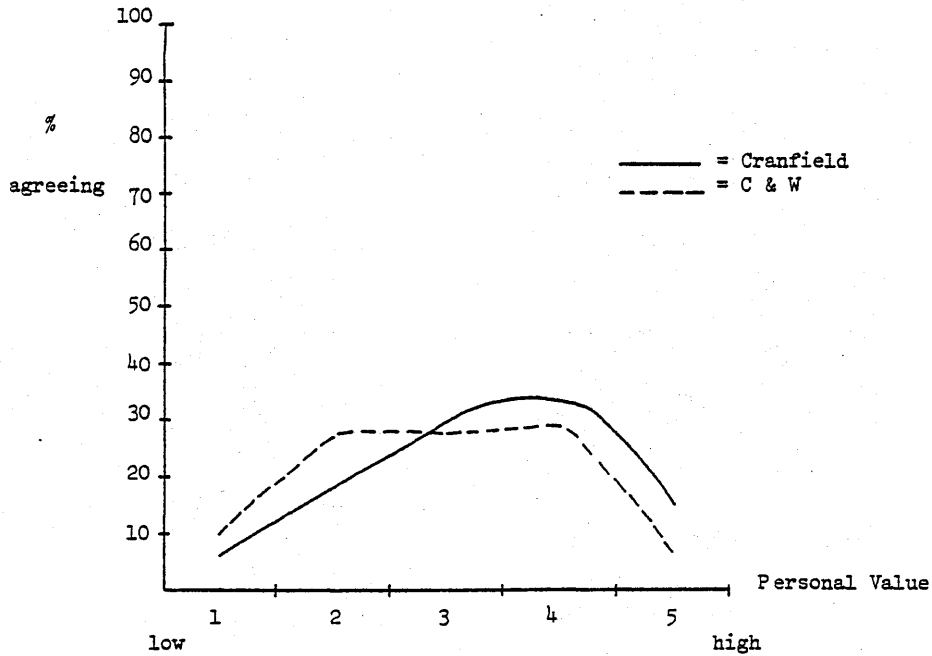


Figure 5.44 : Satisfaction looking back (personal value) by lecturer $\chi^2(4)=66.94, p < .005****$

The mean scores for each group were calculated and, when set against the half-mark criterion, highlight the differences.

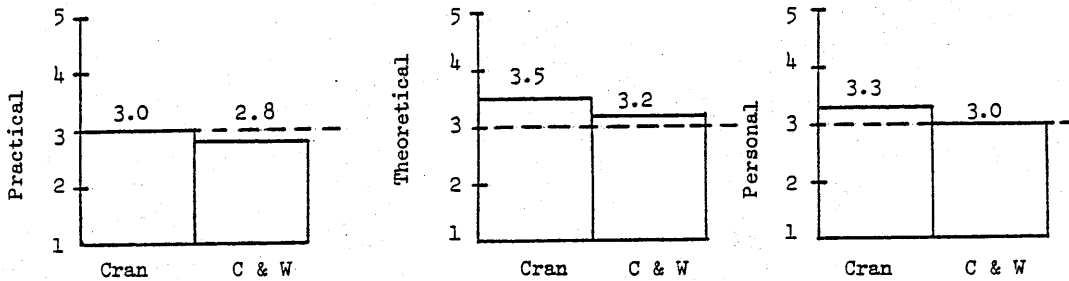


Figure 5.45 : Satisfaction looking back; mean scores by lecturer

Written Comments on the Lecturers

The manager who proposed that the C & W lecturing input was alright in principle but needed "beefing up" provides an umbrella for the many comments about their potential as against their actual value. Some C & W speakers were seen as interesting and making a useful contribution but others

were felt to be under-prepared or secretive or as not taking the role seriously.

Despite giving Company speakers an acceptable rating in quantitative terms, there were a large number of qualitative criticisms of both their subject matter and their presentation of it. Dissatisfaction was sufficient for managers at all levels to ask for improvements to be made or for the sessions to be replaced by Cranfield lecturers. The opportunity cost was seen by some managers to be too high. Company speakers could be heard in-company or be invited for informal evening sessions and as after-dinner speakers.

These findings provide an example of the need to use different methods of data collection. To have had only quantitative or only qualitative responses would have led to different interpretations - an undistinguished pass compared with a dismal failure. Hopefully, by taking account of both, together with the knowledge that some improvements in the C & W input were made in later programmes (not included in this study), a more balanced view can be taken. There can be seen to have been a measure of success but important problem areas, already suspected by some but not accepted by others, have been highlighted for future development.

Conclusion

The null hypothesis that no manager is more satisfied with his learning experience than any other manager - after his return to work - must be rejected. There were significant differences between managers who attended different programmes; MMs were the most satisfied; MRs the least. And even within type of programme there were significant differences between individual programmes. These two findings cause the null hypothesis to be rejected. They are in stark contrast to the perceptions held at the end-of-programme assessment.

There were also significant differences in the satisfaction gained from different academic subjects and from the different lecturers who taught them. These two factors do not distinguish between the managers although they do throw light on possible causes of difference between them. Perceptions of academic subjects have changed over time, whilst those regarding the lecturers have become more deeply entrenched.

Test 3. Managers' perceptions of the extent to which the aims of their programmes had been met when looking back at them after their return to work

Approach Adopted

In the questionnaire sent after their return to work, managers were presented with a list of the aims of their programme as stated in the in-company brochure on Management Development (4). They were asked to give each aim a score out of ten basing their assessment on their experiences as programme participants.

Results and Discussion

The overall achievement of aims shows each programme to have received positive assessments from the relevant participants. The mode for the SMP and MMP was 7; for the MRP it was 6. The means for each programme were 5.3 for the SMP; 5.8 for the MRP; and 6.6 for the MMP. Together these averages suggest that the MMP was the most successful of the programmes. The full range of possible scores were used by MMs; only the very top score was not used by SMs and MRs. These results are shown in figure 5.46.

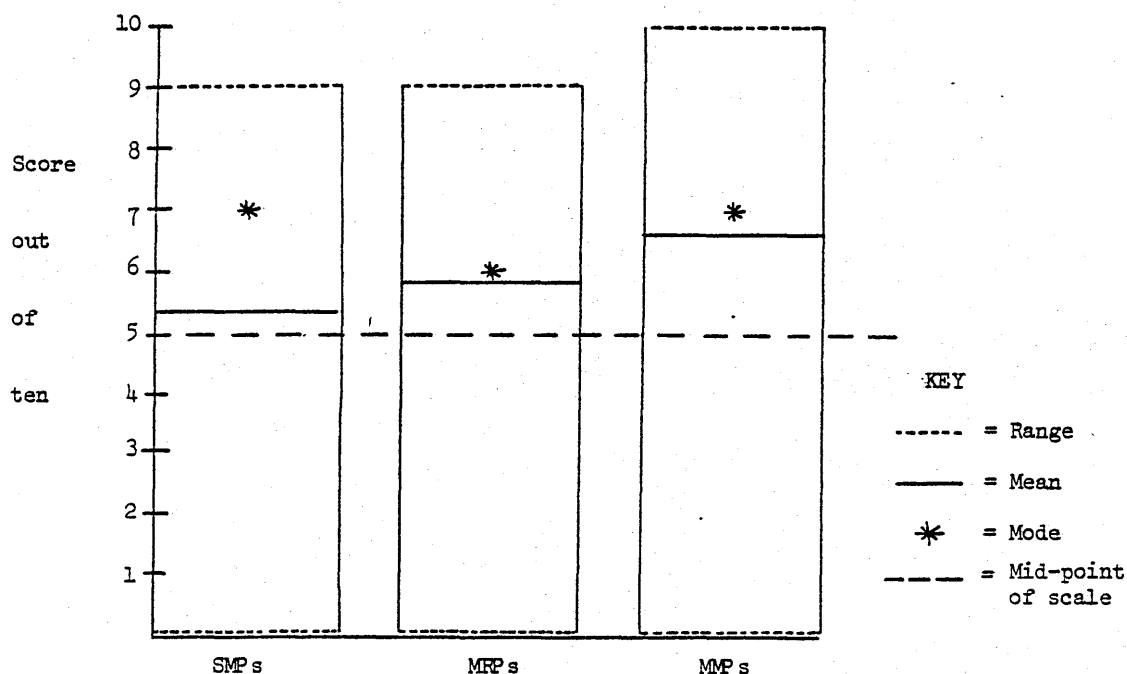


Figure 5.46 : Overall Achievement of Aims

When the combined aims were broken down into individual ones, some interesting differences emerged, particularly on the SMP.

The SMP had five aims compared with only three for the MRP and four for the MMP. The wording of the aims grew in complexity as the programmes became more "high powered." This raised problems. Thus the very sophistication of the SMP aims made them more difficult for lecturers to use when setting objectives and for participants to use when making their assessments. The more rudimentary character of the MRP aims and, even more so, of those of the MMP made both objective-setting and assessment-making more straight forward.

In the event, the mean scores for individual aims fell below the half-way level of acceptability on two of the five SMP aims. These were the aims relating to project management for owner-clients and the introduction and use of technology

in developing countries. The remaining aims, for this and the other programmes were all concerned with mainstream Management School subjects. They were all met satisfactorily as is shown in Figure 5.47.

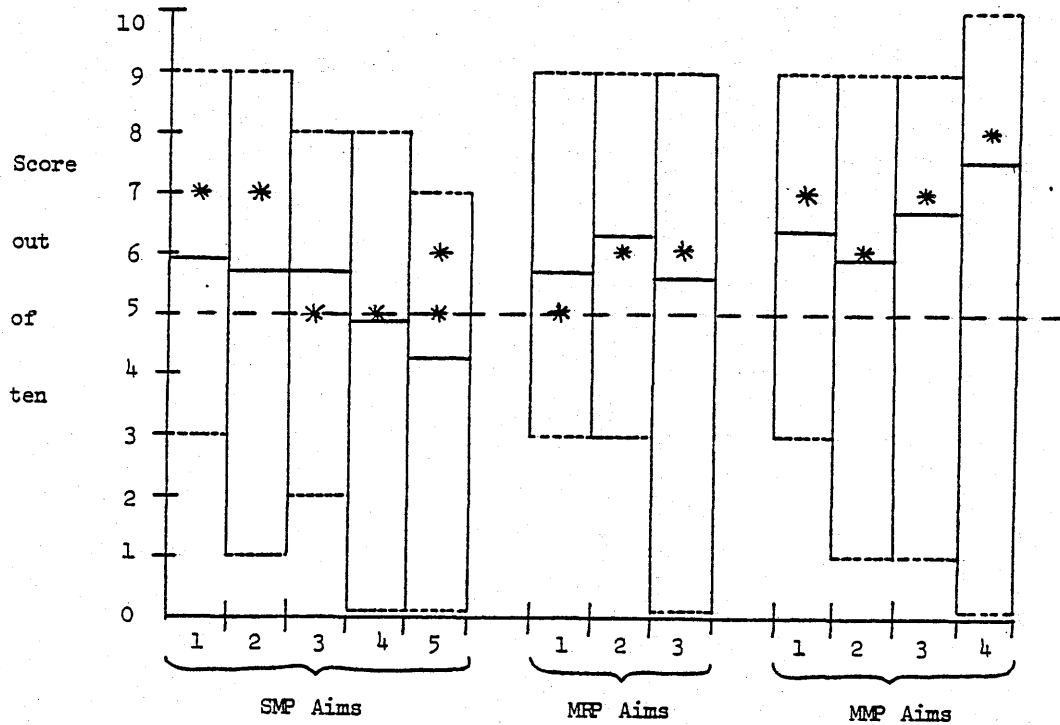


Figure 5.47 : The Extent to Which Managers Felt That Programme Aims Were Met

Each aim was taken in turn and the scores awarded were categorised by the "type" of manager concerned. The only significant difference to emerge between any group on any aim was between professional background and the third MM aim: "to help course members acquire an understanding of financial concepts." MMs with an engineering background gave the finance sessions a higher score than did managers with a non-engineering background. This may have been because non-engineering managers were either accountants and therefore already understood financial concepts or they were non-accountants who may not have been as numerate as the engineers - both by inclination and by training.

No other significant differences emerged.

Type of Programme aims \ manager	Age	Length of Service	Prof back - ground	C & W type	OCL type
MMP Aim 1	-	-	-	-	-
MMP Aim 2	-	-	-	-	-
MMP Aim 3	-	-	*	-	-
MMP Aim 4	-	-	-	-	-
MRP Aim 1	-	-	-	-	-
MRP Aim 2	-	-	-	-	-
MRP Aim 3	-	-	-	-	-
SMP Aim 1	-	-	-	-	-
SMP Aim 2	-	-	-	-	-
SMP Aim 3	-	-	-	-	-
SMP Aim 4	-	-	-	-	-
SMP Aim 5	-	-	-	-	-
Total	0	0	1	0	0

Table 5.3 : Summary of Significant Differences Between Perceptions
of the Meeting of Programme Aims and Type of Manager

Conclusion

The null hypothesis was not rejected by this test. Managers were equally satisfied with the extent to which the aims of their programme aims were met.

Test 4. Managers' perceptions after their return to work of
the value of the people they met on their programme

Approach Adopted

In the questionnaire, managers were asked to rate the people they had met at Cranfield on a five-point scale for "value". Many of them also made additional qualitative comments.

Constraints

1. The people met were classified as:

1. Cable and Wireless programme participants
2. Cable and Wireless visitors
3. Cranfield staff
4. Managers on other programmes

Managers on other programmes were felt to be so remote from all but a few MMs that they have been omitted from the analysis.

2. "Value" was categorised as before into:

1. Practical value
2. Theoretical interest
3. Personal value

The same 5-point scale was used:

- 5 = of great value
- 4 = of some value
- 3 = of occasional value
- 2 = of little value
- 1 = of absolutely no value

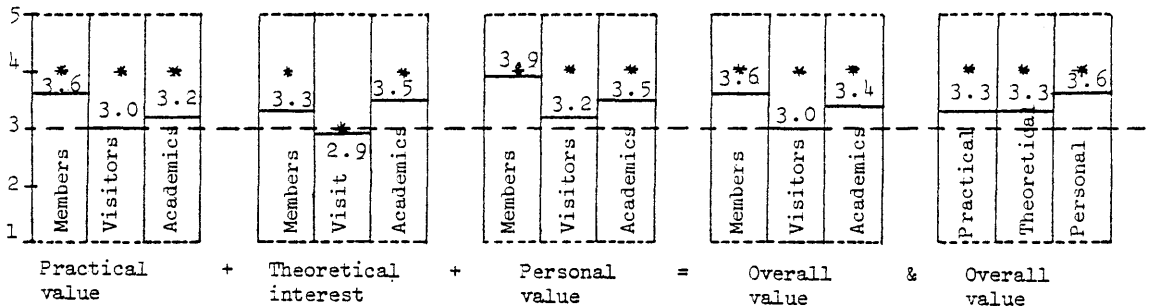
Results and Discussion

Most managers enjoyed meeting one another and developing friendships which outlasted their stay at Cranfield. SMS particularly welcomed the opportunity to spend such a long period of time together in an atmosphere so conducive to discussion and the exchange of ideas and information. Senior jobs often bring with them isolation and a certain loneliness especially if the manager is not working in Head Office. Other managers found it very refreshing to get away from their jobs and be in a position to make an objective review

of their various problems and plans.

The MMP, having a good mix of staff on each programme, allowed managers to destroy Company myths about one another and break down many of the barriers that inevitably develop through such severe differentiation as that in C & W. Even so, one or two managers expressed anxiety about the presence of National staff on the MMP. They feared that discussion on future Company policy was either inhibited by their presence or might be jeopardized if too widely known. A contrary view was held by a far greater number of managers, some of whom would have preferred a less parochial approach, with managers from other companies participating, as both course members and as guest speakers, taking the future of C & W as an important topic for open discussion.

When they came to rating the people they had met, every possible score in each of the categories was used at least once but, despite this range, the modes were universally high at 4 for every aspect but the theoretical interest of the C & W visitors, which had a mode of 3. When the mean scores for each category were compared the results were, not surprisingly, that personal value was higher than practical value or theoretical interest and that programme participants were responsible for the greatest share of both personal and practical value. Cranfield staff were perceived as the group of greatest theoretical interest and the C & W visitors took third place on all three counts. These variations are shown in Figure 5.48.



Key: = Range ——— = Mean * = Mode - - - = Midpoint of scale

Figure 5.48 : Managers' perceived value of the people they met at Cranfield

The responses made by the managers were then categorised in a number of ways to see whether any particular group of participants was significantly different from any other in its perceptions of the value of the people encountered on the programme.

Six different categorisations were subjected to analysis of variance and tested for significance with the F test, the findings are summarised in Table 5.4.

Type of Manager People met	Prog Type	Age	Length of service	Prof back- ground	C & W Type	CCL Type
<u>Cable and Wireless Programme participants:</u>						
Practical value	-	-	-	-	-	-
Theoretical interest	-	-	-	-	-	-
Personal value	-	-	-	-	-	-
<u>Cable and Wireless Visitors:</u>						
Practical value	-	-	-	-	-	-
Theoretical interest	-	-	-	-	-	-
Personal value	-	-	-	-	-	-
<u>Cranfield staff:</u>						
Practical value	-	-	-	-	-	-
Theoretical interest	*	-	-	-	-	-
Personal value	****	-	-	-	-	-
Total number of Significant Differences	2	0	0	0	0	0

Table 5.4 : Summary of Significant Differences Between Manager's
Perceptions of the People They Met

Only two significant differences emerged. These were concerned with perceptions of the value of the Cranfield staff by different types of programme. The fundamental difference in views was between managers on the SMPs and managers on the MMPs. The former regarded the Cranfield staff as being of less value than did the latter. The managers on MRPs shared the opinions of the SMS on practical value and theoretical interest but the MM's opinions on personal value. These differences are shown in Figure 5.49.

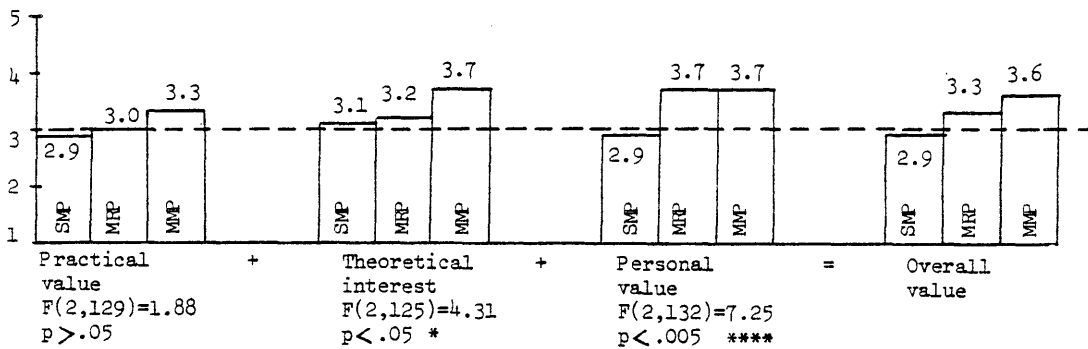


Figure 5.49 : Differing perceptions of the people they met at Cranfield by type of programme attended

This conflict is not apparent in any other subdivision of the managers nor is any other difference of opinion.

Conclusion

All managers share similar views on the value of their fellow participants. All managers share similar views on the value of visitors from the Company. The differences, discussed above, that managers hold on the value of the Cranfield staff is insufficient to reject the null hypothesis.

Test 5. Recommendations made to other Cable and Wireless Managers to attend a Cranfield programme

Approach Adopted

In the follow-up questionnaire, managers were asked whether they had recommended attendance on a Cranfield programme to any of their superiors, peers or subordinates (5).

Such recommendations, made by participant managers on their return to work, were seen as an indirect measure of their satisfaction with the programme they had attended.

Constraints

1. The question did not specify exactly what constituted a "recommendation". It was intended to capture the spirit rather than the form of such comments, so informal, verbal recommendations were regarded as just as valid as formal written ones. A few managers did not respond to the question noting that they had "not had the opportunity." They were clearly interpreting the question in terms of official recommendations made about specific individuals. Such limitations were not intended and it is not known how many responses were lost because of it.

2. Some managers had not recommended attendance on the programme to others. Whether they felt neutral and made no comment to others or whether they felt negative and were actively discouraging attendance on the programme is not known, though two of the respondent managers did indicate the latter sentiment.

Results and Discussion

Overall, 79% of respondents (59% of all participant managers) reported having made a recommendation to someone. There was a significant difference between those to whom

By Whom \ To Whom	Superiors	Peers	Subordinates	Between level differences
All Managers	27%	45%	52%	$\chi^2(2)=16.89$ $p < .005****$
MMs	30%	50%	54%	$\chi^2(4) = 2.98$ $p > .05$
MRs	28%	39%	33%	
SMS	14%	35%	55%	
Between type differences	$\chi^2(2)=3.09$ $p > .05$	$\chi^2(2)=2.45$ $p > .05$	$\chi^2(2)=2.86$ $p > .05$	
Age 25 - 39	37%	56%	58%	$\chi^2(4) = 3.86$ $p > .05$
Age 40 - 49	17%	39%	52%	
Age 50 +	38%	48%	38%	
Between type differences	$\chi^2(2)=7.3$ $p < .05 *$	$\chi^2(2)=3.24$ $p > .05$	$\chi^2(2)=2.30$ $p > .05$	
Up to 15 years service	40%	51%	49%	$\chi^2(4) = 3.45$ $p > .05$
16 - 25 years service	20%	48%	55%	
26 years or more	26%	34%	51%	
Between type differences	$\chi^2(2)=4.68$ $p > .05$	$\chi^2(2)=2.49$ $p > .05$	$\chi^2(2)=0.35$ $p > .05$	
Engineers	25%	45%	53%	$\chi^2(2) = 0.46$ $p > .05$
Non-engineers	27%	46%	46%	
Between type differences	$\chi^2(2)=0.07$ $p > .05$	$\chi^2(2)=0.00$ $p > .05$	$\chi^2(2)=0.19$ $p > .05$	
Head Office	33%	40%	40%	$\chi^2(6) = 4.53$ $p > .05$
National	23%	46%	39%	
F1	25%	44%	62%	
F1 turned HO	25%	53%	60%	
Between type differences	$\chi^2(3)=2.47$ $p > .05$	$\chi^2(3)=0.41$ $p > .05$	$\chi^2(3)=7.17$ $p > .05$	
Traditionalist	27%	47%	48%	$\chi^2(6)=2.32$ $p > .05$
Trouble-shooter	23%	31%	62%	
Catalyst	29%	59%	53%	
Visionary	23%	38%	57%	
Between type differences	$\chi^2(3)=0.30$ $p > .05$	$\chi^2(3)=2.88$ $p > .05$	$\chi^2(3)=1.17$ $p > .05$	

Table 5.5 : To Whom and By Whom Recommendations Were Made (n=136)

they made recommendations but not between those by whom they were made.

About half of all managers made a recommendation to their peers and subordinates compared with only about one-quarter who did so to a superior. This difference was significant ****. The researcher then subdivided the recommendations by the type of manager making them and by the level of manager to whom they were made. There was only one significant difference within the type and none at all between the levels. The significant difference related to the age of those managers who made recommendations to their superiors. They tended to be in their thirties or in their fifties; managers in their forties made fewer recommendations to their superiors than was expected. The full breakdown of distributions is shown in Table 5.5.

Conclusion

Overall, the majority of managers felt that their colleagues in the Company would benefit from participating in a Cranfield programme. Personal endorsement is rarely given lightly, which is why it is so highly prized. Many of the managers did not make recommendations to their colleagues at every level but they were equally likely to do so. The null hypothesis that all managers were equally satisfied with their learning experience, insofar as commending others to it was a measure of that satisfaction, cannot be rejected on this evidence.

Test 6. Managers' perceptions of the benefits they had accrued from the programme.

Approach Adopted

Managers were asked how, in retrospect, they felt they had benefitted from attending the programme in respect of their current job, their future career and in any other way.

These were open-ended questions with a total of nine inches of space for the responses (6).

Constraints

These lay largely in the problems associated with sifting and sorting the comments made. The selection of illustrative comments can reflect researcher bias. This researcher made a persistent and conscious effort to present a balanced picture representing the entire spectrum of views as expressed by the managers themselves.

Results and Discussion

1. Perceived Benefits of the Programme for Managers Current Jobs

This varied from programme to programme; of the comments made by MMs, three-quarters were positive; of those made by SMS, two-thirds were positive; and of those made by MRs one-half were positive.

Despite the criticism of many of the C & W speakers, a better understanding of the Company was reported at all levels. One MM wrote: *"I learned more about C & W in five weeks than I had in the previous twenty years. All this has enabled me to see my present job from a different perspective and has thus enriched it."* Another found the MMP *"generally useful, especially new knowledge of Company policy, HO structure and who I should contact in the future."* The exposure to people in HO and the contacts made with managers from other parts of the business was widely appreciated. SMS too, found benefit from *"a deeper understanding of Company working and the ability to explain policy to members of staff. Hearing the corporate plan for the first time was educational."* And overdue, one might add. *"I learnt a lot about Company structure and operations"*

wrote another SM. Others reported gaining a *"much better understanding of the business outside my present job - the factors affecting a business, particularly C & W"* and a *"better understanding of the Company's strengths and weaknesses, hence I am better able to direct effort"*. Such benefits were not always so positively phrased. For example, *"I now understand Company policy a bit better and the programme has helped in alleviating the frustration that a conscientious staff has in a conservative firm like C & W"* and *"... a breath of fresh air and reassurance that I'm not totally insane in thinking that there are better ways to organise a company than this."*

A second area of widespread benefit was the IPOS component of the programmes. *"This"* wrote one MM *"was the part of the course best presented, of great personal interest and of great relevance to my current job."* The features most frequently reported as being of benefit were:

1. increased self-confidence;
2. having a better understanding of oneself and others;
3. being able to work closer with subordinates, sharing information with them and delegating more responsibility to them.

The word which kept cropping up was "tolerant", the theme associated with it was a greater willingness to discuss issues and to listen to (and maybe even accept!) the other person's point of view. Some of the many comments relating to IPOS are quoted to illustrate the impact made on manager's everyday lives.....

"The interpersonal skills have been of great assistance particularly with regard to dealing with and understanding union related problems. I now have more personal confidence in dealing with people

It has helped me in my day-to-day work in that I discuss projects with my subordinates and get their points of view. I try to work with others as a team. I delegate a great deal and this inspires confidence in others

I feel more confident and capable when involved in the personal problems of my 130 staff

A greater confidence in myself

Greater understanding of personnel management and commercial business management. Helped me realise that I do not delegate enough

Improved my self-confidence, identified my strengths and weaknesses and enabled me to manage my staff better; I now identify priorities more clearly; my communication channel has improved

Yes, I delegate more and plan in a more effective and confident manner (thanks mainly to Myers-Briggs) i.e. understanding myself better

I have consulted people rather more than rushing off on my own. I realise that I am just as fallible as the next man

Contributed to a fuller understanding of myself, my superiors and my subordinates. This is very important in my present job which requires persuasion to achieve results"

Financial awareness had clearly been heightened and problem-solving improved:

"The present benefit is understanding finance, accounting, budgeting etc

Greater need for control procedures related to activities and expenditure

A better awareness of financial implications when making planning forecasts

Company accounts helpful because involved in two companies in which C & W had a minority holding

I now understand personnel policies much better and budgetary limitations

I have greater awareness of the financial constraints that operate on the company

Greater tendency to "think through" problems at an earlier stage

Improved my understanding of non-engineering problems

I have a more balanced approach to problem areas

Improved decision-making

Enabled me to take a much broader view of problems - both operational and personal"

Because of the "general management" nature of the programmes, a number of managers expressed the impact of the programme on their current jobs in general terms:

"The course was a good sounding board for practices that I need but had not consciously thought about

Very much, as I now have a better 'business' understanding'

I have become more appreciative of the functions of other disciplines within the Company

I now feel more confident, having a better understanding and broader concept of management

It prepared me for higher managerial responsibilities which I am also finding useful and helpful in my new job"

and so on.

Some managers are enigmatic in their replies, "considerable benefit very helpful"; others recount a neat bundle of benefits:

"My presentation skills have improved; I have acquired a better understanding of accounting and financial management. I have developed a more analytical approach to problem-solving and my general handling of employees has improved. Improved planning and organising better management of time. Greater awareness of factors contributing to productivity.....

My interpersonal skills have improved and I evaluate a situation more objectively. I budget my time better and delegate more which gives me more time to supervise and check things. I am more cost conscious

Benefits relate to the following aspects of my job:

- regular meetings with government officials*
- preparation of reports and planning projects*
- delegating work and handling staff problems"*

All these managers would appear to be experiencing some success in transferring their Cranfield training.

All bear witness to the practical relevance of many aspects of the programmes. Two SMS, quoted below, draw attention to the importance of process as well as content in developing tangible on-the-job benefits for transfer:

"I believe that, as a result of the course, I am better equipped to consider policy matters concerning the Company. I also consider that I have better insight into problems facing other people in the Company."

"The course allowed me time away from a very busy schedule. This in itself was beneficial and, by meeting and discussing C & W policy, sharing ideas and just 'talking' allows one to reform perspectives. Quite apart from course content, I felt the overall result was to allow me to see more clearly what the Company should be doing."

Not everyone had positive comments to make. One-quarter of MMs, one-third of SMS and one-half of MRs were unable to report any benefits resulting from the programme in their current job. Many were non-committal *"very little not a lot little actual value hardly at all no effect"*, one thought it had been *"detrimental"*, another was *"very disappointed."*

Some managers thought they had little to learn *".... much of what was taught was for managers and not for an engineer the course did not tell me anything I did not already know, or could not have concluded for myself"*: But, half of the negative comments were qualified with the same rider - lack of opportunity and this was especially true of MRs:

"Not at all, since attending the course the Company has assigned me to three temporary posts, none of which included any "management" content whatsoever. The course would have been useful had I been employed in a job where the skills could have been utilised"

No, because there is a 'hump' of second grade people and hence many of us are doing mundane jobs, awaiting their retirement

I was promoted to one grade higher - not related to the training - and I do not have a single member of staff under me

I do not have a specific job at present

My present temporary position does not allow me to practice the main principles taught as it has little management content

Not very much because my present job is mainly dealing with technical problems

I benefitted at the time because it was a "refresher" course. Unfortunately I am not in a management situation and the "polishing up" of talents has now begun to fade somewhat

To be frank, not much assists my present job

Less than I would have hoped due to the rather unusual nature of this job. I do not think that it stretches my management ability, although it does stretch my technical skills and my very limited language skills

Very little because seconded to another company with a restricted working environment

Most difficult to assess as I have had no opportunity to measure up a management situation, having been on leave for five months following the course, "unemployed" for six weeks and now employed in a job where no management skills are needed. In the present economic climate both within and without C & W and in view of my retirement in a few months, I feel that the course will not benefit me to any great degree. However, had I been ten years younger and less cynical, such a course would have been of considerable benefit"

Managerial opportunities on the return to work, are essential to the transfer of management training. The lack of such opportunities for 15% of respondents, is an indictment of the Company. It suggests poor planning and a waste of the resources invested into training. The time, energy and efforts of everyone are discarded; the participants are disillusioned; and commitment, central to the success of the venture is, jeopardized.

2. Perceived Benefits of the Programme for Managers' Future Careers

There were mixed feelings about any direct connection between programme participation and future career advancement. Perceptions of its importance ranged from "milestone" through "stepping stone" to "a step in the right direction" to being of "no benefit." The indirect link was more firmly held:

"The course provided a firmer basis on which to build by experience and practice. This should permit a broadening of the opportunities of which I am able to take advantage"

Overall, I found the programme very stimulating and would like to think my superiors noticed this upon my return to work....."

One MM summed up the experience as being:

"Generally beneficial in future career but not directly beneficial to career progress."

The programmes had a startling influence on the careers of a small number of managers:

"It gave me a lot to think about and probably helped me eventually to make up my mind to get out of C & W after twenty-three years in order that I might use some of my skills in a more rewarding way"

Your course crystallised my decision to get the H out of C & W!"

It has given me a taste for the academic life"

Their numbers were swelled by those managers, due to retire shortly, who thought that the programme might help them in their next career.

Some managers were fatalistic "my future career seems obscure", some were cynical "the greatest benefit probably

is that I am on record as having attended", others were apprehensive "not sure, as I am still doubtful that C & W can use staff who benefit from such programmes when they return to the organisation."

3. Perceived Benefits of the Programme in Other Ways

One of the spin-offs of first-hand experience at Cranfield was the insight into management development and some criteria for how the needs of subordinates might be met. Another was the "club" membership:

"In C & W the Cranfield course is recognised. Being sent on it is a mark of achievement

Wearing the Cranfield tie commands a measure of success in company circles

Talking to people outside C & W, it seems that Cranfield is held in high regard and there is a certain amount of prestige in having been there"

The MRP hold regular monthly meetings "to discuss problems of mutual interest."

But far and away the most important and most prevalent additional benefit was the general broadening of horizons and development of social skills:

"Provides a vehicle for self-appraisal; broadens outlook on life in general

I feel able to "hold my own" in conversation with HO staff knowing more about the company and its future plans

I think I am able to be more tolerant of others, perhaps less dogmatic and certainly more devious - in a nice sort of way

I have learned to respect people's views and requests, even though they may be unreasonable. I am now able to be firm and still be polite when I have to discipline people. Tolerance has become my watchword

Possibly in making me more outgoing and a bit more forceful in putting views across

I evaluate a situation before making a quick decision. I can put forward my views and not seem argumentative. It has, to say the least, broadened my horizons and given me greater confidence

I have always been aware of my limitations insofar as contact with other people is concerned. I am convinced that the extensive sessions on interpersonal skills have helped me understand myself better and have helped me to overcome those limitations to a considerable extent. For me, this was the most important outcome of the Cranfield programme"

Conclusion

Some managers have enjoyed great benefits in many aspects of their work, others only in particular areas. But there are a substantial number of managers who have felt little or no benefit at all. Some of these, about half, are prevented from much gain by the lack of managerial discretion in their jobs.

There appears to be some difference depending on the type of programme attended. The MMP appears to have been the most beneficial with 75% of comments being positive, the SMP follows with 67% positive and the MRP trails in their wake with only 50%.

The comments range from glowing to abject. The lives of a few managers have been changed by attending the programme, those of many have been influenced and those of others remain untouched. The null hypothesis that "no manager was significantly more satisfied with his learning experience than any other manager" cannot be upheld by the findings of this test.

Conclusion to Chapter 5

The null hypothesis that "no manager was significantly more satisfied with his learning experience than any other

manager" was tested in six different ways. This approach was adopted to capture different perceptions of "satisfaction". These perceptions created a series of multi-dimensional pictures for comparison between managers and through time.

Four of the six tests supported the null hypothesis and two successfully rejected it. This result draws attention to the complexity of the concept of satisfaction. No significant differences were found between managers' perceptions of their satisfaction with the learning experience at the end of the programme; nor with the extent to which they later considered the aims to have been met; nor with the contacts they had made on the programme; nor in the likelihood that they would recommend it to others. On all these dimensions, managers were equally satisfied with one another.

However, after their return to work, they no longer placed equal value on what they had been taught. Nor could they agree on the benefits they felt they had or had not enjoyed. It was on these dimensions of "satisfaction" that the null hypothesis was rejected.

Notes to Chapter 5

1. See Q1 of the questionnaire The Transfer of Training, pp 3 - 4. This is shown in Appendix C.
2. See Q2 of the questionnaire The Transfer of Training, pp 5. This is shown in Appendix C.
3. The word "expected" is used in its statistical sense (i.e. X^2 expected values as against those actually observed).
4. For the SMP Aims, see The Transfer of Training questionnaire, p.10. This is shown in Appendix C.

The Aims of the other programmes were as follows:

- MPR
1. To keep abreast of current developments in a complex business environment.
 2. To provide a deeper understanding of human behaviour in organisations and develop abilities in applying that knowledge.
 3. To develop greater understanding of techniques for problem-solving and decision-making.

- MMP
1. To encourage the development of a "business sense".
 2. To improve understanding of marketing and selling concepts.
 3. To help course members acquire an understanding of financial concepts.
 4. To improve skills in handling people.

5. See Q4 of the questionnaire The Transfer of Training, p 11. This is shown in Appendix C.
6. See Q3 of the questionnaire The Transfer of Training, p 6. This is shown in Appendix C.

CHAPTER 6

MANAGERS' PERCEPTIONS OF THE INFLUENCE OF THE ORGANISATIONAL CLIMATE ON THEIR TRANSFER OF TRAINING

The focus of this chapter is Null Hypothesis 3 : that there is no significant difference between managers' perceptions of aspects of the organisational climate in helping or hindering them to transfer what they have learnt.

Essentially, this concerns the perceptions held by managers about the facilitative or inhibitive nature of the Company with regard to helping or hindering them to transfer what they learnt at Cranfield back to work. Organisational climate is a complex territory to map, so, to assist the managers and to introduce some elements of similarity for comparison, a checklist of possible items of importance was used. Based on the earlier findings of Vandepuut (1973) and tailored by C & W managers themselves, this checklist forms the basis of the data collected, analysed and discussed in this chapter. Managers were invited to add items to the list but the number that did so was negligible.

The chapter is divided into three parts :

Part I : looks at climate in its entirety. It describes and examines the contrasting aspects of climate that were perceived as helping or hindering the managers en masse.

Part II : looks at the influence of individual aspects of the organisational climate on the transfer process. Four separate aspects are identified :

1. the Company's external environment;

2. the Company's internal environment;
3. the manager's job;
4. other people with whom the manager works.

Each provides a context within which the null hypothesis can be tested. Managers' perceptions, after their return to work, are grouped according to six divisions of their "profiles".

These are by :

1. type of programme attended;
2. age at date of programme;
3. professional background;
4. C & W type;
5. dimensions of the MBTI;
6. CCL type.

In this way, the null hypothesis (H_03) can be put to the test.

Part III : interprets the findings of this study in the light of those of other researchers. Implications of the various results for one another are discussed in turn. Attention is focussed on four topics:

1. The Myers Briggs work preferences;
2. Herzberg's motivation - hygiene theory;

3. Hackman's job description survey;
4. Baumgartel & Jeanpierre's transfer study.

Approach Adopted

A checklist comprising 61 items falling into eight groupings was presented to managers at the end of their programme (t1) and again several months after they had returned to work (t2) (1). The checklists were identical and on each occasion managers were asked to mark every item as either a factor helping their transfer of training, as hindering their transfer or as neither helping nor hindering. The first measure (t1) described their anticipations, the second measure (t2) what actually happened.

When the 61 items were being analysed each was coded with a variable label for easier handling of the data. These same labels are used in the text for ease of cross-referencing. The 61 variables fall into eight groups. These groups are each coded with a letter:

E = environment

T = technology

C = company (organisational structure)

V = values

J = job characteristics

P = people's characteristics

R = relationships with others

Variables within each group are numbered from one, so the seven environmental variables are numbered E1 to E7; the three technological variables are numbered T1 to T3 and so on.

Constraints

Two constraints must be borne in mind.

1. The first constraint was that the checklist was not administered to all managers. Those on the earliest programmes (2) were not asked to complete it at t1 although they were sent it at t2. This is compounded by the fact that not all the managers completed and returned the checklist at either t1 or t2. Because of this 107 managers responded at t1 and 133 managers at t2; the number who responded on both occasions is 81. When the overall view is discussed it represents the total response for t1 and t2 respectively (i.e. t1 : n = 107 ; t2 : n = 133).

2. The second constraint was that a substantial number of F1 managers did not know what job they were going to after the programme. They may have had several months leave due to them before taking up their new posting which could be anywhere in the world or a temporary assignment in HO. In t1 these managers had to complete the checklist as best they could, given their general knowledge, understanding and feelings about the Company.

Part I: Overall Influence of the Organisational Climate on the Transfer of Training

The importance of the organisational climate to transfer was discussed in the opening chapter of this thesis. Its importance to the C & W managers returning from Cranfield is discussed here.

Perceptions of the Climate at the End of the Programme

At the end of the programme managers anticipated that

certain aspects of the organisational climate would help or hinder their transfer of training more than others.

They were discriminating in their use of the checklist. Over half of them rejected at least two-thirds of the items as neither helping nor hindering in their effect. The "top ten" helping factors were recognised as such by half of the managers. The "top ten" hindering factors were recognised as such by only one-third of the managers. In fact, there was only one hindering factor on which a full 50% of the managers agreed. These "top tens" are shown in Table 6.1 and Table 6.2.

Rank	Helping Factor	% of managers agreeing
1.	A1, My control over my working environment	67
2.	A3, My freedom to act on my own judgements	64
3.	J11, Opportunities to experiment	58
	R3, The attitude of my subordinates	58
5.	V11, Active encouragement for training	54
6.	J9, Opportunities for team work	53
	J10, Opportunities to initiate projects	53
8.	A2, My participation in decision-making	52
	P5, People's sharing of ideas and information	52
10.	E7, Local culture	49
	J12, Appropriateness of Cranfield to my job	49
	R1, The attitude of my superiors	49

Table 6.1 - Managers perceptions :
The anticipated "top ten" helping factors

Rank	Hindering factor	% of managers agreeing
1.	C8, Awareness of C & W goals and strategy	50
2.	C5, Official communication system	47
	V8, Problems only recognised as catastrophes	47
4.	V4, Don't rock the boat	43
5.	J1, My personal workload	42
6.	J8, Task predictability in this job	39
7.	V5, Paternalism	36
8.	V9, Priority for short-term results	35
9.	E4, Political influences - Local	33
10.	V12, Authoritarian culture	31

Table 6.2 - Managers' perceptions :
The anticipated "top ten" hindering factors

The helping factors were concerned with individual autonomy, the many opportunities which a manager's job in C & W was perceived as providing and the usefulness of the Cranfield programme. The hindering factors were largely concerned with the organisational structure and Company values.

The top seven helping factors, as individual items, had mean scores which showed them to be absolutely helpful as well as relatively helpful. None of the hindering factors, however, were regarded as absolute. When described on a continuous scale, 36 of the 61 items (59%) are perceived as helpful and the remaining 25 (41%) are perceived as a hinderance. This is a ratio of 3.2 for a facilitative climate. The distribution is shown in figure 6.1.

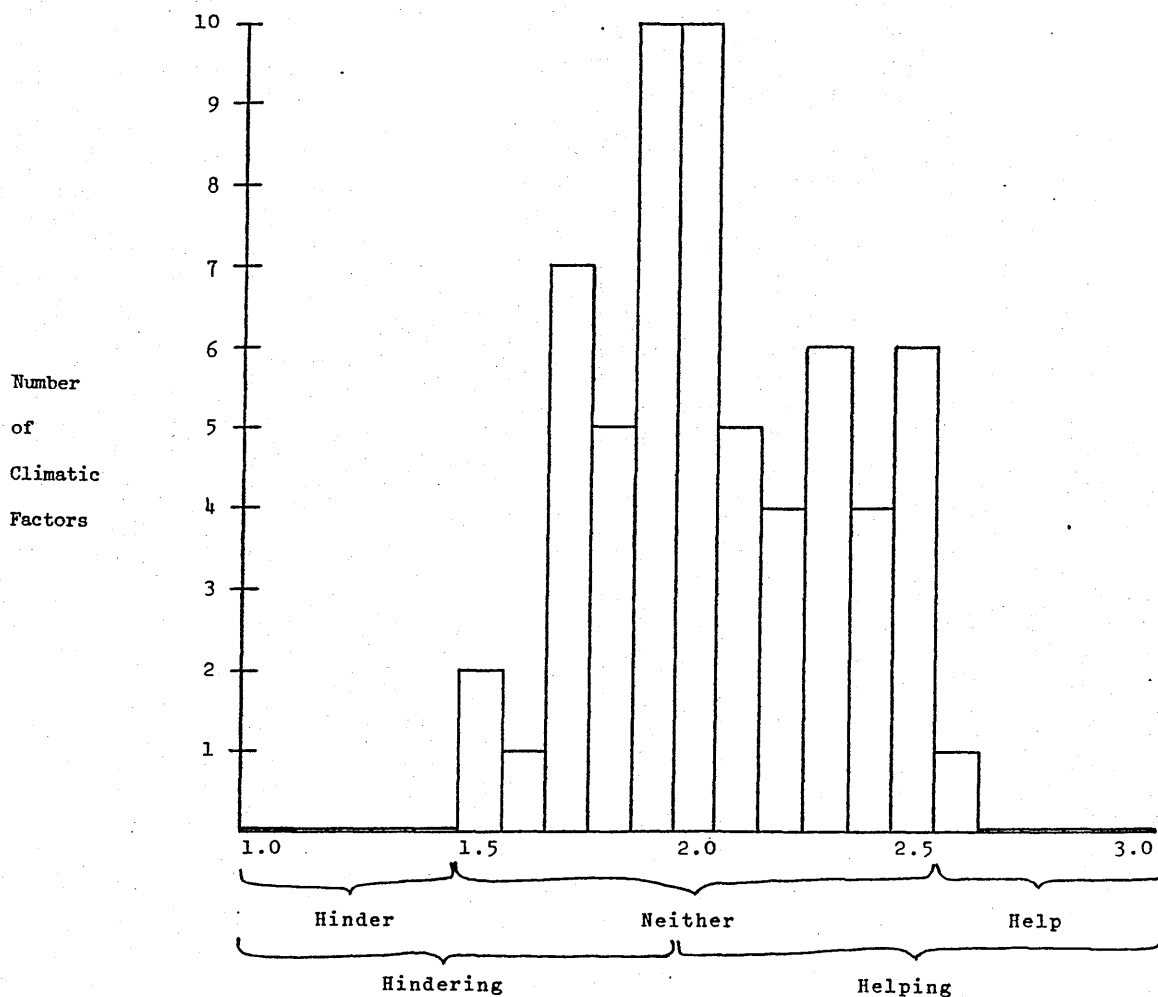


Figure 6.1 : Distribution of Mean Scores of Managers' Perceptions of

Anticipated Helping and Hindering Factors

Perceptions of the Climate After Returning to Work

After managers have returned to work and experienced those aspects of the organisational climate that actually did help or hinder the transfer process, new priorities emerged. The "top ten" helping factors confirmed five items from the "anticipated" list. They were to do with autonomy, subordinates and Cranfield. The five items dropped were to do with opportunities in the job and the support of superiors and other companies. They were replaced with "people" factors: contact with others in the same job and further afield in the Company; and the keenness and enthusiasm with which

others, particularly subordinates, approached their work. There was a shift away from what the situation offered them towards what the people within the situation offered.

Everyone of these top ten helping factors was supported by over half of the managers, the very top one drawing support from over three-quarters of them.

The hindering factors, as before, only won the agreement of half the managers on a single item. Support for the other nine fell steadily to one-quarter of all managers. Six of the "anticipated" items stayed in the top ten although there was some shifting of position. Again the emphasis was on Company values and organisational structure. The details are shown in Table 6.3 and Table 6.4.

On the continuous score, those helping factors for which there is absolute support drops from seven to five. Only one, "the attitude of my subordinates", appearing in both lists. Again, there are no hindering factors for which there is absolute support. There is, however, a noticeable shift in those items perceived as relatively helpful as opposed to a hindrance. The dividing line is now drawn between the 46th and 47th item showing 46 (75%) of the organisational climate factors as helping and 15 (25%) as hindering. Figure 6.2 shows the distribution of scores. The ratio is now 3:1 for a facilitative climate.

Rank	Helping factor	% of managers agreeing
1.	J3, Contact with others	77
2.	R5, My contacts in the company	71
3.	P2, People's motivation to work	66
4.	P1, People's keenness and enthusiasm	63
5.	R3, The attitude of my subordinates	62
6.	A2, My participation in decision-making	59
7.	A1, My control over my working environment	56
	J12, Appropriateness of Cranfield to my job	56
9.	P8, People's ability to come up with goods	54
10.	A3, My freedom to act on my own judgements	53

Table 6.3 : - Managers perceptions :
The actual "top ten" helping factors

Rank	Hindering factor	% of managers agreeing
1.	V8, Problems only recognised as catastrophes	53
2.	V7, Tendency to secrecy	44
	V9, Priority for short-term results	44
4.	V4, Don't rock the boat	38
5.	C1, The Hierarchy	35
6.	C5, Official communication system	33
7.	C6, Power and responsibility	32
8.	C4, Influence of the company on behaviour	27
	V2, Looking after No.1	27
10.	J1, My personal workload	26
	V5, Paternalism	26

Table 6.4 : - Managers perceptions:
The actual "top ten" hindering factors

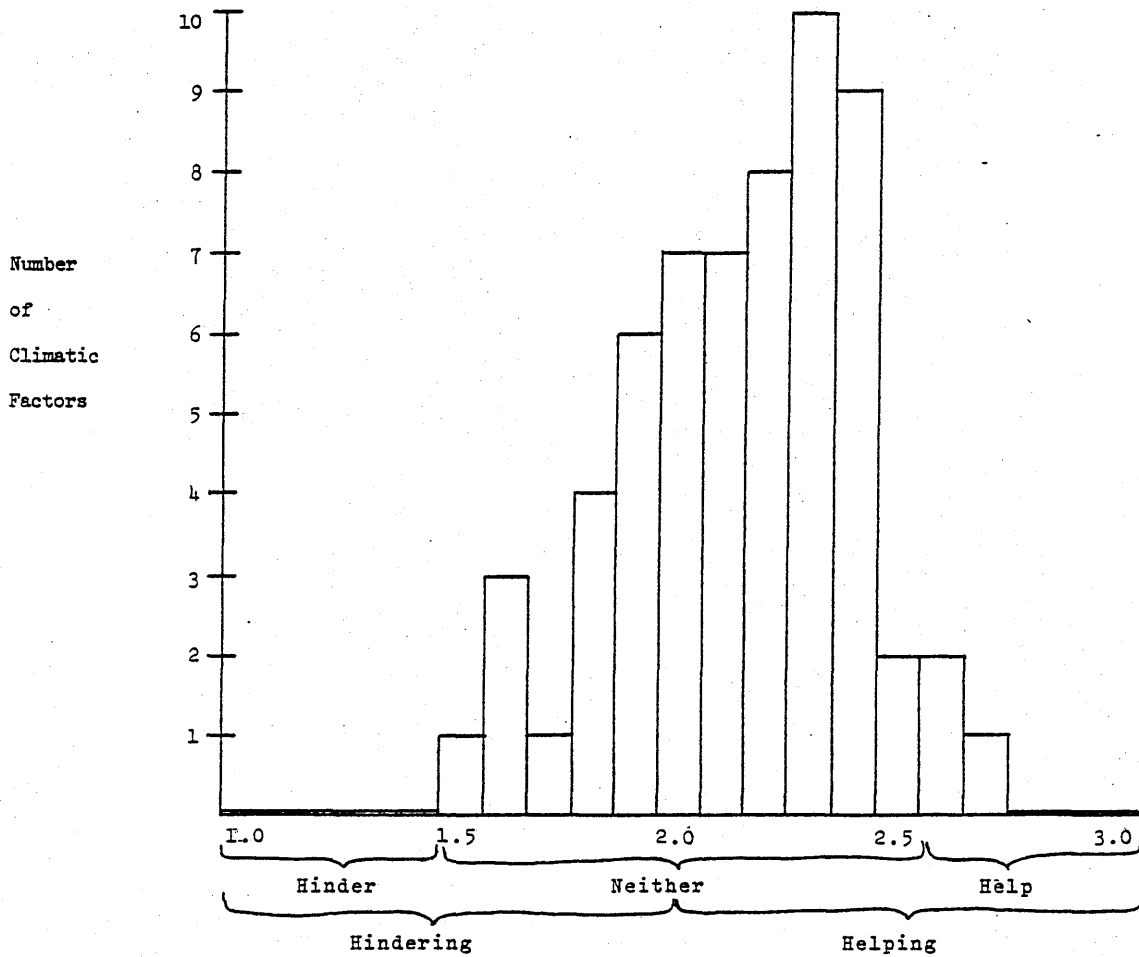


Figure 6.2 : Distribution of Mean Scores of Managers' Perceptions of Actual Helping and Hindering Factors

This compares with Hogarth's ratio of 4:1 for and Vandenput's ratio of 3:1 against a facilitative climate. A possible explanation for the difference in attitudes may lie in the method of data collection. Vandenput's data was verbal, originating in interviews; Hogarth's data and that of this study was written, in response to specific questions. It may be that, in conversation, managers are much more critical of their situation than they are willing to commit to paper.

The Concensus View of the Organisational Climate

The picture emerging from the C & W managers before they returned to the Company was a positive one. They believed their working environment to be supportive, encouraging and full of opportunities. In addition, two-thirds of all managers saw themselves as having sufficient control and freedom to initiate change. They regarded the "outside" world of politics, culture, consultants, unions, customers and changing technology as unimportant to their transfer activities. Indeed, over half of them rejected most aspects of their climate as affecting them either one way or the other. On the less positive side, many managers were concerned by the inadequacies of the official communication system which they felt had led to a general lack of awareness of Company goals and strategies. Because of this, they saw a general reluctance to acknowledge problems until potential disasters were on hand. Together, these shortcomings led to a desire amongst many employees to keep their heads low and not rock the boat.

After the participants had returned to work and had been engaged in trying to transfer their learning for anywhere between four months and two years four months, the overall picture witnessed little change. There was a general shift towards an even more positive view of the influence of the climate on transfer.

In order to measure the extent of this relationship over time, Spearman's rank order correlation coefficient (r_s) was calculated between the anticipated and the actual factors identified as having helping or hindering qualities. It proved that there is a highly significant similarity between the anticipated and actual helping factors ($r_s = .81$). The similarity between the anticipated

and actual hindering factors is also significant but, because of the general shift towards helping, it is less dramatic ($r_s = .65$). Thus, in general, C & W managers have a consistent attitude towards and understanding of their Company.

One interesting change in emphasis was observed. The interaction with other people, both in the immediate job and company-wide was later felt to be the most helpful aspect of the organisational climate. The "encouragement and support" anticipated earlier was couched in institutional rather than in personal terms.

Changing Perceptions of Individual Aspects of the Climate

As the positive correlation between the anticipated and actual perceptions of the overall response may have masked differences on individual aspects of the organisational climate, further investigations were conducted. The anticipations of 81 managers registered before the return to work (t1) were matched against their own record of actual events at a later date (t2). The significance of any change occurring between t1 and t2 was measured by the Sign Test.

Of the 61 aspects of the organisational climate, a positive movement (i.e. from hinder to neither, from hinder to help, or from neither to help) occurred in 40 of them, a negative movement (i.e. from help to neither, from help to hinder, or from neither to hinder) occurred in 18 and no movement at all occurred in three. On 23 aspects the movement was significant; four times in a negative direction, 19 times in a positive direction. The details are shown in figure 6.3.

The four aspects of the climate on which there was a significant net loss were:

1. the perceived benefits of technical training (T2);
2. the opportunities for experimentation (J11);
3. the tendency to secrecy (V7);
4. the priority given to short-term results (V9).

Those aspects on which there was a significant net gain were largely from the areas concerned with the characteristics of a manager's job and the people with whom he worked. The five biggest gains were:

1. my contacts in the Company (R5);
2. people's keenness and enthusiasm (P1);
3. people's motivation to work (P2);
4. contact with others (in my job) (J3);
5. awareness of C & W goals and strategy (C8).

Full details are shown in figure 6.3.

Despite these changes, the overall rank order of the various aspects did not change significantly over time. A number of items were presumably moving in parallel with one another.

Aspects of the Organisational Climate	Negative Differences	Positive Differences	Net Differences	Significance level (Sign Test)
<u>External Environment</u>				
E1, Union activity	-6	+17	+11	*
E2, Customer activity	-6	+20	+14	**
T2, Technical training	-30	+12	-18	***
<u>Internal Environment</u>				
C2, Links between departments	-14	+30	+16	**
C5, Official communication system	-9	+29	+20	****
C8, Awareness of Cable & Wireless goals and strategy	-11	+45	+34	****
C9, Freedom to meet during working hours	-6	+29	+23	****
V7, Tendency to secrecy	-29	+12	-17	**
V9, Priority for short-term results	-21	+9	-12	*
V10, Long-term planning is encouraged	-14	+36	+22	****
<u>Manager's Job</u>				
J3, Contact with others	-6	+40	+34	****
J5, The trained people at my disposal	-14	+34	+20	***
J6, The physical environment in which I work	-15	+29	+14	*
J7, The amount I get paid	-4	+18	+14	****
J8, Task predictability in this job	-13	+32	+19	***
J11, Opportunities to experiment	-30	+14	-16	**
<u>Other People</u>				
P1, People's keenness and enthusiasm	-9	+44	+35	****
P2, People's motivation to work	-6	+40	+34	****
P4, People's willingness for responsibility	-15	+36	+21	****
P7, People's vision of the future	-9	+24	+15	**
P8, People's ability to come up with goods	-11	+36	+25	****
R2, The attitude of my peers	-9	+25	+14	***
R5, My contacts in the company	-6	+45	+39	****

Figure 6.3 : Aspects of the Organisational Climate on which there were Significant Differences Between the Anticipated and Actual Response (n = 81).

Part II : The Influence of Particular Aspects of the Organisational Climate for the Transfer of Training

1. The Company's External Environment

This aspect of the climate comprises all those activities and influences which affect the Company but over which it has no control. All companies would include unions, customers and other companies; C & W also has to be especially aware of political and cultural influences - worldwide - and technological developments. The ten items that featured in the checklist are listed below in table 6.5. Against them are set any significant differences found between different types of manager. These are the results of tests of the null hypothesis.

The Company's External Environment	Type of Prog	Age	Prof Back-ground	MBTI types	C & W type	CCL type
E1 union activity	-	-	-	-	***	-
E2 customer activity	-	-	-	-	-	-
E3 political influences (UK)	-	-	-	-	-	-
E4 political influences (local)	-	-	-	-	-	-
E5 local culture	-	-	-	-	-	-
E6 external consultants	-	-	-	*	****	-
E7 contact with other companies	-	-	-	-	-	-
T1 complex technology	-	-	-	-	-	-
T2 technical training	-	-	-	-	-	-
T3 technological change	-	-	-	-	-	-
Totals	0	0	0	1	2	0

Table 6.5 : Summary of Differing Perceptions of Whether the External Environment Helps or Hinders the Transfer Process

The General View

Before they returned to work, over three-quarters of the managers saw all but two aspects of their environment as having no influence on their transfer

of training. The two which they thought might have an effect were contacts with other companies (E7), which half of the managers thought would be a help, and local political influences (E4) which one-third anticipated would be a hindrance.

In the event, contacts with other companies (E7) and customer activity (E2) were felt to be helpful by at least one-third of the managers (3).

Differing Perceptions Between Groups of Managers

Contact with other companies was reported as a facilitator to the transfer of training by the Belgian managers in Vandemput's study. They also felt that external consultants were helpful. This was one of the two "modern management techniques" that Baumgartel and Jeanpierre linked with innovative effort by Indian managers on their return to work. In C & W there was a significant relationship between the type of manager and the importance they attributed to external consultants. Managers with a preference for thinking were more likely to perceive external consultants as helpful than those with a preference for feeling ($X^2 (2) = 6.05, p < .05 *$). This is because thinkers base their decisions on logic whilst the feeling type base their's on personal values. The chances are that they don't like outsiders interfering in Company activities.

HO managers found consultants less important than would be expected whilst National managers found them helpful ($X^2 (2) = 10.88, p < .005 ****$).

On the hindering side, local political influences (E4) and local culture (E5) were perceived as inhibitive, although only by one-fifth of the managers. Political activity had been identified as an inhibitive factor in Vandenput's study. So too had union intervention. In C & W union activity (E1) was seen as inconsequential to the transfer process by all but the Nats ($X^2 (2) = 9.83, p < .01 ***$). They, however, were split in their views as to whether union activity was a help or a hindrance.

Despite their close involvement in the fast-changing and complex technology of telecommunications engineering, C & W managers did not find that the technical aspects of their work environment had much of an impact on the transfer of their management training. This was also in contrast to Vandenput's findings. His managers found the characteristics of modern technology - its complexity, high rates of change and inflexibility - to be inhibitive.

Over 40% of C & W managers thought that their high level of technical training might help them in their transfer of management training and almost 30% later reported it as having actually done so.

Summary

Compared with other aspects of the organisational climate, the environmental factors rated high only as "neither a help nor a hindrance." both before and after the return to work. This contrasts with the French managers in Hogarth's study who found fluctuations in economic conditions the most important hindering factor to the transfer of training.

C & W seems to be so large and self-contained that external activities do not have much impact on the everyday lives of individual managers. The few differences of opinion held by Nats were insufficient to reject the null hypothesis that there is no significant difference between managers' perceptions of aspects of the organisational climate in helping or hindering them to transfer what they learnt. As far as the transfer of training is concerned, all managers are equally unaffected by the possible influences of the external environment.

2. The Company's Internal Environment

This aspect of the climate is established, controlled, maintained and modified by the organisation itself. It comprises the rules and regulations; the channels of communication; the pecking order; the priorities; and the "atmosphere" within which everyone in the Company works. It is a function of everybody in C & W but a reflection of nobody. All are responsible for its creation and development yet no single individual is able to change it. In this study, the ten tangible aspects of the internal environment are grouped under the heading Company Structure (C1-C10) and the twelve intangible aspects are headed Company Values (V1-V12). They are listed in tables 6.6 and 6.7 together with the significant differences between groups of managers. Because of their complexity, the sub-divisions of structure and values are discussed separately.

Company Structure

The aspects of organisational structure and the differing impact these had on the managers when they attempted to transfer their training are listed in table 6.6.

Company Structure	Type of Prog	Age	Prof Back-ground	MBTI types	C & W type	CCL type
C1 the hierarchy	-	-	-	-	-	-
C2 links between departments	-	-	*	-	-	-
C3 the flexibility of the system	-	-	-	-	****	-
C4 influence of the organisation on behaviour	-	-	-	**	-	-
C5 official communication system	-	-	-	***	**	-
C6 relationship between power and responsibility	-	-	-	-	****	-
C7 influence of Head Office	-	*	**	-	-	-
C8 awareness of the Company's goals and strategies	-	-	-	**	**	-
C9 freedom to meet during working hours	-	-	-	*	-	-
C10 role of staff groups, eg Staff Development, management services	-	-	-	-	****	-
Totals	0	1	2	4	5	0

Table 6.6 : Summary of Differing Perceptions of Whether the Company Structure Helps or Hinders the Transfer Process

The General View

The organisational structure in general was not seen as very helpful. Indeed, the two factors perceived as the greatest hindrance to the transfer of training before managers returned to work were from this group. They were the lack of awareness of C & W goals and strategies (C8) and the official communication system (C5). Half of the managers expected these to hinder them. The role of staff groups (C10) was seen as facilitative by 40% of managers. One aspect of the Company's structure, the flexibility of the system (C3), elicited a mixed response. One-third of the managers thought it would definitely help them; one-quarter that it would definitely hinder them. Less than 40% thought it unimportant.

After their return to work, there was a general amelioration in the responses although they remained high in the overall list of hindering factors. There was some shift in the priorities given to the various factors.

The hierarchy (C1) now emerged as the most inhibitive, closely followed by the official communication system (C5) and the perceived mismatch between power and responsibility (C6). The lack of awareness of Company goals and strategy, so keenly felt to be a hindrance on the return to work, was transformed into a helping factor of equal conviction some months later. In the land of the blind, the one-eyed man is King!

Another important helping factor, the freedom to meet with others during working hours (C9), was raised from relative obscurity: 78% of managers had thought it unimportant, now 50% thought it a definite help. The "system" was seen, in retrospect, as less flexible but the links between departments were more facilitative and the influence of HO far less important than had been anticipated (4).

These findings are consistent with those of Vandeput (1973) and overlap with those of Baumgartel and Jeanpierre (1972). The latter are discussed in detail later in this chapter.

Differing Perceptions Between Groups of Managers

When the individual aspects of the organisational structure were looked at in terms of the various types of manager, some interesting and significant differences emerged. The most frequent source of these differences was whether the manager was classified as HO, Nat or Fl staff (C3, C5, C6, C8, C10.) Essentially, HO's found the Company's structure more of a hindrance than one would have expected whilst Nats found the structure in which they operated positively helpful.

Two of the five disputed items were particularly controversial for Fl's also responded in an unexpected way.

They were the relationship between power and responsibility (C6) and the awareness of Company goals and strategy (C8). On the first of these (C6), more Fl's than expected (30%) thought the relationship between power and responsibility helpful, a view with which few (only 7%) HO's could agree although many of them (59%) thought it unimportant. Nats, however, thought it very important, just under 40% of them finding it a hindrance and just over 40% of them finding it helpful ($X^2(4) = 18.55, p < .005$ ****).

On the second issue, the awareness of Company goals and strategies, the difference between the groups was also significant ($X^2(4) = 19.64, p < .005$ ****). After their return to work, 70% of Nats found their awareness helpful, but only 35% of HO's did; more of them than expected found their lack of awareness a hindrance (28% compared with 7% of Nats and 5% of Fls). Fls were fairly evenly split between finding it helpful (47%) and neither (48%).

The other three elements of the Company structure on which there was disagreement between C & W categories of managers were the perceived flexibility of the system (C3) ($X^2(4) = 18.37, p < .005$ ****); the role of staff groups (C10) ($X^2(3) = 13.59, p < .005$ ****); and the official communication system (C5) ($X^2(4) = 12.91, p < .025$ **). All three were found significantly more helpful by Nats than by other staff.

Other differences also emerged. Non-engineers found the links between departments (C2) a hindrance to their transfer of training. Engineers were unconcerned by this ($X^2(2) = 7.31, p < .05$ *). Non-engineers were also unusual in that 46% of them found the influence of HO (C7) helpful compared with only 18% of engineers ($X^2(2) = 8.04, p < .025$ **). The influence of HO also caused a difference of opinion amongst the different age groups. Whilst the older managers (aged 50+) were not affected either way,

the younger managers (aged 39 and below) found it helpful but those managers in their forties more frequently described HO's influence as a hindrance ($X^2(4) = 9.94$, $p < .05^*$).

Two aspects of the structure were perceived differently by extraverts and introverts. The first of these was the influence of the Company on behaviour (C4). The extraverts found this far more helpful than expected whilst the introverts found it far less helpful than expected and more of a hindrance ($X^2(2) = 8.56$, $p < .025^{**}$). It may be that extraverts can take from a situation what will help them to transfer their training whilst introverts are more sensitive to the inhibiting factors in a situation. The second difference between extraverts and introverts was the effect on their awareness of C & W goals and strategies (C8). Here again the extraverts thought that their level of awareness helped them more than did the introverts. Only 4% of the extraverts perceived their lack of awareness as having hindered them compared with 20% of the introverts ($X^2(2) = 7.47$, $p < .025^{**}$).

Two other Jungian dimensions differentiated between managers on their perceptions of company structure. The first of these was the thinking-feeling dimension; the second the judgemental - perceptive dimension.

A significant difference emerged between those managers preferring thinking or feeling and those who perceived the freedom to meet during working hours (C9) as helpful or not. Despite the general shift from regarding this factor as unimportant (78% of all managers before their return to work) to being helpful (50% of all managers later) there was a tiny minority (4%) who actually found it a hindrance. Thinking managers were more likely than feeling managers to find it helpful.

$(X^2)(1) = 4.98, p < .05^*$). As thinking managers are in the majority by 7:3 this may account for the overall shift of opinion. One would not expect thinking types to find this factor to be as important as they later experienced it to be. Feeling types, on the other hand, might not need to prove the need for and value of transfer to themselves by meeting with others. Indeed, 62% of the feeling types reported the opportunity to meet during working hours as being of no influence either way, compared with only 39% of thinking types.

Finally, the official communication system (C5) was perceived differently by perceptive and judgemental managers ($X^2(2) = 9.51, p < .01^{***}$). Well over half the perceptive types (57%) found the official communication system to be a hindrance to their transfer of training compared with only one-quarter (26%) of judgemental types. Half of the Js (51%) thought it unimportant whilst the remaining quarter (23%) reported that it actually helped them. Only 29% of Ps thought that it neither helped nor hindered whilst a mere 14% found it a help. This finding is consistent with Jungian theory that Js prefer to communicate in an orderly and systematic manner whilst Ps are frustrated and constrained by "official" channels.

Company Values

These were explained to managers as being "the essential but unspoken values of this organisation". They are itemised in table 6.7 together with various differences in the perceptions held of them by the managers.

Company Values	Type of Prog	Age	Prof Back-ground	MBTI types	C & W type	GCL type
V1 priority for the benefit of the Company as a whole	-	-	-	-	-	-
V2 "looking after No 1"	-	-	-	-	-	-
V3 innovation is encouraged	-	-	-	-	-	-
V4 "don't rock the boat"	-	-	-	-	-	-
V5 paternalism	-	-	-	*	-	-
V6 openness	-	-	-	-	***	-
V7 tendency to secrecy	-	-	-	-	-	-
V8 a problem is only recognised when the catastrophe is emerging	-	-	-	***	-	-
V9 priority is given to short-term results	-	-	-	-	-	-
V10 long-term planning is encouraged	**	-	-	*	-	-
V11 active encouragement is given to training and self-renewal	-	-	-	-	****	-
V12 authoritarian culture	-	-	-	-	-	-
Totals	1	0	0	3	2	0

Table 6.7 : Summary of Differing Perceptions of Whether Company Values Help or Hinder the Transfer Process

The General View

Of the twelve values listed, five appeared in the "top ten" anticipated hindering factors and six appeared in the "top ten" actual hindering factors. The most negative value on both occasions was that problems were not given attention until a "catastrophe" was on hand (V8). Just under half of the managers identified this as a major hindrance before returning to work and just over half confirmed this belief after their return. The phrasing was taken directly from Vandenput's work where it had been identified as an inhibitor to the transfer of training. The other major hindering factors were V7, V9 & V4 all supported by between one-third and one-half of all managers; and V2, V5 & V12 which were supported by at least one-quarter of all managers.

An interesting difference between the anticipated and actual impact of the Company values was the shift away from the "neither" vote (5). After their return to work, managers acknowledge the Company values as being far more important than they had previously thought. This was especially the case with the priority accorded for the benefit of the Company as a whole (V1) which they found much more helpful than expected. The tendency to secrecy (V7), however, was felt to be a much greater hindrance whilst the encouragement of innovation (V3) was felt to be either better or worse, depending on the individual concerned. This sort of split was also apparent with the issues of openness (V6) and of problem recognition (V8). Long-term planning (V10) was seen as more helpful whilst the priority given to short-term results (V9) and the tendency to "look after No. 1" (V2) were found to be a greater hindrance. The only values to be regarded as less important than anticipated were paternalism (V5) and the encouragement given to training (V11).

There was a general agreement on the hindering nature of many of the Company's values. When the mean score for each of the 61 items was calculated, the bottom seven were all Company values. Vandenput's managers found their companies' values even more inhibiting, whilst Baumgartel and Jeanpierre, House, Gibb and Huczynski all draw attention to the importance of these being facilitative for the effective transfer of training to take place.

Differing Perceptions Between Groups of Managers

There were some significant differences of opinion between the various types of manager. On the questions of openness (V6) and the encouragement given to training (V11)

there was a connection with the C & W category of manager; Nats found them both more helpful than other managers. (Openness: $X^2(3) = 11.98$, $p < .01***$); training encouraged: $X^2(3) = 13.71$, $p < .005****$).

Another difference was related to long-term planning (V10). Similar proportions of MMs (45%) and SMs (41%) felt long-term planning to be sufficiently encouraged to help them in their transfer of training. However, 20% of MMs thought it insufficient and a hindrance compared with only 3% of SMs ($X^2(2) = 7.43$, $p < .025**$). Extraverts were less likely than introverts to find the absence of long-term planning a hindrance ($X^2(2) = 6.04$, $p < .05*$). They were also less likely to be hindered by the lack of recognition being given to problems (V8) ($X^2(2) = 9.50$, $p < .01***$).

There was one other difference between managers regarding values. It was that those managers with a preference for feeling, as opposed to thinking, tended to find the paternalistic aspects of the Company (V5) helpful to them ($X^2(2) = 6.19$, $p < .05*$). Feeling types appreciate benevolence and enjoy "belonging" to the world-wide family of C & W.

Summary

The internal environment presents rather a gloomy context for the successful transfer of training. However, it must be remembered that between one-third and two-thirds of managers thought the individual aspects considered were unimportant to the transfer process. Of those managers who did find them significant, the balance of overall opinion fell to the hindering side only by a narrow margin (12 cases to 10).

With so many differences of opinion on Company structure and values, 18 of which are statistically significant, the null hypothesis being tested (H_03) must be rejected. From the evidence collected, the internal environment does influence the transfer of training, sometimes positively but more often in a negative way. For seven aspects of the internal environment the C & W category of manager is responsible for the difference; the Nats always come smiling through whilst HOs are invariably the worst off. This may reflect two distinctly different cultural poses but it may also highlight a very real difference in situation and morale. Seven other aspects of the internal environment relate to various Jungian dimensions, the most important of which is extraversion - introversion. The implications of these findings is discussed in Part III of this chapter.

3. The Manager's Job

This aspect of the organisational climate is closely linked with the practical opportunities that a manager has for transferring his new skills and knowledge back at work. The characteristics of a manager's job which were believed to influence transfer are listed in table 6.8. They comprise 16 items, each of which is a measure of the manager's capacity for innovation and action. Table 6.8 shows how various groups of managers differed in their perceptions of which were helping and which were hindering factors.

The Manager's Job	Type of Prog	Age	Prof. Back-ground	MBTI types	C & W type	CCL type
J1 my personal workload	**	-	-	-	-	-
J2 availability of criteria to evaluate performance	**	-	-	*	**	-
J3 contact with others	**	-	-	-	-	-
J4 the equipment at my disposal	-	-	-	**	-	*
J5 the trained people at my disposal	-	-	-	-	-	-
J6 the physical environment in which I work	-	**	-	****	-	*
J7 the amount I get paid	-	-	-	-	****	-
J8 the predictability of future tasks in this job	-	-	-	-	-	-
J9 opportunities for team work	-	-	-	-	****	-
J10 opportunities to initiate projects	-	-	-	*	-	-
J11 opportunities for me to experiment and broaden my experience	**	***	-	{**** *}	-	-
J12 appropriateness of the Cranfield training to my job	*	-	-	-	-	-
A1 the extent to which I have personal control over my working environment	-	-	**	-	-	-
A2 the extent to which I may participate in decision making	-	-	-	-	-	-
A3 the amount of freedom I have to act on my own judgements	-	****	-	-	-	-
A4 the amount of authority I have over the actions of others	-	-	-	-	-	-
Totals	5	3	1	6	3	2

Table 6.8 : Summary of Differing Perceptions of Whether the Manager's Job Helps or Hinders the Transfer Process

The General View

Aspects of their jobs which C & W managers felt would help them on their return to work were, without doubt, their perceived autonomy and the opportunities which over half of them felt existed.

All four aspects of a manager's autonomy were seen as helpful to his transfer of training. This was especially so before the return to work when two of them, personal control over my work (A1) and the freedom to act on my own judgement (A3) won the top two rankings of all anticipated helping factors. Participation in decision-making also featured amongst the top ten helping factors. All three were supported by over half of the managers.

Later, after their return to work, managers continued to describe these aspects of autonomy in their job as both important and helpful. All three remained in the top ten but their pre-eminence was lost. A1 and A3 fell in both absolute and relative terms but A2 and A4 made modest gains. Control and freedom seem to have been over-rated at the end of the programme whilst participation and authority had not been fully appreciated.

The other major facilitators, anticipated at the end of the programme, were opportunities. Opportunities for experimentation (J11), for the initiation of projects (J10) and for working in teams (J9). Half of the managers also thought that what they had learnt at Cranfield (J12), was sufficiently appropriate to their job to be a positive help. The aspects of their job which they thought would probably hinder their transfer of training were their personal workloads (J1) and the predictability of future tasks in their work (J8). Of least importance was the equipment at their disposal (J4) and the amount they got paid (J7). Their overall apprehensions concerning the characteristics of their jobs were fairly widely spread between what might help and what might hinder (6).

After their return to work there was a general shift towards seeing job characteristics as more helpful than anticipated. Only three items lost support as helping

factors. These were the opportunities inherent in the job (J9, J10, J11), opportunities to experiment taking the brunt of the disappointment. The other nine aspects of the "job" all gained support as facilitators. This was generally at the expense of the "neither" camp but two items anticipated as hindering factors did suffer heavy losses. These were the managers' personal workload (J1) which was not as oppressive as feared and task predictability (J8), the absence of which Berger (1973) believed to be an important indicator of positive transfer although Hogarth (1979) found the opposite! One-quarter of the C & W managers found the level of task predictability to be a help but this contrasted with one-fifth who found it a hindrance and two-fifths who had expected it to be a hindrance.

The most dramatic development was the recognition of contact with others (J3) as a helping factor. An overwhelming 77% of all managers declared this to be the case after their return to work, making this aspect of the climate the most important of all facilitators to the transfer of training. The drama lies in the fact that only 33% of managers had anticipated this as important.

Different Perceptions Between Groups of Managers

When looked at by type of manager, the job characteristics proved themselves controversial. Amongst the participants of different types of programme, for example, differences arose on five of the items. Three times the differences involved a help-hinder conflict (J1, J2, J3) and twice they were on the degree of helpfulness (J11, J12). Differences also emerged between different age groups (J6, J11), different C & W categories of manager (J2, J7, J9) and different Myers-Briggs dimensions (J2, J4, J6,

J10, J11) and CCL types (J4, J6). All in all, 18 significant differences were recorded on nine of the twelve 'J' items.

There were few differences on the autonomy issues between the various groups of managers. However, non-engineers did report their personal control over their working environment (A1) as being far more helpful than did managers with an engineering background. ($X^2(1) = 5.65, p < .025^{**}$). In addition, three-quarters of the younger managers felt the freedom they had to act on their own judgements (A3) helped their transfer of training. Only half of those in their forties and less than one-third of those over 50 made such positive statements ($X^2(4) = 14.64, p < .01^{***}$). Amongst the CCL types there were no significant differences but it was interesting to note that Catalysts, as one would expect, were the least enthusiastic about the real extent of their autonomy.

Half of the MMs (51%) found that their personal workload (J1) actually helped them in their transfer of training; only 12% of MRs enjoyed this experience, 35% of them reporting their workload as a hindrance which compared with only 22% of MMs. SMs were fairly evenly balanced. ($X^2(4) = 12.05, p < .025^{**}$).

A knowledge of the outcome of his efforts is critical to a manager's motivation and job satisfaction according to Hackman and Oldham (1974, 1975, 1980). The availability of criteria to evaluate their performance (J2) was felt to be very helpful by MMs but not by MRs and SMs, the latter finding the lack of criteria an actual hindrance ($X^2(4) = 10.54, p < .05^*$). Intuitive managers also found the lack of evaluative criteria to be a hindrance ($X^2(2) = 7.24, p < .05^*$). The majority of Nats and Fls however, found theirs to be helpful ($X^2(4) = 12.36, p < .025^{**}$).

Contact with others (J3), was found to be the most important helping factor of all. But, whether it was actually a help or not depended on the manager. SMS sometimes found it a hinderance ($X^2(2) = 6.08$, $p < .025$ **).

The physical environment in which managers work (J6), the equipment at their disposal (J4) and the amount they get paid (J7) are as close to Herzberg's hygiene factors as this checklist probed. Baumgartel and Jeanpierre found that high income managers were more likely to attempt transfer; less than 4% of any group of C & W managers thought their income would inhibit them from transferring their training but there was a difference amongst those who thought that it would help. 50% of the Nats thought that it would encourage them compared with only 18% of Fls and 22% of HOs. The Fl staff, widely regarded as the best paid group, thought their income unimportant to their transfer attempts; 80% said it had neither helped nor hindered them ($X^2(2) = 11.17$, $p < .005$ ****).

There was an interesting split on the impact of physical conditions within which managers work. Younger managers (up to age 39) found them a hindrance to the transfer of training, managers in their forties found them a help and the older, 50+, group were inclined to regard them as neither ($X^2(4) = 11.13$, $p < .05$ **). Non-traditionalists were also more likely to find their physical environment a hindrance ($X^2(1) = 4.88$, $p < .05$ *). This was particularly true of intuitive managers ($X^2(2) = 10.64$, $p < .005$ ****). Although this finding flies in the face of theory, which suggests that sensing managers should be influenced by their surroundings whilst intuitives should remain unconcerned, it is consistent with that of Collins (1965). He found that Ss adjusted to their climate far more readily than did Ns. Of those managers who found the equipment at their disposal (J4) responsible for

helping or hindering them, managers with a preference for perception were more likely to find it a hindrance whilst those preferring judgement were much more likely to find it a help ($X^2(2) = 7.83, p < .025^{**}$). Traditionalists were less likely, to feel hindered by their equipment than were non-traditionalists ($X^2(1) = 4.87, p < .05^*$).

The helping or hindering nature of the opportunities implicit in managers' jobs varied between managers (J9, J10, J11). The importance of such opportunities to the transfer of training, are emphasised by Bakke (1959), Baumgartel and Jeanpierre (1972) and Hogarth (1979). They are regarded as vital by Davies (1972), Berger (1973) and Huczynski (1977). Amongst the C & W managers a number of differences emerged:

1. The opportunities for teamwork (J9) were found more helpful to Nats (77%) and Fls (55%) than to HOs (35%). Few managers found teamwork, or the lack of opportunity for it, a hindrance but 60% of HOs regarded it as unimportant compared with 40% of Fls and only 15% of Nats ($X^2(2) = 11.42, p < .005^{****}$). Vandemput's managers saw the opportunities for teamwork as the major facilitator emerging from all job characteristics.

2. More intuitive managers than expected (60%) described their opportunities to initiate projects (J10) as helpful. This compared with only 44% of sensing managers who shared their view. Half of the sensing types (51%) though such opportunities unnecessary to the transfer of training; only 28% of intuitive types shared this view ($X^2(2) = 6.49, p < .05^*$).

3. The opportunities for experimentation and the

broadening of experience (J11) varied between age groups and managerial status although, of course, these tended to be linked. Young managers found the opportunities open to them more helpful than did older managers ($X^2(4) = 10.16, p < .05^*$). MMs thought the opportunities open to them more helpful than did SMs and MRs ($X^2(2) = 8.97, p < .025^{**}$). Extraverts and judgemental types both reported that the opportunities to experiment had helped them to transfer their training. This is consistent with theory; both types are keen to get things done (E : $X^2(2) = 8.23, p < .025^{**}$; J : $X^2(2) = 6.63, p < .05^*$).

The final job characteristic to be considered was the appropriateness of the Cranfield training (J12). This is obviously crucial to transfer and has been described as such by all the writers on the subject. Sykes (1962) goes beyond congruence of content to that of ideals if frustration is to be avoided on the return to work. Vandenput's study shows clearly the facilitative nature of relevant training and the inhibitive impact of irrelevant training. Despite its appearance in both the anticipated (10th) and the actual (7th) "top ten" helping factors, there was a difference in the extent to which managers found it a help or not ($X^2(2) = 7.29, p < .05^*$). Middle managers were the most satisfied group, 60% of them finding their programme helpful compared with 40% of SMs and 30% of MRs. Only 1% of MMs thought it so inappropriate as to be a hindrance compared with 10% of SMs and 6% of MRs. Relevance of training, as Berger points out, is dependent upon the actual needs (i.e. weaknesses) of the participant as well as on the perceived needs of the Company and the job. The matching process is achieved through the selection of participants and the design of the programme. Were 10% of SMs wrongly selected? Was the SMP ill-designed? Only 30% found its

relevance helpful. Or, did the managers fail to recognise their own weaknesses?

Summary

A manager's job, being a combination of roles and tasks, is clearly an important aspect of the organisational climate and being so very individualistic it is the cause of many different perceptions.

In general, job characteristics and autonomy in C & W are seen by the managers as facilitative rather than inhibitive to their transfer of training. The factors of greatest importance are: contact with others (J3); the appropriateness of Cranfield (J12); participation in decision making (A2); control over their own workplace (A1); and the opportunities for team-work (J9).

With the exception of J12, they describe a process of working that has proved itself facilitative to the transfer of training. This is a collaborative style in which managers can work together - with one another, their subordinates and superiors - to share the decisions and responsibilities connected with the managerial tasks yet still maintain the authority to put the agreed proposals into action.

When the responses to the checklist were partitioned by type of manager, and the "top ten" helping and hindering factors were listed for each group (7), some telling differences emerged. For example, in the division based on type of programme attended, MMs were the only group to include the appropriateness of their Cranfield programme in their Top Ten helping factors; this is consistent with the findings of H₀2 (Ch. 5). No job-

related factors occurred amongst MMs ten most hindering factors but three did amongst the MRs. These were the amount of work, its predictability and the physical conditions in which they worked.

Amongst the different age groups, the younger managers (those under 40 years of age) found six of their ten most helping factors came out of the job itself, as did the HO managers. The other two groups to record a disproportionately higher number of job-related items amongst their Top Ten helping factors were non-engineers with seven and trouble-shooters who achieved the impossible - eleven out of ten! The non-engineers emphasised their autonomy, the appropriateness of the programmes and the opportunities open to them. Trouble-shooters were strongly influenced by the nature of their jobs. Very few job-related factors were mentioned in the managers' charts of Top Ten hindering factors.

The differences between groups of managers, when tested for statistical significance, undoubtedly cause the null hypothesis that "there is no difference between managers' perceptions of aspects of the organisational climate in helping or hindering them to transfer what they have learnt" to be rejected. The perceptions of organisational climate accounted for by the manager's job vary between managers on 20 different occasions.

The four aspects of autonomy were continually mentioned as facilitative to transfer both before and after the return to work. C & W managers are not alone in their high regard for this aspect of climate. Autonomy was the only category that Vandenput's managers described as a net facilitator. They reinforced this by establishing the lack of influence as the most frequently occurring inhibitor in his study. Hogarth's managers also gave strong support to the need for autonomy. Berger et al

significantly correlated high job autonomy with successful transfer. They also discovered that managers saw autonomy as an expression of support from those for whom they worked. Managers who perceived themselves as lacking autonomy therefore felt a dual loss which caused them great difficulties in the introduction of change.

4. Other People With Whom the Manager Works

This is the fourth, and final, aspect of the organisational climate to have been considered. It was made up of the characteristics of the people with whom each manager worked and the relationships which he had established with them. These factors are the most subjective and, according to Vandepuut's managers, the most influential. They are unlike all the other aspects of climate considered so far in that they are irrational yet inter-dependent; they can be changed overnight by the retirement or promotion of a key person; for Fls they vary with each posting; for HOs and Nats they may involve long, slow and careful nurturing. They are, above all, a measure of the calibre of employees in the Company, as seen through the eyes of the managers in this study. The checklist comprised 13 items. These are shown in Table 6.9 together with any statistically significant differences in perception between the managers.

People's characteristics and the relationships which managers have with others were separated in an attempt to isolate the effects of one upon the other. It is not easy to shake this complex web of perceptions loose and disentangle the strands from one another. The researcher was seeking a different "angle" with each set of items. From the specific characteristics (P1-P8) she hoped to elicit relatively unemotional perceptions

of the people with whom the managers worked. From the relationships they held with others (R1-R5), she expected far more personal experiences.

So as not to confuse the two viewpoints during discussion of the results, they are reported on separately.

Other People With Whom Managers Work	Type of Prog	Age	Prof. Back-ground	MBTI types	C & W type	CCL type
<u>People's Characteristics</u>						
P1 their keenness and enthusiasm	-	*	-	-	-	-
P2 their motivation to work	-	-	-	*	-	-
P3 their acceptance of new ideas	-	-	-	***	-	-
P4 their willingness to take responsibility	-	-	-	-	-	-
P5 their willingness to share ideas and information	-	-	-	-	-	-
P6 their willingness to delegate	-	-	-	**	-	-
P7 their vision of the future	-	-	-	****	-	-
P8 their ability to actually come up with the goods	-	**	-	-	-	-
<u>Personal Relationships</u>						
R1 the attitude of my superiors	-	-	-	-	-	-
R2 the attitude of my peers	-	-	-	-	-	-
R3 the attitude of my subordinates	-	-	-	-	-	-
R4 the availability to me of relevant information	-	-	-	-	-	-
R5 the number of "contacts" I have in other parts of the Company	-	-	-	-	-	-
Totals	0	2	0	4	0	0

Table 6.9 : Summary of Differing Perceptions of Whether Other People Help or Hinder the Transfer Process

People's Characteristics

The General View

This aspect of the working environment is the Cinderella of the transfer process. Little mentioned before the return to work, it was later reported as one of the most important areas. The only item to reach the anticipated Top Ten helping factors was the apparent willingness of the people with whom the managers worked to share ideas and information (P5). This was ranked 8th and supported by 52% of all managers but fell to 15th after they had returned to work. It was still supported by 49% of all managers but had been overtaken by four other perceptions of people's characteristics. Dramatic changes occurred after the return to work. Every single item attracted a smaller neither vote showing that managers who had previously given little heed to the influence of other people on them were later seeing things differently. Other people's keenness and enthusiasm (P1), for example, had been dismissed as unimportant by 69% of all managers at the end of the programme. After their return to work, only 30% still held this view (8).

More dramatic changes between t1 and t2 took place amongst the factors perceived as helpful to the transfer of training: These were:

- the keenness and enthusiasm of others (P1), anticipated to be a helping factor by only 27% of managers but experienced as such by 63%;
- other people's motivation to work (P2), expected to help by 28% of managers but perceived as having helped by 66% of them;

- the ability of others to "come up with the goods" (P8) was only anticipated as helpful by 22% of managers but was later reported as having helped 54% of them.

These three factors, certainly the first two, are inter-related but their greatest importance lies in how these qualities in others helped managers in their own efforts to apply what they had learnt at Cranfield. All three (P1, P2, P8) appeared in the actual Top Ten helping factors and, together with the willingness with which others took on responsibility (P4) were supported by over half of all the managers. The only negative aspect of people's characteristics was an increase in the feeling that people were not sufficiently willing to delegate (P6). The number of managers who found this hindered their transfer almost doubled from 11% to 19%. Even so, 31% still thought it sufficient to be helpful.

Differing Perceptions Between Groups of Managers

The general agreement amongst all managers on the helping nature of people's characteristics left little opportunity for dispute between them. However, a far higher proportion of managers in their forties found people's keenness and enthusiasm (P1) to be helpful to them than did managers in their twenties and thirties ($X^2(2) = 6.86, p < .05*$). The same was true of perceptions of other people's ability to come up with the goods ($X^2(4) = 11.74, p < .025**$). Managers under 40 saw it as more of a hindrance and less of a help than expected; managers in their 40s perceived the opposite whilst the older group, in their 50s, never let it hinder them. Either criticism of other people's performance declines with age or the dependence upon others is gradually reduced and therefore of less importance; perhaps both are true.

Although other researchers have drawn attention to the general need for support from the others with whom the managers work, few have examined the importance of their personal characteristics; how willing and able they are at actually doing their jobs. Vandenput's managers mentioned the rigidity and conservativeness of the people with whom they worked a number of times as a hindrance to their transfer of training. They also reported a short-term orientation, lack of motivation and fear of taking responsibility in others as inhibiting to themselves. They found that collaborativeness, an interest in new ideas and the willingness to delegate all to be characteristics in others which helped them. The perceptions of the C & W managers regarding the quality of the people with whom they work suggest them to be fortunate indeed.

The introvert-extravert dimension of the MBTI was significantly correlated with two of the characteristics in this group (P3 and P6). The sensing-intuitive dimension was correlated with two others (P2 and P7). Extraverts found the extent to which other people were open to new ideas (P3) helped them more and hindered them less than it did the introverts ($X^2(2) = 10.33$, $p < .01***$). Extraverts were also less hindered than were introverts by other people's unwillingness or inability, to delegate (P6) ($X^2(2) = 7.86$, $p < .025**$). Introverts are yet again shown to be more sensitive to those around them than extraverts. Extravert may get things done but perhaps by riding roughshod over other people.

Intuitive managers were more concerned about other people's motivation to work (P2) than were sensing managers ($X^2(2) = 6.86$, $p < .05 *$). Only 15% of Ns (intuitives) thought it unimportant compared with 35% of Ss (sensing types). Nevertheless, those Ss who were

concerned held similar views; 10% of intuitives found the level of motivation in others to be a hindrance to themselves and 75% found it to be a help. This compared with 3% of sensing types who found it a hindrance and 62% who found it a help. Intuitive managers were also more bothered by other people's vision of the future (P7) than were sensing managers ($X^2(2) = 11.29, p < .005****$). 65% of sensing managers reported that this characteristic had no influence on their transfer activities whilst 28% found that it helped and a mere 6% that it hindered them.

Amongst intuitive managers however, only 38% thought it unimportant. The same proportion, 38% found inspiration in the visions held by others but 23% were disappointed, disillusioned and depressed by what they discovered in others. These are both areas in which theory would suggest that intuitive managers, always conscious of the possibilities inherent in a situation, should be interested. The same theory suggests that sensing managers will remain relatively unconcerned with such thoughts.

Personal Relationships

The General View

Before they returned to work, half of the managers anticipated that the supportiveness of their subordinates (R3) and their superiors (R1) would be helpful to their transfer of training. One-third thought that their peers (R2), their contacts in the Company (R5) and the relevant information available to them (R4) would also be helpful. Another one-third thought that their lack of contacts would hinder them and one-fifth anticipated the non-availability of relevant information as inhibitive to their transfer of training.

In the event, the supportiveness of superiors (R1), peers (R2), and subordinates (R3), were all felt to be helpful by half of the managers. Subordinates had lived up to expectations but peers were found to be more helpful than previously expected whilst superiors were considered by a growing number of managers actually to inhibit the transfer of training. Less than 5% of managers reported subordinates or peers as a hindrance but 23% of managers thought this of their superiors.

Fears of the inhibitive effects of not being able to access appropriate information (R4), were borne out for one-quarter of the managers but one-third stood by the facilitative nature of the information available.

A most dramatic development was the leap made by R5, "my contacts in the Company" from 11th most hindering factor to 2nd most helping factor of all the 61 items considered. The proportion of managers finding their contacts in another part of the Company a positive influence on their transfer of training more than doubled from 34% to 71%. The proportion worried that their perceived lack of contacts would prove a hindrance fell from 30% to 2%.

Differing Perceptions Between Groups of Managers

There were no significant differences between the perceptions of any group of managers regarding the effect of personal relationships on the transfer of training.

This, and the influence of technology, are the only aspects of the organisational climate in which such unanimous agreement is found.

The Role of Colleagues in the Transfer of Training

In the literature, the importance of a supportive superior tends to over-shadow that of the other people with whom a manager works. This study, whilst recording the facilitative influence of all support, from whatever quarter, also highlights the crucial nature of the superior by showing that his lack of support is the only vacuum to have a negative influence. Peers and subordinates are either helpful or of no consequence. Superiors are less likely to be helpful and can be a hindrance. Vandenput's managers also viewed superiors as more inhibiting than subordinates, although they saw peers as intermediate.

Hariton (1951) and Harris and Fleishman (1955) stress the importance of the immediate boss being supportive; Bakke (1959) extends this to include subordinates as well; and House (1968) creates separate but equal categories for the formal authority system, the immediate superior and the primary work group (i.e. peers and subordinates). Baumgartel and Jeanpierre (1972) mentioned the attitude of superiors but not those of peers or subordinates and Hogarth (1979) too pays little attention to the influence of subordinates beyond asking managers if they felt that their immediate working environment would support them, to which 61% of managers agreed that it would. This is very similar to the response of the C & W managers, 58% of whom expected their subordinates to be supportive and 62% of whom found that they were.

Summary

This aspect of the organisational climate, other people with whom the manager works, is remarkable on two counts. Firstly, its importance as a facilitator for the transfer of training; secondly, the great swings in its favour

by so many managers on their return to work. This rather suggests that managers had not given much consideration to the impact of others on their own level of achievement beforehand.

As a test of H_03 , the few differences, linked entirely to age and two of the Jungian dimensions, cannot be regarded as sufficient evidence to reject the null hypothesis. Managers in C & W share their perceptions of the people with whom they work. It perhaps goes some way to explaining the strong bonds between them and the loyal regard they have for their Company.

Conclusion to Part II

This section was devoted to the testing of null hypothesis 3 (H_03) : that "there is no significant difference between managers' perceptions of aspects of the organisational climate in helping or hindering them to transfer what they have learnt".

To do this, the eight aspects of climate, identified by Vandeput were combined to form four divisions. These were:

1. the external environment;
2. the internal environment;
3. the managers' job;
4. other people at work.

The perceptions of respondent managers with regard to the helping or hindering nature of each of these was examined in turn. Responses were divided in six different ways to see whether or not any particular aspects of the managers'

profiles differentiated between their perceptions of the climate thus causing the null hypothesis to be rejected. Forty-seven significant differences were identified. They are summarised in table 6.10.

Aspects of the Organisational Climate	Type of Prog	Age	Prof Back-ground	MBTI types	C & W type	OCL type	Totals
<u>External Environment</u>							
EL - E7	0	0	0	1	2	0	3 } 3 0 }
TL - T3	0	0	0	0	0	0	
<u>Internal Environment</u>							
CI - CI0	0	1	2	4	5	0	12 } 18 6 }
VI - VI2	1	0	0	3	2	0	
<u>Manager's Job</u>							
J1 - J12	5	2	0	6	3	2	18 } 20 2 }
A1 - A4	0	1	1	0	0	0	
<u>Other People</u>							
P1 - P8	0	2	0	4	0	0	6 } 6 0 }
RI - R5	0	0	0	0	0	0	
Totals	6	6	3	18	12	2	47

Table 6.10 : Summary of Differing Perceptions of Whether Aspects of the Organisational Climate Help or Hinder the Transfer Process

The two aspects of the climate in which the null hypothesis was rejected were the internal environment and the manager's job. Together, they were responsible for 80% of the differences. The null hypothesis was not rejected with regard to the remaining aspects of the climate, the external environment and the other people with whom the manager works. In both these areas, managers were generally in agreement with one another.

The most important features of the manager's profile in rejecting the null hypothesis were the MBTI dimensions and the C & W category of manager. These accounted for

64% of the variation. Of lesser note were the contributions made by age and type of programme attended. Together they caused 26% of the variation. The remaining two features of the manager's profile were professional background and CCL type. These made a negligible contribution (only 10%) to the differing perceptions held between managers concerning their organisational climate. Despite the many differences of opinion concerning the internal environment, this aspect was perceived, on balance, as a hindrance to managers. The managers job, although even more controversial, was perceived as helpful by the majority of managers. Managers were in strong agreement as to the very helpful influence of the other people in the Company for their transfer of training. They were equally unanimous, although in a different way, on their views regarding the external environment; by which they found themselves unaffected.

The aspects of the climate requiring attention by the Company are, fortunately, completely within its grasp. These include the jobs of specific individuals, the structure of the Company and the values that are maintained. None are easy to change but all are possible. If a single theme is forthcoming, it is the need for more open, more regular and more relevant discussion on the Company's current and future operations. Managers are demanding the right to manage. If they are not felt worthy of that right then the Company must stop pretending that they are managers and acknowledge them as administrators and engineers once more.

Part III : Related Research and its Relevance to the Transfer of Training

Attention in this section is focussed on four topics. These are:

1. Myers-Briggs work preferences;
2. Herzberg's motivation - hygiene theory;
3. Hackman's job description survey;
4. Baumgartel and Jeanpierre's transfer study.

1. The Myers-Briggs Work Preferences and their
Relevance to the Transfer of Training in C & W

The four dimensions upon which the various work preferences are based were responsible for 18 significant differences in the distribution of perceptions of the organisation climate. The extravert-introvert (E-I) dimension was responsible for seven of them; sensing-intuition (S-N) for five; thinking-feeling (T-F) for three; and judgemental-perceptive (J-P) for three. When differences were sought between the CCL clusters only two were discovered. Both were between traditionalists and non-traditionalists on the immediate working environment.

Taking the responses as a whole and observing the proportion of managers opting for each of the three responses for the transfer of training (i.e. help, hinder, neither), the researcher was led to another calculation. This was to add together the number of times that a majority vote went to each choice and then to test them against one another for significance using $\chi^2(9)$.

The results of this exercise confirmed and strengthened those of the individual items discussed earlier. Together, they show a persistent trend for managers with a preference for E, S, T, and J to regard the organisational climate

as less influential on their transfer of training than do managers with a preference for I, N, F, and P. When they do consider it as influential, the ESFJs find the climate to be generally helpful whilst the INTJs more often find it a hindrance.

1. E-I : The Extravert-Introvert Dimension

Aspect of Organisational Climate	Perception of Climate's Influence on Transfer					
	Hinder		Neither		Help	
<u>External Environment</u>						
E1 - E7	E>I	4 : 3	I>E	5 : 2	E>I	5 : 2
T1 - T3	I>E	2 : 1	E>I	3 : 0	I>E	3 : 0
<u>Internal Environment</u>						
C1 - C10	I>E	10 : 0	E>I	6 : 4	E>I	8 : 2
V1 - V12	I>E	12 : 0	E>I	9 : 3	E>I	10 : 2
<u>Manager's Job</u>						
J1 - J12	I>E	9 : 3	E>I	8 : 4	I>E	7 : 5
A1 - A4	I>E	4 : 0	E>I	4 : 0	E=I	2 : 2
<u>Other People</u>						
P1 - P8	I>E	8 : 0	E>I	6 : 2	E>I	7 : 1
R1 - R5	I>E	4 : 1	E>I	5 : 0	I>E	5 : 0

Table 6.11 : Dominant Perceptions Held by Managers with a Preference for Extraversion (E) on Introversion (I)

As Table 6.11 shows, an extravert or introvert orientation has an important influence on a managers perception of the organisational climate. The extravert is far more willing to dismiss it as unimportant to his transfer of training. The introvert on the other hand, is more sensitive to its influence. When managers do regard the climate as important, it is the introverts who see it as a hindrance most often. They also see it as a help more often in some situations : in their jobs, in their relationships with others and in their appreciation of technology. On all these issues they express a greater overall concern than do the extraverts.

Extraverts share the introverts view of autonomy as a helping factor but they find the outside world more helpful than do introverts who tend to exclude it. Extraverts stand in contrast to introverts on the other aspects of climate. These are their perceptions of peoples characteristics, the company's structure and its values. All are found helpful by the extravert, but not the introvert who more often describes them as a hindrance. These findings suggest that when introverts are influenced by their surroundings they see them as inhibitive but when extraverts are influenced they see them as facilitative. This would be consistent with Jung's contention that the introvert prefers to be left alone by the outside world, whilst the extravert draws his energy from it. In fact, the results of this study confirm that introverts say that the climate is either not important or, if it is, it hinders them. Extraverts more often say that the climate is either not important or, if it is, it helps them. This, in turn, rather suggests that introverts are more dependent upon their situation than are extraverts.

60% of C & W's managers are introverts.

2. S-N : the Sensing-Intuition Dimension

The S-N preference for gathering information has a strong effect on managers' perceptions of their transfer of training. On every aspect of climate the sensing manager is the least affected; on every factor the intuitive finds the effects of climate inhibitive more often than does the sensing type. Collins (1965) found exactly the same in his study of 200 school-teachers. He concluded that sensing types could find job satisfaction in any climate whilst intuitives were easily frustrated and inhibited if the climate didn't "suit" them.

There was some concensus on the helping aspects of the climate, particularly with regard to the manager's job which both sensing and intuitive types found equally helpful. On other aspects, their responses were mixed. The Ss found the outside world, the Company structure and people's characteristics more helpful than did Ns. The Ns, in their turn, found technology, company values and their personal relationships with others to be helpful to their transfer of training more often than did Ss.

73% of C & W managers have a preference for sensing.

Aspect of Organisational Climate	Perception of Climate's Influence on Transfer					
	Hinder		Neither		Help	
<u>External Environment</u>						
E1 - E7	N>S	4 : 3	S>N	4 : 3	S>N	3 : 4
T1 - T3	N>S	2 : 1	S>N	2 : 1	N>S	2 : 1
<u>Internal Environment</u>						
C1 - C10	N>S	7 : 3	S>N	7 : 3	S>N	7 : 3
V1 - V12	N>S	11 : 1	S>N	11 : 1	N>S	7 : 5
<u>Manager's Job</u>						
J1 - J12	N>S	11 : 1	S>N	9 : 3	S=N	6 : 6
A1 - A4	N>S	3 : 1	S>N	4 : 0	S=N	2 : 2
<u>Other People</u>						
P1 - P8	N>S	8 : 0	S>N	7 : 1	S>N	5 : 3
R1 - R5	N>S	4 : 1	S>N	3 : 2	N>S	3 : 2

Table 6.12 : Dominant Perceptions Held by Managers with a Preference for Sensing (S) or Intuition (N)

3. T-F : The Thinking-Feeling Dimension

The T-F dimension of a manager's work preference indentifies his decision making style : whether it is founded on logical analysis (T) or on his personal beliefs (F). This preference, like the previous two, has a significant influence on a manager's perception on his organisational climate. A thinking manager is far less likely than a

feeling manager to be influenced by the climate. When he does find it important he will rarely see it as being helpful. Indeed, it is only in the area of technology - itself a product of logical thinking that the T finds any comfort. In addition, he is more likely than the F type to find his relationships with others, their characteristics and the values of the Company as a whole, to be a hindrance. Regarding his job, he shares the views of the F type and on the other aspects of climate, the external environment and Company structure he experiences fewer hindrance than does the F.

68% of C & W managers have a preference for thinking.

Aspect of Organisational Climate	Perceptions of Climate's Influence on Transfer					
	Hinder		Neither		Help	
<u>External Environment</u>						
E1 - E7	F>T	4 : 3	T>F	4 : 3	F>T	6 : 1
T1 - T3	F>T	2 : 1	F>T	3 : 0	T>F	3 : 0
<u>Internal Environment</u>						
C1 - C10	F>T	7 : 3	T>F	7 : 3	F>T	7 : 3
V1 - V12	T>F	9 : 3	T>F	7 : 5	F>T	10 : 2
<u>Manager's Job</u>						
J1 - J12	T=F	6 : 6	T>F	11 : 1	F>T	12 : 0
A1 - A4	T>F	3 : 1	T>F	3 : 1	F>T	4 : 0
<u>Other People</u>						
P1 - P8	T>F	5 : 3	T>F	8 : 1	F>T	7 : 1
R1 - R5	T>F	4 : 1	F>T	3 : 2	F>T	4 : 1

Table 6.13 : Dominant Perceptions Held by Managers With a Preference for Thinking (T) or Feeling (F).

4. J-P : The Judgemental-Perceptive Preference

The preference for J or P signals a manager's preference for coming to either conclusions about or to an understanding of a situation. The former is more action-orientated, wanting to organise and control, whilst the latter is more adaptable, seeking awareness and further knowledge. As a result, neither of them dominate the "neither help nor hinder" view of the organisation climate. However, when they do acknowledge the influence of the organisational climate on their transfer activities, Ps more frequently find that it hinders them whilst Js more frequently find that it helps them. Ps find the greatest hindrance in all those things that are decided upon by others - the environment, both internal and external, their job and other people's characteristics.

Aspect of Organisational Climate	Perception of Climate's Influence on Transfer					
	Hinder		Neither		Help	
<u>External Environment</u>						
EL - E7	P>J	7 : 0	J>P	5 : 2	P>J	5 : 2
T1 - T3	P>J	2 : 1	P>J	2 : 1	J=P	1½ : 1½
<u>Internal Environment</u>						
C1 - C10	P>J	7 : 3	J>P	6 : 4	J>P	6½ : 3½
V1 - V12	P>J	8 : 4	J=P	6 : 6	J>P	8 : 4
<u>Manager's Job</u>						
J1 - J12	P>J	11 : 1	J>P	7 : 5	J>P	9 : 3
A1 - A4	J=P	2 : 2	P>J	3 : 1	J>P	4 : 0
<u>Other People</u>						
P1 - P8	P>J	8 : 0	P>J	5½ : 2½	J>P	7 : 1
R1 - R5	J>P	3 : 2	J>P	4 : 1	P>J	3 : 2

Table 6.14 : Dominant Perceptions Held by Managers with a Preference for Judging (J) and Perceiving (P)

Their relationships with others is the only aspect of the climate that they can keep sufficiently flexible to prevent it becoming a hindrance.

J types, on the other hand, appear to be able to turn most things to their advantage, or at least see them as facilitative more often than do Ps.

80% of C & W managers have a preference for J.

The Composite View

Table 6.15 identifies the composite preferences that will find different aspects of the climate of greatest hindrance (column 1); of least important (column 2); and of greatest help (column 3). The figures in brackets show the percentage of C & W managers who are this type (n = 172) (10).

Aspect of the Organisational Climate	Types most like to find climate will:					
	Hinder		Neither		Help	
<u>External Environment</u>						
E1 - E7	ENTF	(1%)	ISTJ	(26%)	ESFP	(1%)
T1 - T3	INFP	(6%)	ESPF	(1%)	INTJ	(7%)
					INFP	(3%)
<u>Internal Environment</u>						
C1 - C10	INFP	(3%)	ESTJ	(18%)	ESFJ	(9%)
V1 - V12	INFP	(3%)	ESTJ	(18%)	ENFJ	(2%)
			ESTP	(2%)		
<u>Manager's Job</u>						
J1 - J12	INFP	(6%)			ISFJ	(10%)
A1 - A4	INFP	(3%)	ESTJ	(18%)	INFJ	(3%)
	INTJ	(7%)	ESTP	(2%)	ISFJ	(10%)
	INFP	(3%)			INFJ	(3%)
					ESFJ	(9%)
					ENFJ	(2%)
<u>Other People</u>						
P1 - P8	INFP	(3%)	ESTP	(2%)	ENFJ	(2%)
R1 - R5	INTJ	(7%)	ESFJ	(9%)	INFP	(6%)

Table 6.15 : Summary of the Myers-Briggs Types Most Likely to Find that the Organisational Climate will Hinder, Help or be of No Importance to Their Transfer of Training

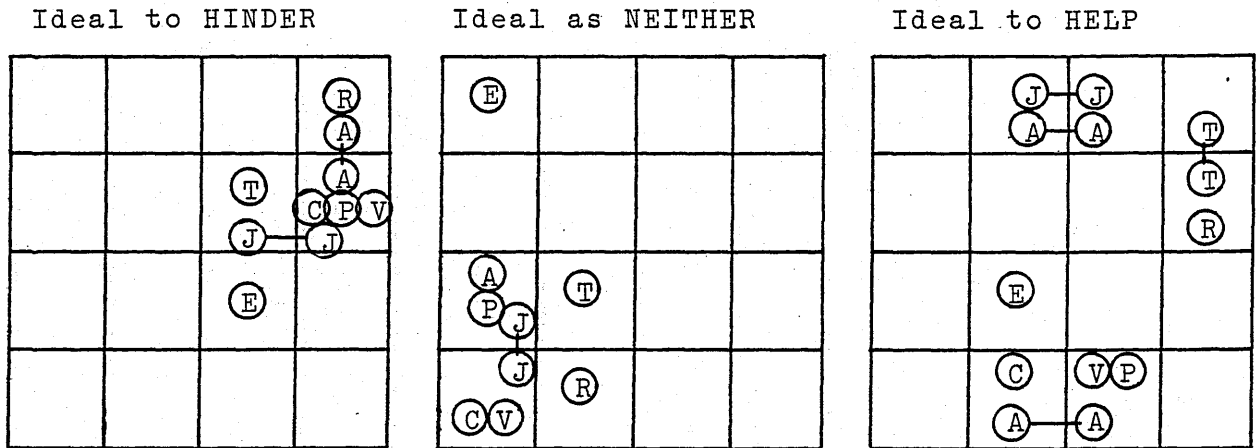


Figure 6.4 : Distribution of Perceptions of the Influence of the Climate on Transfer by Myers-Briggs Types

Figure 6.4 shows how perceptions of the C & W climate cluster on the type grid. The implications for C & W would appear to be that:

1. the climate is hindering at least 17% of the Company's managers. In addition it is particularly uncondusive to visionaries, a group currently under-represented in the Company. Ns have already been shown to be easily distressed by the climate in which they work. This will not encourage them to join C & W.
2. Over half of C & W managers are unaffected by the climate. This is a reflection of the large proportion of traditionalists. There appear to be a progressively smaller proportion of traditionalists coming through C & W (see figure 4.18). This suggests that fewer managers will remain oblivious to the climate in the future.
3. The helping nature of the climate is directly experienced by at least one-third of all managers. They are well spaced across the grid with the exceptions of the ST column. Unfortunately 51% of all managers fall into this sector.

Summary

On all four dimensions there were significant differences between each type as to the frequency with which they considered the climate to be either a help or a hindrance. Those considering it a help were more frequently E,S,F, and J; those considering it a hinderance were more frequently I,N,T, and P (10).

There were also differences as to how frequently the types felt themselves to be influenced at all by the organisational climate. The four preferences least frequently influenced by the climate were E, S, T, and J. The difference between the first three and their counterparts, I, N, and F were statistically significant. The difference between J and P managers was not significant (11). The ESTJ type is identified by Myers (1980) as the most 'masculine' and a natural manager; Barron and Egan's (1968) Irish managers were overwhelmingly this type; so too were Hay's (1964) 62 engineering managers. ESTJs distinguish themselves in this study as the type least likely to respond to questionnaires! The fact that they are less influenced by the world around them confirms that, as a type, they are sufficiently robust to be more resilient to the characteristics of the organisational climate than are the other Myers-Briggs types. Their opposite, the INFP would, likewise, be the most sensitive to their environment. Most managers, of course, are other combinations of preferences and the relative strength of the various dimensions will pull the individual towards a particular interpretation of each situation.

2. Herzberg's motivation - hygiene theory and its relevance to the transfer of training in C & W

Herzberg's theory (1966) distinguished between the job attitudes which were felt to lead to satisfaction and those which were felt to lead to dissatisfaction.

Five factors stood out as determinants of job satisfaction; these were achievement, recognition, work itself, responsibility and advancement. They were long-term, to do with self-actualisation and were described by Herzberg as motivation factors. The factors identified as determinants of dissatisfaction were neither the opposite nor the absence of those bringing about satisfaction; they were completely different. The five major dissatisfiers were company policy and administration, supervision, salary, interpersonal relations, and working conditions. They were all short-term, to do with the immediate environment and were described by Herzberg as hygiene factors because, if properly maintained, they could prevent the ills of dissatisfaction. Although responsible for opposite outcomes, satisfaction and dissatisfaction, the two sets of factors are not the opposite of one another. They are completely independent of one another; if one is manipulated it's effects will be limited to its own area. So, a reduction in dissatisfaction for example will not lead to an increase in satisfaction, as one might intuitively expect.

Herzberg's theory is relevant to this study on two counts. Firstly, the content of his factors, which range through those of the organisational climate, may coincide with those that help or hinder the transfer of training. Secondly, the nature of the relationship between his factors has important implications for those between the helping and hindering factors in transfer.

Comparison of Content

Four aspects of the organisational climate identified in this study approximate Herzberg's hygiene factors and his motivation factors. One would expect the former to feature high in the ranking of hindering factors and the latter to feature high in the ranking of helping factors. The outcome is shown in Tables 6.16 and 6.17.

Aspect of the organisational climate (Hygiene-type factors)	Anticipated Hindering		Actual Hindering	
	Rank (n = 61)	% of managers agreeing (n = 107)	Rank (n = 61)	% of managers agreeing (n = 133)
J4 The equipment at my disposal	43	7%	28(+15)	16%(+9)
J5 The trained people at my disposal	13	28%	33(-20)	14%(-14)
J6 The physical environment in which I work	19	21%	17(+2)	23%(+2)
J7 The amount I get paid	30	15%	53(-23)	3%(-12)

Table 6.16 : Aspects of the Organisational Climate Approximating Herzberg's Hygiene Factors

Aspect of the organisational climate (Motivation-type factors)	Anticipated Helping		Actual Helping	
	Rank (n = 61)	% of managers agreeing (n = 107)	Rank (n = 61)	% of managers agreeing (n = 133)
J10 Opportunities to initiate projects	6	53%	15(-9)	49%(-4)
J11 Opportunities to experiment	3	64%	21(-18)	46%(-18)
A1 My control over my working environment	1	67%	7(-6)	56%(-11)
A3 My freedom to act on my own judgements	2	64%	10(-8)	53%(-11)

Table 6.17 : Aspects of the Organisational Climate Approximating Herzberg's Motivation Factors

Three of the four hygiene-type factors appeared in the top half of the hindering list before the return to work but this later fell to only two. At best, support for them as hindering factors only came from 28% of the managers dropping to a low of only 3% for one factor. There would appear to be no grounds for comparing the hindering factors with Herzberg's hygiene factors.

On the self-actualisation front, however, a different picture emerged. The four motivation-type factors were ranked 1st, 2nd 3rd and 6th on the anticipated helping list and were supported by up to two-thirds of all managers. This is entirely consistent with the theory but, when looking at the relative positions held by the same factors in the actual helping list, one cannot help wondering if they are not a little idealistic. Faced with reality, half of the managers still support the four factors but their relative importance as helping factors slips to between 7th and 21st place. Nevertheless, support is still forthcoming from between 46% - 56% of all managers.

Comparison of Relationships

The relationship between the hygiene and motivation factors is so interesting because changing one is not going to have consequences for the other. If a similar relationship exists between helping and hindering factors then removing the hindering factors is not going to enhance the helping factors and vice versa. If, however, they are related to one another and do not exhibit a "dual-factor" nature then manipulations with various aspects of the climate could have repercussions elsewhere in the system.

To identify the nature of the relationship between the helping and hindering factors, Spearman's rank order

correlation was conducted twice, once on the anticipated factors and once on the actual factors. In both cases there was found to be a significant correlation between the two. ($r_s = -.59$ for the anticipated influence of the climate; $r_s = -.52$ for its actual influence).

This confirms that help and hinder are at opposite ends of the same poles and that a reduction in hindering aspects of the climate will lead to an increase in the helping aspects. Conversely, a reduction in the helping factors will only increase the hinderances. Double benefit is therefore to be accrued by the Company for any positive steps it takes to improve the organisational climate and double trouble will ensure from any deterioration in the climate.

3. Hackman's Job Description Survey and its Relevance to the Transfer of Training in C & W

The JDS was developed for use in work redesign with reference to the workforce in general and lower (supervisory) levels of management. It "is not appropriate for use in diagnosing the jobs of single individuals" (1980, p 314), "care should be taken not to define jobs too broadly" (p 308) and "it is less appropriate for middle and upper level managers, whose jobs are much more strongly defined by role relationships than by concrete tasks to perform" (p 307).

How then can it possibly be of interest to transfer of training for middle and senior level managers? One reason is that job characteristics are investigated in this study as a component of organisational climate. Another is that for the C & W managers, job characteristics vary enough to create significant differences between the perceptions held about the extent to which they help and

hinder the transfer of training. The theoretical assumptions underlying the JDS may illuminate some of the problems in C & W.

Hackman et al (1974, 1975, 1980) identified three critical factors in determining a person's motivation and satisfaction with their job. These are that :

1. they find their work meaningful and worthwhile;
2. they are responsible for results;
3. they have regular knowledge about their performance.

The job characteristics believed to encourage the development of these factors are:

1. skill variety;
2. task identity;
3. task significance;
4. autonomy;
5. feedback.

All these were covered to some extent by the items in the checklist. The first three; which ensure meaningful work, were loosely described by J1, my personal work load.

1. Skill Variety

This is high for most managers who need a multiplicity of skills and talents; to be able to work on a number of tasks simultaneously; and to be able to switch from one

task or role to another at a moments notice. Versatility is important for managers (Mintzberg 1973). It was measured a little more by J9-J11, the opportunities available to managers for teamwork, project intiation and experimentation. Managers tended to over-emphasise the opportunities open to them before they returned to work only to be disappointed later.

2. Task Identity

This is often low for managers, especially in a bureaucratic organisation like C & W. It can be higher for top managers who can see strategies through from beginning to end and for managers with high autonomy like Project Managers. With increased development in the areas of new business and greater decentralisation, task identity may be on the increase in C & W. One measure linked to it, J8 on task predicability, was found helpful by more managers than found it a hindrance (26% against 18%).

3. Task Significance

This varies in C & W but is generally high as tele-communications is in the forefront of technological development and has a big impact of the world as a whole. C & W's clients range through numerous government contracts and industrial clients in all parts of the world. They have a fleet of ships on the oceans and satellites in space. The work is intrinsically meaningful although as the responses to C8 (awareness of C & W's goals and strategies) showed, many managers would like to know how their contribution fits into the overall Company plan. For others tasks are seen merely as paper-pushing or working on ideas that are destined to be shelved. Disappointments in the past have led some managers to tell the researcher that whatever Cranfield, or anyone else,

does "nothing will change".

4. Autonomy

This aspect of job is well covered by the checklist and well appreciated by the C & W managers who rank it high as a helping factor. They also admit to experiencing less autonomy than they first anticipated. What should C & W expect in return for bestowing autonomy upon a manager? Hackman believes an increased feeling of responsibility and an increased willingness to accept personal accountability. The manager becomes more independent because, through his increased control over situations, he has the opportunity for putting his training into action and learning from the outcomes.

5. Feedback

This comes from the job itself, through meeting deadlines and budgets, and from the "significant others" in a manager's world - colleagues at various levels, in the same and different departments. Recognition of a managers contribution is not always easy to voice and can seem to go unnoticed or simply be taken for granted. The way in which perceived value is expressed depends heavily on the personality of the individuals concerned, and the generally accepted norms for dealing with others. The checklist looked at the issue of feedback from several points of view. Within the characteristics of the job J2, the availability of evaluation criteria, took the problem by the horns. Senior managers in particular had to report that the lack of such criteria hindered them in their transfer of training. Still at the formal level C2, links between departments and C5, the official communications system, were investigated. The former was felt to be a lot more helpful than the latter.

When viewed at its most informal, through personal relationships with others and the "grapevine", feedback was reported as being alive and well although it was now subjective and, no doubt, well-flavoured with personal bias by the time it reached its destination.

If these five characteristics are evident then the jobs in question should be capable of providing the incumbent with sufficient internal work motivation to fulfil his transfer of training activities. When specific jobs are measured using the JDS a "motivating potential score" (MPS) can be assessed for each job which can then be matched up with the appropriate person (who has been separately measured). A good match between job and individual means that the work will be effectively performed AND be rewarding and satisfying to the employee. A manager whose job is too low for him on MPS will be frustrated; a manager whose job is too high on MPS will be under stress. Both will become alienated and perform badly. Both will "blame" the job; everyone else will blame the manager and a second level of stress is soon reached.

Bearing in mind the limitations of this instrument for individuals at this level and, bearing in mind the crudeness with which the sketches above are drawn, there seems to be little reason why any manager in C & W should be finding his job to be a hindrance to his transfer of training. Some do, but the remedy lies within easy reach of the Company.

4. Baumgartel and Jeanpierre's study (1972) and its relevance to the transfer of training in C & W

The Indian managers in Baumgartel and Jeanpierre's study felt there were six factors which helped them in their transfer of training. These were:

1. self-direction;
2. consideration;
3. innovation;
4. knowledge application;
5. communication;
6. training investment.

1. Self-Direction

Most important was the "freedom to set personal performance goals". C & W managers also anticipated this to be the most important helping factor and, after their return to work, found it to be important but ranked it only 7th in retrospect. They were considering "the extent to which I have personal control over my working environment" (A1). When the various breakdowns of these "actual" scores were made it was the participants of the Management Refresher Programmes, those managers of 50 years of age or more and the non-engineers who found it so important. The Fls were the only group of staff not to be concerned with having personal control over their working environment. Amongst the CCL types, it was more important to traditionalists and trouble-shooters than to catalysts and visionaries.

2. Consideration

Baumgartel and Jeanpierre's second factor was the extent to which "higher management is considerate of the feelings of lower management". Seven of the questions on the C & W checklist referred to this topic (C1, C4, C7, V5, V12, A2 and R1). Only three of the seven fell into the

"top ten" ranking before the return to work. These were A2 "the extent to which I may participate in decision making" which was ranked 8th, and R1 "the attitude of my superiors" which was ranked as 10th most helping. On the hindering side, V5 "paternalism" was seen as the 7th most inhibitive aspect of the organisational climate. When the managers were asked their views after they had returned to work only A2 remained as an important helping factor; R1 had not lived up to expectations. On the hindering side however, all five of the remaining factors were mentioned with particular emphasis going to C1 "the hierarchy", V5, "paternalism" and V12 "authoritarian culture".

3. Innovation

Baumgartel and Jeanpierre's third factor was the degree to which the "organisation stimulates and approves of innovation and experimentation." This very issue is directly challenged in the C & W checklist by V3 "innovation is encouraged" and J11 "opportunities for me to experiment and broaden my experience". It was indirectly challenged by J10 "opportunities to initiate projects" and V4 "don't rock the boat". The latter (V4) was consistently seen as the fourth most hindering factor. It was anticipated to be so and the experience of all the subgroups confirmed it. No-one felt that innovation was either encouraged or discouraged sufficiently to mention it as being important either way. The opportunities, however, were anticipated as being important although they only turned out to be so for younger, non-engineering, Head Office staff with trouble-shooter or catalyst work preferences.

4. Knowledge Application

Baumgartel and Jeanpierre's fourth factor is the degree to which the "organisation is anxious for executives to make use of knowledge gained in management courses." This is encompassed to some extent in the above point but an additional factor, P3 the "acceptance of new ideas" amongst the people with whom the manager has contact, is also linked. Only senior managers found this an important helping factor (8th) although there is a significant correlation between extraversion and P3 as a helping factor ($X^2(2)=10.33$, $p<.01***$).

5. Communication

Baumgartel and Jeanpierre's fifth factor is "free and open communication among the management group." This is a topic well covered by the checklist (C5, C8, C9, V6, V7, P5, R4, R5). Four of the eight items are not regarded as important by the C & W managers. Of the remainder two are felt to be a help and two a hindrance. The helping factors are R5, "the number of contacts I have in other parts of the Company" and C9, "freedom to meet during working hours". The former, which is the informal communication system or "grapevine" of the Company, is acknowledged as the second most important helping factor of all although, perhaps surprisingly, this had not been anticipated beforehand. The latter, C9, is of less importance but again of much more than had been anticipated. Visionaries found it the most important and indeed there is a positive correlation between it and the thinking dimension of the MBTI ($X^2(1)=4.98$, $p<.05*$). The hindering factors are almost a mirror image of the helping aspects. V7, the "tendency to secrecy" was rated as the second most important hindering factor of all and this too, had

not been anticipated. It was most keenly felt by the older, more senior managers, the Fs, and the catalysts although only one sub-group (the trouble-shooters) gave it a lower ranking than 4th. The other hindering factor is C5, "the official communication system" which was not quite as bad as expected but was still widely held as an important inhibitor to the transfer of training. Perceptive managers found it to be a significant hinderance. ($X^2(2)=9.51, p < .01***$).

It is interesting to note how, when the formal communication system is felt to be inadequate, an informal and highly effective system develops in its place.

6. Training Investment

Baumgartel and Jeanpierre's sixth, and final, helping factor was "the willingness of top management to spend money on training." This was covered by VII "active encouragement is given to training and self-renewal". Whilst this was generally acknowledged as a helping factor only the National staff singled it out as being of special importance.

Summary

Baumgartel and Jeanpierre reported the above six items as being helping factors in the transfer of training. This research would acknowledge and confirm these findings. However, it would also dispute the relative importance given by Baumgartel and Jeanpierre to items 3, 4 and 6 (innovation, knowledge application and training) placing more emphasis on 5 (communication) and, to a lesser extent, on 1 (self-direction). It would also draw attention to the importance of the nature of the relationship between a manager and the people with whom he works. On item 2 (consideration), the findings of

the C & W research suggest that the organisational climate is frequently inhibitive rather than facilitative. This is not to reject Baumgartel and Jeanpierre's assertion. Indeed, that the lack of consideration is seen as a hindrance could well imply that the converse is true, supporting Baumgartel and Jeanpierre's view that consideration is a help.

Notes to Chapter 6

1. The checklist is on pp 12 - 15 of The Transfer of Training questionnaire, shown in Appendix C.
2. MMP7, MMP8 and MMP10 : n = 39 leaving 142 managers who were asked to complete the checklist at t1, 107 (75%) did so.
3. The distribution of responses for each factor of the external environment, before and after the return to work, is shown in Appendix E, Table E1.
4. As Note 3 for company structure, Appendix E, Table E2.
5. As Note 3 for company values, Appendix E, Table E3.
6. As Note 3 for the manager's job, Appendix E, Table E4.
7. These are shown in Appendix F, Tables 9 - 17.
8. As Note 3 for other people, Appendix E, Table E5.
9. X^2 tests of significance were conducted in the following manner:

Each of the 61 variables for climate were looked at in terms of the percentage of extraverts and introverts reporting that it helped them or hindered them or it neither helped nor hindered them in their transfer efforts. For example, under the heading AUTONOMY (A1 - A4) the following results were collected.

	HINDER		NEITHER		HELP	
	E	I	E	I	E	I
A1	7.5	21.0	35.8	22.2	56.6	56.8
A2	9.4	18.5	28.3	23.5	62.3	58.0
A3	13.2	16.0	34.0	29.6	52.8	54.3
A4	9.4	12.0	45.3	38.3	45.3	40.7
	0	4	4	0	2	2

A X^2 test was then carried out, firstly on the help vs hinder totals (note that in this case, a higher proportion of introverts than extraverts saw everyone of the autonomy variables as a hindrance - thus producing a score of 4 : 0 - whilst in the category "neither", the position was reversed), and then, because of the large proportion reporting "neither" on many of the variables, on the "help + neither" vs "hinder + neither" variables. Either way, the differences were significant for all four dimensions:

i) help vs hinder

E - I : $X^2(1) = 27.36, p < .005$ ****

S - N : $X^2(1) = 13.26, p < .005$ ****

T - F : $X^2(1) = 24.86, p < .005$ ****

J - P : $X^2(1) = 22.46, p < .005$ ****

ii) help + neither vs hinder + neither

E - I : $X^2(1) = 12.94, p < .005$ ****

S - N : $X^2(1) = 6.0, p < .025$ **

T - F : $X^2(1) = 14.91, p < .005$ ****

J - P : $X^2(1) = 11.08, p < .005$ ****

10. The full results from this table is taken is shown in Appendix E, Table E6.

11. The frequency with which each preference had the highest and lowest proportion of "neither" scores was also tested for significance. This showed whether certain types reported "neither" significantly more often than either help or hinder. The results were significant for three of the four dimensions:

E - I : $X^2(1) = 20.48, p < .005$ ****

S - N : $X^2(1) = 35.72, p < .005$ ****

T - F : $X^2(1) = 17.36, p < .005$ ****

J - P : $X^2(1) = 0.52, p < .05$

CHAPTER 7

TRANSFER IN ACTION : MANAGERS' PERFORMANCE ON THEIR RETURN TO WORK

Having considered the possible determinants of successful transfer, attention is now focussed on how the managers in the study actually performed on their return to work. This was perhaps the most difficult part of all. Had the programme participants been returning to a production line or consumer goods sales force, measurement of performance would have been a relatively straight-forward task. However, as managers, they were all returning to jobs that were multifaceted, unpredictable and crisis-prone; were different from one another; and in the case of the Fls (almost half of the total participants), were different from the jobs they had left behind them.

In order to test null hypothesis 4 (H₀4) that there is no significant difference in the transfer performance between participant managers the researcher decided upon two approaches. The first looked at the performance against twenty specific tasks and is discussed in Part I. The second looked at individual progress against the resolutions that managers had set themselves before their return to work. This is discussed in Part II.

Part I : Performance of Specified Tasks as Perceived by Managers After Their Return to Work

Approach adopted

"Transfer performance" was measured after managers had returned to work by asking them how they "now" felt they would undertake twenty assorted tasks (1). They were asked to rate each task against a 5-point Likert-type

scale ranging from worse through same, a little better, much better to very much better.

Constraints

1. The approach is subjective and relies upon the perceptions of the participants. This is a feature common to all the measures in this study and has been discussed elsewhere but these are the only measures that ask the managers to judge themselves. Because of this; cognitive dissonance may well come into play in one of two ways, either to confirm that they have benefitted from attending the programme or to establish that they did not need to attend it in the first place.
2. The twenty tasks listed were carefully selected so as to be relevant to the C & W manager but, in order to make them applicable to as wide a range of managers as possible, they were of a general managerial nature rather than homing in on specific skills. As a result, direct questions were posed about the subject matter of the IPOS component of the programmes but not about other subjects such as finance and business policy.
3. By qualifying the 5-point scale with comparative labels, the measure taken is a relative one rather than an absolute one. This is necessitated by the lack of an absolute measure before attendance on the programme with which to compare an absolute measure after the programme. The question is phrased so that the respondent becomes his own control. A comparison with himself over time is implicit in the wording of both question and response. Comparing responses between managers is only possible in a relative manner. In other words, one manager may believe he now undertakes a certain task, say delegating work to others, the "same" as before whilst another manager may consider that he is now "very much

better" at delegating. In absolute terms they may well have an identical performance, it depends on what their starting point was. Their "transfer performance" is based not upon how well they do a job but on how much better they now do it.

As the broad objective of all management development is to improve performance, regardless of starting point, relative criteria were felt to be appropriate and acceptable.

4. Some of the questions could not be answered by all managers.

Results and Discussion

The General View

On every one of the 20 tasks someone felt that they would now undertake it very much better. However, on eight of the 20 at least one person felt that they would now do it worse! The full range of scores was used and the overall response approximated a normal curve; the mean scores ranged from 2.58 to 3.50 with a mode of 3. The distribution of responses is shown in Figure 7.1.

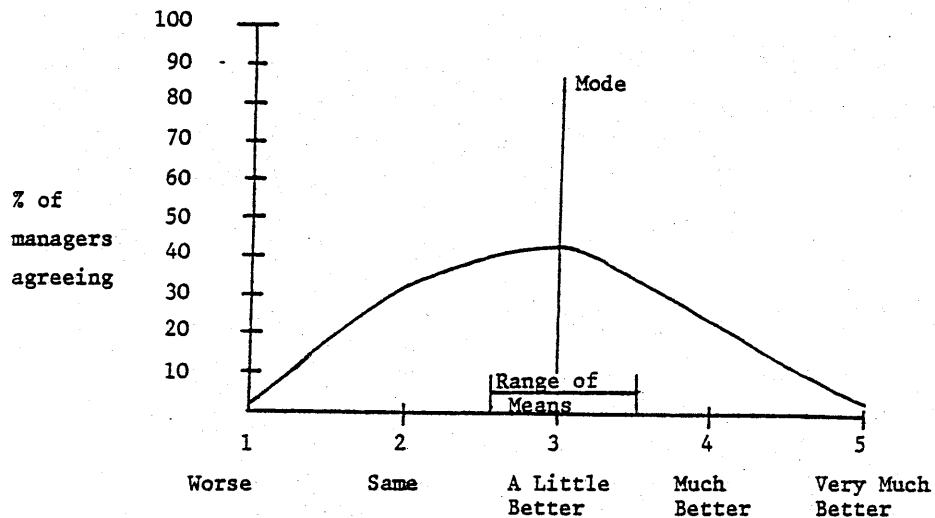


Figure 7.1 : Frequency of responses from all managers on all tasks

When the individual tasks were ranked in order of their mean scores, it was the self-oriented activities on which managers felt they had made the greatest progress. Four out of the top five individual tasks were related to self-management. The full ranking by groups of activities and individual items are shown in Tables 7.1 and 7.2 respectively.

Rank*	Groups of tasks	Mean
1	Self-oriented	3.3
2	Subordinate-oriented	3.0
3	Superior-oriented	3.0
4	Communications-oriented	2.9
5	Company-oriented	2.8

Table 7.1: Managers' perceptions of their performance at groups of tasks back at work (n = 136)

* Ranking based on means at 2 decimal places.

Rank*	Tasks	Mean
1	Recognising my strengths and weaknesses	3.5
2	Taking action on my strengths & weaknesses	3.2
3	Selling myself	3.2
	Encouraging others to do their best work	3.2
5	Sorting out priorities	3.2
6	Presenting a case for internal approval	3.1
7	Delegating work to others	3.1
8	Preparing a case for internal approval	3.1
9	Conducting a performance appraisal	3.0
10	Dealing with unsatisfactory staff	3.0
11	Coping with personal problems of staff	2.9
12	Understanding Company policy	2.9
13	Selling the Company	2.9
14	Approaching another dept for advice	2.9
15	Working with foreign service staff	2.9
16	Approaching Head Office for advice	2.9
17	Handling disagreeable instructions	2.8
18	Handling a meeting with union reps	2.8
19	Reprimanding older but junior staff	2.8
20	Working with Head Office staff	2.8
21	Understanding Company procedures	2.7
22	Working with National staff	2.6

Table 7.2 :Managers' perceptions of their performance at individual tasks back at work (n = 136)

* Ranking based on means at 3 decimal places.

Each task was rated from 1 to 5 in conjunction with the question :

"How much better do you now feel you would undertake the following tasks?"

Different Perceptions Between Groups of Managers

There was little in the overall response to suggest anything unexpected but when the tasks were analysed individually by particular features on the manager profile some significant differences emerged. These are shown, in summary form, in Table 7.3

Performance Variable	Type of Programme	Age	Years of Service	Professional Background	Cable and Wireless Type	OCL Type
1, Selling myself	****	****	**	-	-	-
2, Selling the Company	-	-	-	-	****	-
3, Understanding Company Policy	-	-	-	-	****	-
4, Understanding Company Procedures	-	-	-	*	****	-
5, Sorting out priorities	****	-	-	-	**	-
6, Delegating work to others	****	-	-	-	**	-
7, Encouraging others to do their best work	****	*	-	-	-	-
8, Handling a meeting with union representatives	****	-	-	-	-	-
9, Conducting a performance appraisal	****	-	-	-	-	-
10, Preparing a case for internal approval	****	-	-	-	-	-
11, Presenting a case for internal approval	****	-	-	-	-	-
12, Working with Head Office staff	-	-	-	***	-	-
13, Working with National staff	-	*	-	-	-	-
13, Working with Foreign service staff	-	-	-	*	**	-
14, Approaching Head Office for advice	-	-	-	-	-	-
14, Approaching another dept for advice	-	-	-	-	-	-
15, Reprimanding older but junior staff	****	****	-	-	-	-
16, Dealing with unsatisfactory staff	****	***	-	-	*	-
17, Coping with personal problems	****	-	-	-	-	-
18, Handling disagreeable instructions from above	***	*	*	*	-	-
19, Recognising my strengths and weaknesses	***	-	-	-	-	-
20, Taking action on my strengths and weaknesses	****	-	-	-	-	-
Totals	14	6	2	4	7	0

Table 7.3 : Summary of Significant Differences on Performance Back at Work Between Different Groups of Managers (F Test)

- **** = differences are significant at the .005 level
- *** = differences are significant at the .01 level
- ** = differences are significant at the .025 level
- * = differences are significant at the .05 level
- = no significant difference

Thirty-three significant differences in performance were recorded amongst the various groups of managers. Fourteen of the differences were associated with the type of programme attended; seven with the C & W type of manager; six with age; four with professional background; and two with length of service in the Company. There were no significant differences in performance between the different CCL types.

Performance Back at Work by Type of Programme Attended

The grouping of managers by programme type brought about the greatest number of significant differences. Interestingly enough these excluded all Company-related tasks but included all the others.

The significant differences are shown in Figure 7.2.

On each of the 14 tasks it is always the MMP that scores the highest. Exactly half of the lowest scores are from the MRP and half are from the SMP. All three groups make the greatest improvement on the same task - "recognising your personal strengths and weaknesses" - although there was still a significant difference between them.

If the hypothetical "pass mark" of the midpoint is superimposed, the participants of the MMPs would appear to have effected successful transfer whilst the other two groups have only done so with regard to their personal strengths and weaknesses. There are a number of possible explanations for these differences. Some are a function of the programme attended, others of the managers themselves. The MMP may, because of its more tangible techniques-oriented content, be teaching skills which be more readily transferred. The MMP may, because of its

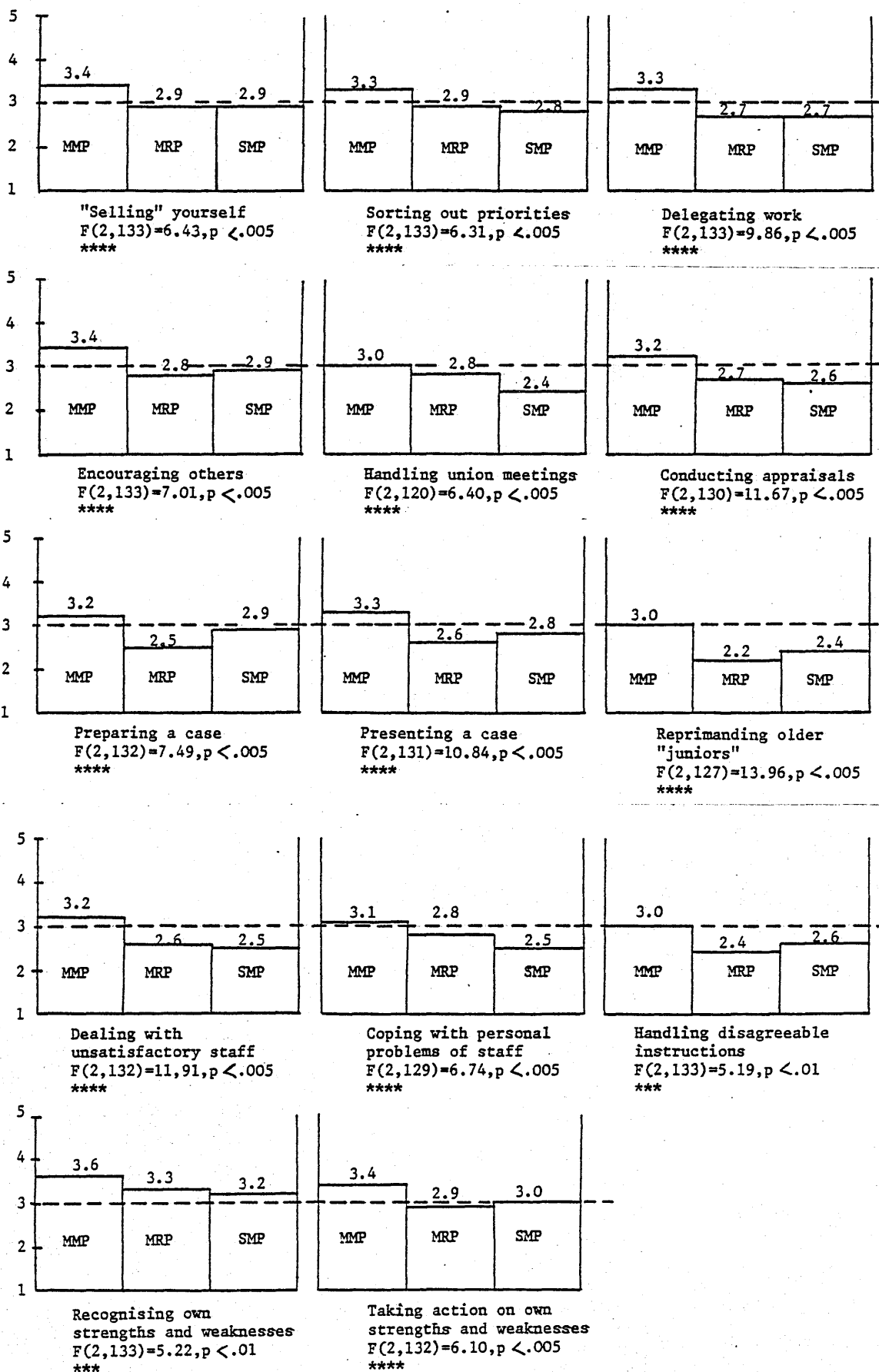


Figure 7.2 : Performance Back at Work : Mean Score by Type of Programme Attended

greater length, five weeks as against two week for both the MRP and SMP, be engendering greater motivation in the participants to change their behaviour on their return to work. The MMs themselves, being less experienced than the SMs and MRs, may have merely "caught up" with the others. Starting from a lower base in terms of managerial experience, the potential for improvement amongst the MMs is greater than for the others. MMs, being younger and possible carrying less responsibility than the MRs and SMs, may have more energy and drive, be more flexible and open to change. On the other hand, MMs may be perceiving their performance in an over-enthusiastic and optimistic manner; the MRs and SMs may be more realistic, pessimistic or cynical (depending on one's viewpoint) about their own performance. Any of these factors in isolation or combination, may be the explanation. In-depth interviewing of a sample of respondents would be helpful to our understanding. What is indisputable is that these managers have different perceptions of their performance back at work depending on the programme they attended.

Performance Back at Work by Cable and Wireless Type of Manager

Seven significant differences were recorded as resulting from the Cable and Wireless categorisation of manager. This time they included items on Company policy and procedures. On each occasion it was the Nats who had the higher scores and "Fl turned HO" staff who had the lower scores as shown in Figure 7.3.

Even on those tasks on which the difference was not significant, Nats had the highest scores for every task. Once again, "recognising my strengths and weaknesses" was given the highest score by each group.

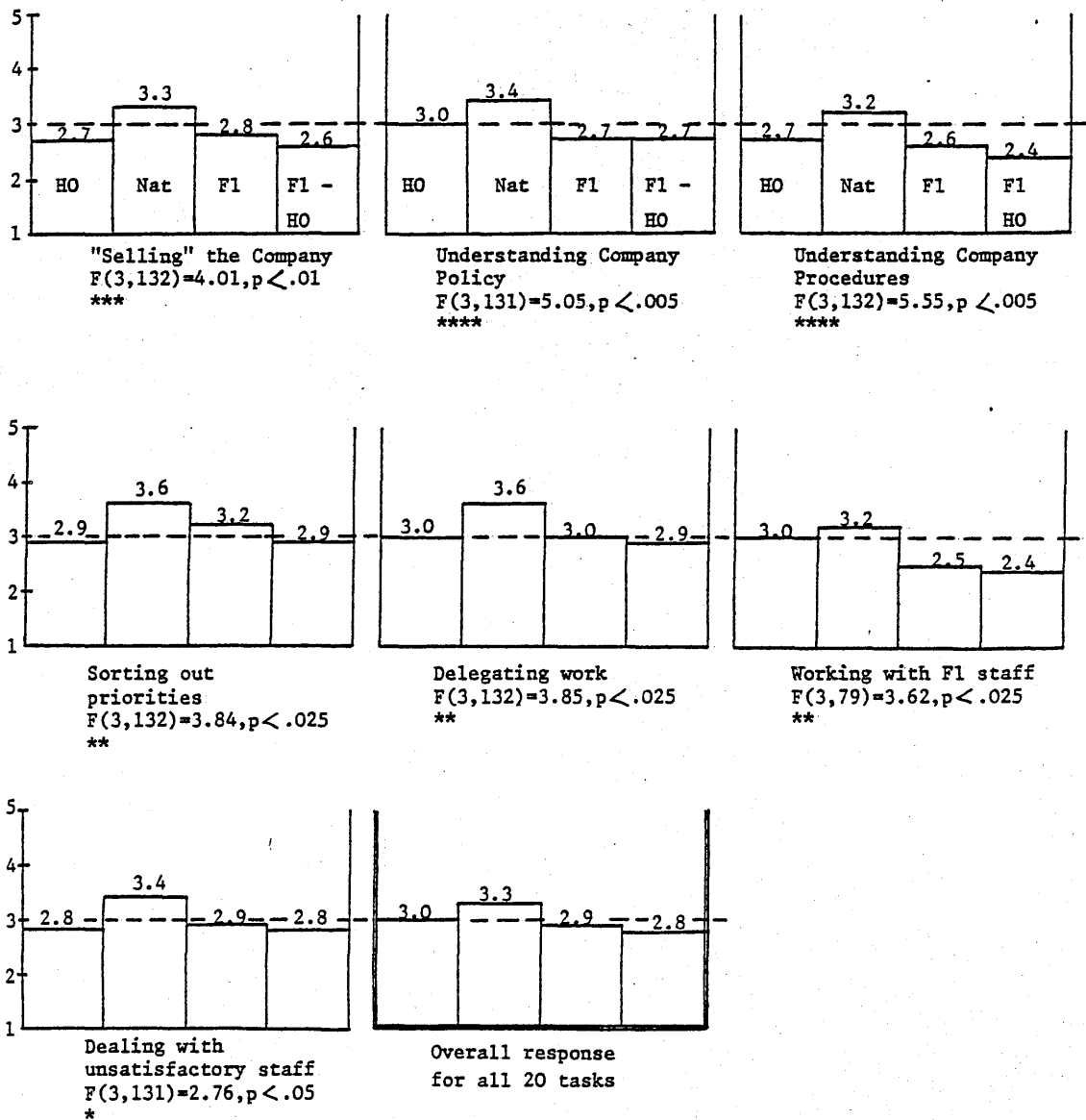


Figure 7.3 : Performance Back at Work; Mean Scores by Cable and Wireless Type of Manager

The National staff, who attended only the MMP, clearly perceived themselves as doing a better job after their participation on the programme. Either that or they were being excessively polite. They seem to have made particular advances in terms of understanding how and why the Company operates in the way it does. This perhaps highlights an area for improved in-house training.

Performance Back at Work by Age

Age was the third most frequent factor with which performance varied significantly. The six tasks on which there was a significant difference between age groups are shown in Figure 7.4.

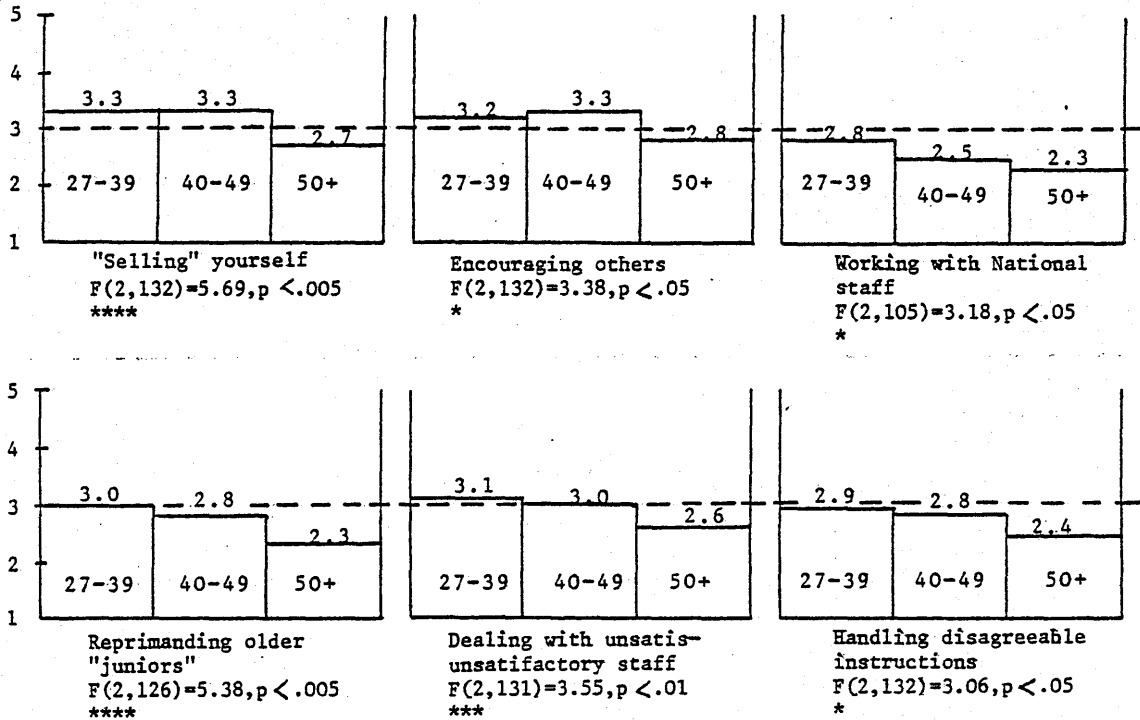


Figure 7.4 : Performance back at work; mean scores by age

Figure 7.4 shows clearly that the older managers, those aged 50 and over, find their performance at work to be influenced less by the management programme they attended than do the younger managers. This trend is continued throughout all twenty tasks. In every one of them, the older age group have the lowest scores for improved performance as a result of the programme. Managers under 40 and those in their forties often record similar scores but for 70% of tasks, the youngest group has the highest score suggesting a fairly strong link between age and transfer.

Performance Back at Work by Professional Background

On many of the tasks there was very little difference between perceptions. When differences did occur, engineers gained more on those tasks demanding more "outgoing behaviour; the non-engineers gained greater understanding of the way the Company worked and felt better able to interact with other groups of staff. These improvements in performance may well reflect former areas of weakness which the programme has been able to help correct. The tasks on which significant differences occurred all emphasise the progress made by managers with an non-engineering background. They are shown in Figure 7.5.

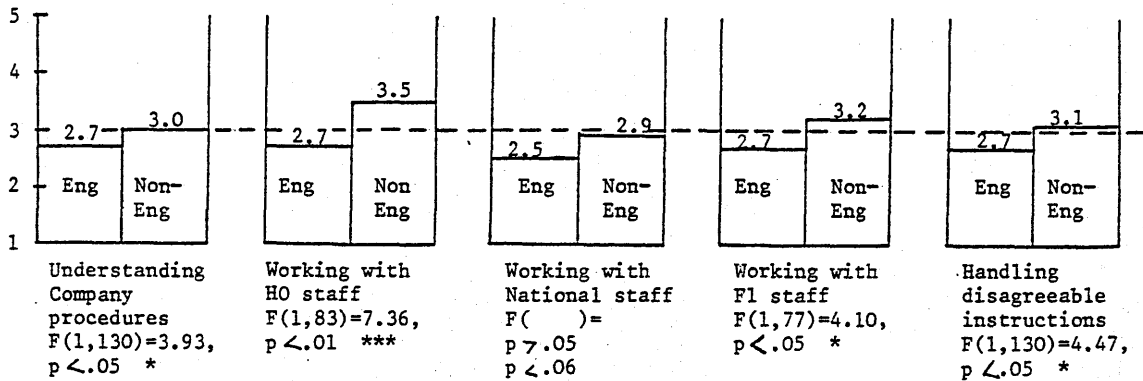


Figure 7.5 : Performance back at work; mean scores by Professional Background

Performance at Work by Length of Service

Despite its links with age and type of programme attended, the number of years a manager had been with the Company when he attended his programme caused few differences in his performance on his return to work. The general trend was for perceived improvements in performance to vary inversely with length of service in the Company.

However, the differences were only significant in connection with two tasks. These are shown in Figure 7.6.

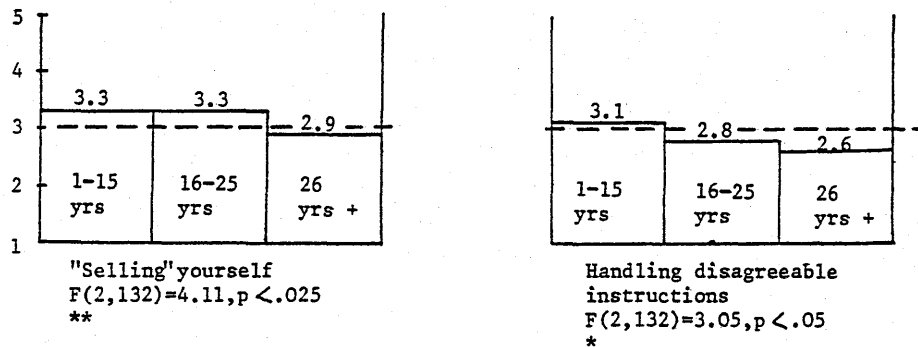


Figure 7.6 : Performance back at Work; mean scores by length service with the Company

The Individual Tasks

Only one of the twenty tasks was not the object of a significant difference. It was "approaching Head Office/ another Department for advice." On all other tasks there was at least one significant difference. The task attracting the most controversy was "handling instructions from above with which you do not agree". Significant differences on this occurred between managers who attended different programmes, were of different ages, with different length of service and professional background. Those managers who felt they were now more able to cope with this tricky problem were most likely to be young non-engineers, who had been with the Company for less than fifteen years and attended an MMP. (Perhaps the old, long-serving senior engineers were issuing the instructions!) The only other tasks to attract more than two significant differences were "selling myself" and "dealing with a member of my staff whose general standard of work is unsatisfactory". Both created differences in three of the six groups.

Conclusion

H₀4 that "there is no significant difference in transfer performance between participant managers" is rejected by this evidence. When the transfer process is measured by managers' perceptions of how they undertook specified tasks after the programme compared to their perceptions of how they did the same tasks beforehand, it is clear that differences do exist. These are greatest, both in numeracy and reliability, between the different types of programmes attended, category of staff and age group.

Transfer is most likely to occur amongst young MMs, particularly National staff. It is least likely amongst F1 staff in their fifties, particularly those who have moved to permanent jobs in HO and attended the MRP or SMP.

Had the null hypothesis been measured purely in terms of CCL type, it would have been confirmed. Whilst the visionaries and trouble-shooters consistently recorded higher transfer scores than the traditionalists and catalysts, the differences amongst the four groups were never sufficient for a 95% level of significance.

Part II : Performance Regarding Personal Resolutions Set by Managers Before Their Return to Work

Approach Adopted

At the end of their programme, managers were asked to make at least one and not more than three "resolutions" to try to transfer something that they had learnt on the programme back to their place of work. In the follow-up questionnaire they were reminded of the resolution they had submitted and were asked to comment on their progress with its implementation (2).

Constraints

1. The request that managers should make a resolution before returning to work was introduced in June 1978. This means that the 39 managers attending programmes run before that date (MMP7, MMP8 and MMP10) were not asked to submit any proposals; the subsequent 142 managers were asked.

Results and Discussion

The General View

A resolution was made by 43% of all the managers. Of the remainder, 36% chose not to set a resolution and 21% had not been asked to. In other words, 55% of those asked set resolutions. Managers were asked to set at least one and not more than three resolutions. Of those asked, 45% set none; 25% set one; 20% set two and 10% set three.

SMs tended to set more Company specific resolutions than the MRs and MMs who were more concerned with personal development and their immediate jobs. SMs also tended to report greater "success" than other managers who often found their efforts thwarted.

Some resolutions typical of the SMs were to:

- * *"adopt the project planning system used by CCS in the PT forum.*
- * *Get a written succession manpower plan.*
- * *Institute through the Group a policy of vertical integration through acquisitions in the U.S.A. and Europe.*

- * *Rejuvenation of the marketing effort. Utilization of market audit and techniques which have been described on the programme.*
- * *Consider the result, and how it may be effected, of increased delegation of authority to branch managers from HO.*

They also pledged their energy to improving the "people" side of C & W:

- * *Improve participation of subordinates in decision-making process.*
- * *Increase delegation to subordinates in an attempt to stretch their abilities.*
- * *Instigate regular management meetings in order that better interpersonal relationships can be established.*
- * *Make the people who work with me plan better.*
- * *Pay close attention to the issue of "feedback" in interpersonal skills to ensure that subordinates fully understand what is expected of them."*

The resolutions set by the MRs and MMs had a greater tendency to relate to their own behaviour rather than to that of others, or the Company. This reflected their more restricted sphere of influence. The comments they made about their progress were often positive but sometimes negative - generally due to insufficient opportunity resulting from a temporary or non-managerial job and too little real authority.

Some of their resolutions and commentary on their progress are quoted below. Perhaps the most popular resolution was to encourage team building:

"* I will organise my staff members to work together as a team and hope that everyone will be able to respect one another's views. I anticipate no difficulty once I get the co-operation of the staff members concerned— — — I have had no difficulty with my staff. I am pleased to say that all is proceeding smoothly. The occasional bickering has died down and all that is now needed is to motivate everyone to a high level of performance....

* To foster and develop further inter-relationships among my own staff as means to better performance for the Section. The present rigid salary structure will be a hinderance— — — Team spirit is increasingly noticeable in the Sections under my control. A system of job-rotation is in force and is showing tangible benefits both in terms of productivity and staff career development. The existing (and foreseeable) salary structure is still a hindrance. Reward is often not commensurate with actual responsibilities

* To hold more consultation meetings, more frequently, with my staff and endeavour to bolster morale at regular intervals— — — This was indeed done, and I think, some success achieved, but the cards were rather stacked against one. Maintaining morale in an environment where little of practical consequence ever seems to be achieved is always difficult

* To organise a joint advisory committee in my department— — — I have submitted a proposal to my superior. Unfortunately, because of the rapid expansion of this Section and many other special projects, we are faced with a heavy workload. The achievement of the resultion has to be delayed

One manager found that his two resolutions combined in an unexpected way:

* (1) to encourage a better working relationship with my staff and (2) try to achieve a more fulfilling role within the scope of the department — — — The first of these resolutions has been fairly successfully achieved and a much better and happier "team" has resulted. The second has not been achieved, although there are signs of change within the Company and the attitude of management. However, there is still a reluctance to admit change amongst many senior managers on the basis of "this is the way it has always been done." In the next few years, I think there will be considerable changes (partly due to retirements) which will result in a better climate. Looking back I think that, as I gain much needed experience in handling staff and as a consequence help to achieve some success with my first resolution, I am in fact also achieving a certain amount of enjoyment which is beginning to mean some success with the second resolution in a different way to that which I had imagined

For a number of managers, progress was very personal:

" I have actually caught myself avoiding a decision which was truly mine. Noticing is the thing!

.... I consult more with my colleagues than previously but I know my boss considers that I still do not consult enough. However, I fully understand that group decisions are usually much better than individual ones so "if in doubt, consult" is a good maxim which I would not have learnt other than by attending the MMP

.... I now question more closely those people who tell me things I do not understand. This especially applies to the bullshit merchants, of whom there are an inordinate number in C & W

* I may seek a change of job within C & W. My recent training may help but my age and technical specialisation will probably hinder— — — I have had interviews for two positions within C & W but was unsuccessful in each case - I will keep on trying if I see a job that appeals to me

Relationships with subordinates proved a fertile ground for improvement.

* Feedback of subordinate's performance so as to improve motivation— — — I think I have improved on this. I still need to remind myself consciously that feedback is very important

* Greater feedback to staff— — — I have made a conscious effort to keep my staff better informed of Departmental activities, future plans and their own performance levels against required standards

* Application of the Vroom-Yetton model in trying to assess what kind of involvement of my subordinates I should encourage in decision-making— — — I have a better feeling for when and when not to delegate, particularly the latter

* Reassess my managerial style and make the appropriate modifications when dealing with my subordinates— — — Reassessment was easy, putting it into practice was difficult! I made some headway when dealing with subordinates but there remains the managerial problem of relationships with subordinates when there is a mutual dislike for each other.

* Take a keener interest in encouraging my immediate subordinate to delegate more, to fulfil his immediate subordinates' needs for responsibility, their need to feel useful etc. As they are subject to my immediate influence, there should be no problem— — — Progress has

been less than spectacular! Whilst not wishing to appear apologist for my lack of success, it must be said that I tried, that I have had perhaps a very modest amount of success but that implementation of a resolution such as mine requires, in part, a fairly fundamental change on the part of the individual concerned. If this change is to be made it would require the individual to mature rapidly, which, in turn, calls into question the means, or even the desirability, of trying to change the development/ personality of an individual to achieve an, albeit honourable, end. Simply stated, it is very difficult to stop people being what they are, even if their behaviour appears to adversely affect others

Some managers took the bold step of attempting to tame their bosses:

* I will attempt to explain the nature of a consultative style of management to my superior as I am convinced that, in my department, this would greatly improve efficiency and morale — — — attempted and quite sympathetically received; which surprised me. However, there have been few signs of a change in management styles Sometimes I feel that only the intervention of an outside agency will speed up the process

* I will make a determined effort to understand my boss (2 levels up), appreciate his viewpoint and create a constructive working relationship, without abrogating responsibility for my particular function. Helping me will be my immediate boss who has a supportive and participative style which I find helpful, my peers and the greater insight I now have into my own behaviour. The apparently rigid and autocratic style with which the (higher level) manager operates will make this resolution particularly difficult — — — I now have a much better working relationship with my boss. To what extent this is due to a modification of my, or his attitudes; a longer-

established relationship; or his acceptance (after initial over-caution in his new job) that I occasionally have sound and practical ideas, I don't know. Strangely enough, my immediate superior seems to have abrogated responsibility for my department in recent months. In some ways this is helpful in view of the better relationship. I now have established with his boss but it sometimes leaves me feeling a little out on a limb. (This could be because their relationship is not particularly happy)

Finally, there were those who took on the challenge of introducing management techniques and using the available management information more effectively:

** To introduce the short-term forecast methods learned at Cranfield, alongside those we already use, in order to determine whether there is an improvement in our guesswork*

** To use the accounting information*

** To make greater use of network analysis*

** To improve short-term planning.*

** To work out a long-term policy for C & W Telex in view of threats and opportunities; a kind of corporate plan for telex*

All these manager were able to report success with their resolutions except the last one who was moved and had to leave it to his successor.

This sample of resolutions and associated comments has been described at length and in the managers' own words, to show the concern, effort and sincerity with which so many of them undertook the task of transfer. Not all of them were successful but most of them had tried and some are

still trying. Whether "successful" or not, most of the managers learnt something from their efforts, even if it were only that nothing is simple and that one solution often leads to another problem. Most important of all it got them thinking - about themselves, their job, the Company, the people they work with, the ethics and effectiveness of their actions. It caused them to be reflective and gave them a sense of purpose. The words quoted above were written by managers working in all parts of the world. As such they undoubtedly reflect local problems but, taken together, they mirror many of the Company-wide issues that have already surfaced in this study.

Categorising the "areas" in which resolutions were made at the end of the programmes gives an indication of those topics covered at Cranfield that managers felt should be transferred back to the Company. An element of personal preference and what they perceived as realistic would also have influenced their decision.

Of the 136 resolutions set, 5% were in the area of finance and accounting; 11% in the area of business environment and marketing; 11% in operations management; and a staggering 73% were in the human resources area of interpersonal and organisational skills.

The "aspect" of the resolutions can also be usefully examined. A content analysis revealed nine categories into which the resolutions fell. The three most popular were those pertaining to subordinates (34%), planning and forecasting (20%) and self-development (14%).

The matrix in Table 7.4 shows how the "area" and the "aspect" of the resolutions related to one another.

Area Aspect	Finance and Accounting	Business Environment & Marketing	Operations Management	Interpersonal & Organ- isational Skills	Overall
Budgetary Control	3%			1%	4%
Marketing		3%			3%
Planning & Forecasting	1%	3%	7%	9%	20%
Networks & Computers				3%	3%
Decision - making			1%	10%	11%
Self- development	1%	2%		11%	14%
Subordinates		2%	2%	30%	34%
Superiors				4%	4%
Dep/Org Structure		1%	1%	5%	7%
Overall	5%	11%	11%	73%	100%

Table 7.4 : Matrix of the Area and Aspect of the Resolutions

The matrix highlights the important themes of the programme such as working with and through others and the importance of planning. It also draws attention to the area in which managers feel that they have understood something sufficiently well to attempt its application on their own, without any further assistance or tuition. Quite clearly, the human resources area of interpersonal and organisational skills is the area in which managers

feel most competent to try something new. The choice of resolution also reflects two other important considerations. One is the need which the manager perceives the Company to have for certain modifications. The other is the opportunity that he is likely to have to effect any changes. Broad business policy issues and the like are frequently outside his sphere of influence. Interacting with his immediate co-workers is not.

After their return to work, managers were asked to comment on the progress they had been able to make on their resolutions and for their more general comments. Their responses fell into the categories shown in figures 7.7 - 7.10.

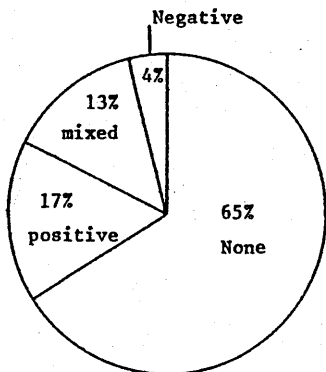


Figure 7.7 : Resolution Comments (n = 181)

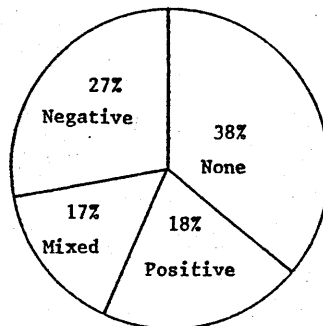


Figure 7.8 : General Comments (n = 181)

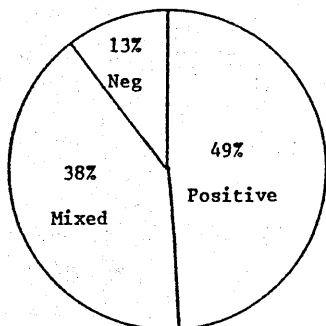


Figure 7.9 : Resolution comments excluding 'none' (n = 63)

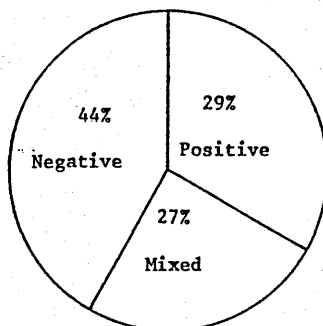


Figure 7.10 : General comments excluding 'none' (n = 122)

When managers wrote about their resolutions few (only 13%) were wholly negative in their comments. Virtually half of them (49%) made only positive comments and the remaining 38% had mixed experiences to report. However, a less rosy picture was presented by the general comments made on the transfer process. Almost twice as many managers voiced their opinions here. Of them, almost half (44%) made entirely negative comments, a further quarter (27%) made partly negative remarks, leaving only (29%) to make purely positive comments.

Negative comments fell into five main categories.

These were:

1. responsibility without authority;
2. problems of communication;
3. feelings of hopelessness;
4. a diminishing regard for the Company;
5. lack of opportunity.

The examples that follow draw on all levels of manager. They were (with one exception) all managers who had not set a resolution and were responding to the request "please describe what progress you have made in general"....

"... very little due to the closed minds of some senior managers who, while passing down responsibility, fail to share their authority. Also, the secrecy with which decisions are taken makes one feel that one's efforts are ignored..."

That was a SM; this problem is not restricted to the middle levels. The next commentary is made by a MM who has found

a solution of sorts but the outcome is still one of frustration.

"My current job has a high level of responsibility with a non-commensurate low level of authority. My superiors expect rapid results from my department which has not had any real control since its birth a year ago. All my "subordinates" are employed by a sub-contractor who does not recognise my position in terms of authority, and my superiors are reluctant to demand such recognition for political reasons.

I am told to do the best I can while at the same time having it stressed that great improvements in output are expected rapidly.

Consequently, I must use a great deal of tact when doing the job together with unobtrusive supervision. I am surprised that this approach appears to be working to a certain extent but it can never be a satisfactory situation.

I feel that, of necessity, my understanding of my "subordinates" has developed more than it would have done in a different situation but feel that certain situations would resolve themselves easier if I were free to use more than diplomacy in these relationships. I can of course expand my techniques when dealing with my superiors but I seem to have little success in that direction.

In general I feel frustrated about this lack of authority but I guess that frustration is common amongst most middle managers in C & W."

Indeed, some managers come to live with the frustration :

"The greatest dissatisfaction with the job is lack of authority and control that I personally exercise over the working environment. Consequently problems I was able to forecast and advertise (from my previous experience) have come about but since I did not control the means of avoiding or minimising them, the corrective actions now being applied are rather late in the day. .

I continue to be frustrated by the lack of executive authority to implement my ideas but very much enjoy the "hustle" and debate involved in the job..."

The importance of having authority is emphasised by the next manager:

"... I am making some progress. The reason? Being made responsible for the total performance - commercial, financial, engineering and man management of a mixed group of staff (Nat & Fl) to achieve the business aims of part of a small business (140 people)."

Communication is always a problem in large companies but the experiences expressed by the following two managers - both working in HO - go beyond the usual complaints:

I do not believe that the majority of people (with whom I am in contact) understand the verb "to communicate" and although I have spoken to my superior on this matter there is a manifest antipathy to any suggestion I propose. Consequently no progress has been made or will be made before his impending retirement...."

"... One of the main difficulties has been whether or not I am talking the "same language" as senior management in this organisation which often regrettably is not the case as regards objectives of my own department and also means of achieving same. One of the crucial differences lies in the problem of setting long- and short-term objectives and then finding either or both upset by the expediency of the moment!"

The frustrations described by so many managers have led some to a feeling of hopelessness in others who, unable to effect change in C & W, are now thinking of leaving it, often after a career of some twenty years. One manager to have made the break, completed the Transfer of Training Questionnaire from his new Company:

"... on my return to HO (from Cranfield) I found that my understanding of people, the financial setup etc. had improved and because of this my enthusiasm increased - I found that I understood (as I believed) and thus I tackled barriers that I might have shrunk away from previously. The problem was, that I became aware after a period of time that although I had changed the system hadn't and thus the only alternative for me at that time was to look for a move. Three other senior people within my department were also going through the same period of indecision (they eventually left as well). I found I could understand what motivated them! In my new job I have found that the course has helped me tremendously - I would like other people from this organisation to have the benefit of a Cranfield course.

Funny thing though - I still get frustrated, perhaps not to the same extent - I can have an impact on inertia here - within C & W there was no chance."

Other managers are sticking with the Company but their attitude towards it has hardened:

"Nothing has changed so far; I have to follow the Company's instructions to carry out my work. Unfortunately, since attending the Cranfield programme, I find more dis-satisfaction with the Company...."

I have gained promotion which was an objective I set myself. I also wished to gain experience in a wider field of work which, due to current circumstances, has turned out OK. However, the regard I have for the Company is not what it used to be. I'm more convinced that C & W management has much to answer for in relation to our current problems."

The lack of opportunity to manage has become a familiar theme in this study, it is even recognised by those who do have it ...

"...perhaps I have been one of the lucky ones, because I feel activities in my present position have allowed any new skill attained at Cranfield to be utilised. However, I am still very much aware that I could have dropped into some mediocre backwater and felt thoroughly frustrated..."

"...I have been seconded to a foreign company in the Middle East and this has been a good experience but, in the months following Cranfield, I worked in HO and a more soul-destroying, out-of-phase management team in comparison with the course ideals would be hard to find..."

Some managers were given the opportunity to make the transition from engineering to management, but not everybody:

"... the total experience of the five weeks has enabled me to "place" myself within C & W and provided the basis on which I have felt able to make the difficult transition from "doing" to "managing". Were this to be the only product (and I'm sure it will not be) it would, for me, be wholly worth while...."

"... all in all I feel that a lot of useful ground was covered which will continue to form a useful background to my switch from engineering to managerial problems.."

"... In attempting to improve the engineering and technical standards of the Company, and the general proficiency and professional approach on engineering consultancy matter; some progress.

In all other matters pure frustration.."

Not everyone had negative comments to make about their progress in transferring what they had learnt at Cranfield back to work:

"... I applied a lot of what was taken on the course - accounting, project management, interpersonal skills and economics - in the position I held as Branch Accountant. It also helped me to reassess my staff and pursue more staff development and delegation.

This was very satisfying as business has been increasing 30% - 35% per year yet I have seen a very smooth transition and have not felt the weight of the increased work load even though no additional staff were recruited..."

"... I have been able to make use of my training in Investment Appraisal and Project Analysis both within the Company and in extra-curricular situations.

There is a greater degree of confidence in making decisions involving expenditure of Company resources, and a greater awareness of the Company's relation to the new areas of non-traditional business, possible in this area. To further generalize the Cranfield course has assisted in broadening my methods in a number of ways, some unconnected with C & W. Others definitely relevant but not applicable within the context of the existing organisational structure on this Branch..."

"... After attending the course at Cranfield my job was changed and I am now responsible for the work of more than 200 people. It was difficult to make a resolution at Cranfield since I did not know what the job would entail.

Looking back, the organisational behaviour part of the Cranfield course has helped tremendously together with interpersonal skills. One of the problems that I face is weak junior and middle managers, who have forgotten (if they ever knew) how to delegate and manage instead of being specialist engineers.

A re-organisation is being implemented and all managers encouraged to communicate with each other to work as a team instead of in isolation. Budgeting has been introduced..."

"... I did not see the Cranfield programme in terms of teaching me something which would enable me to improve my management technique by making fundamental changes in my attitude and approach to the job, or by 'mending my ways', etc. Rather, it broadened my awareness of a number of aspects of management which, although I had known of them previously, were unclear in my mind, or required re-enforcement. In addition, in normal working life,

it does not appear that people are willing to talk about management whereas putting a group together at Cranfield does bring this about. The whole experience has improved my self-assurance in the management area. In this way it has improved my overall ability to deal with the general problems which arise from day to day."

Some of the comments focussed as much on the Cranfield experience as on the transfer process. To provide some flavour of the comments, contrasting views of two SMS are given below:

"... difficult to assess as one seems to be jumping off into one deep end after another.

However, the value of a course such as that held at Cranfield lies largely in the congenial surroundings which foster free, frank and relaxed discussions and interchange of ideas and experiences in the general approach to and solution of problems encountered.

This discussion leads to the creation of a fund of vicarious experience to enhance the actual experience of the individual (myself). I accept this vicarious experience as valid in general because from my personal knowledge most of those in the group have a common working experience/training (many of the group joined the Company with me and we trained together).

The progress (such as it is) that I have made is basically in being able to understand the jargon and methodology of the general business scene. This is particularly significant to one coming from an almost purely technical working background where one tends to deal with absolutes.

People, and therefore money and contracts, do not behave

like machines - and the recognition of this is probably the greatest hurdle to overcome in the transition from technology to administration. The contribution that Cranfield has made to understanding this is very large..."

"... I regret that I was exposed to the Cranfield environment at such a late stage in my career; however as I attended as a substitute for a younger member of the department there seems little point in making a recommendation regarding the maximum age of those attending.

I am sorry to have to say that I thought from a Company view the course was a waste of money and from my "work" view a complete waste of time.

Of course some of the lecturers were entertaining and often appeared as "music hall" turns with a polished script but with little relevance to C & W. By comparison the Company lecturers were in the main amateurish but their content was what was required for a Company oriented course.

To say the business game was silly is as kind as I can be and the pencil with the erasure attached has been most useful."

After so many negative comments about the Company, C & W readers may be relieved that Cranfield does not get off scot-free either!

Different Perceptions Between Groups of Managers

The programme attended and C & W category of manager are the most important determinants for the setting of resolutions and making of comments. This is clearly

shown in Table 7.3 which summarises the differences between managers found to be significant by the X^2 test.

On the setting of resolutions, SMs were far more likely to do so and MMs were less likely to ($X^2(2)=7.8, p<0.5^*$). 54% of all the managers set resolutions but only 44% of all MMs did whilst 67% of all SMs and 60% of all MRs did. MMs also tended to set fewer resolutions and SMs more than would be expected ($X^2(6)=16.33, p<.025^{**}$. If zero excluded then $X^2(4)=2.04, p>.05$).

The area in which the resolution was set also varied by type of programme ($X^2(6)=12.73, p<.05^*$). MMs set fewer on finance and business environment than expected, they were on target with operations management and high on IPOS. The MRs were consistent with expectation on all the subject areas but SMs were low on IPOS, high on finance and operations management and very high on business environment and marketing.

When the comments made about the progress made with the resolutions is analysed, there are noticeably more positive comments made by the MMs; more negative comments made by the MRs; and more mixed comments made by the SMs ($X^2(6)=15.16, p<.025^{**}$; if zero excluded (E) too small).

Other comments, those describing general progress, vary by the type of programme and the number of years service with the Company. Only 9% of the comments made by MRs and 13% of those made by SMs are positive, compared with 23% of those made by MMs. The three groups are much closer when making negative comments - 26% of SMs, 27% of MMs and 30% of MRs. The MMs are more forthcoming with their remarks than the other two groups only 29% having no comment to make compared with 48% of MRs and 54% of SMs. This may be because fewer of the MMs have

resolutions to carry their remarks. ($X^2(6)=14.4, p < .05^*$).

Perhaps even more revealing to the difference caused by length of service ($X^2(6)=16.46, p < .025^{**}$). Over half of the negative comments came from managers with 26 years or more service with the Company. Almost three-quarters of the positive comments came from managers with 16-25 years service. Those managers with up to 15 years had mixed views with an emphasis on the positive. What does this mean? Are the managers who have given their lives to this Company disillusioned and bitter? Are they, and the managers who have been with the Company for less than 15 years, those managers deprived of the opportunity to "manage". Are the positive group, who have both experience and opportunity, optimistic and energetic enough to carry C & W into the future?

Notes to Chapter 7

1. These are shown on pp 7 - 9 of The Transfer of Training questionnaire in Appendix C.
2. See pp 16 - 19 of The Transfer of Training questionnaire in Appendix C.

CHAPTER 8

RESEARCH CONCLUSIONS : IMPLICATIONS AND RECOMMENDATIONS

After some 400 pages of argument, evidence and speculation, what are the conclusions to be drawn from this study? What are their implications for the transfer of training; for the setting up of joint ventures; for Cranfield; and for C & W? What specific recommendations can be made as a result of these findings?

At the beginning of this thesis, on Page 1, two questions were asked: these were "to what extent do managers apply what they have learnt in the classroom to the jobs they subsequently do?" and "what are the important factors affecting this process of transfer?" Can these questions now be answered? Briefly, transfer depends on having learnt something worth transferring and how to go about it; on having the formal opportunity and the informal support to attempt transfer; and on having the energy, enthusiasm and insight to try. Many factors influence the transfer process. The factors emerging as important from this study are summarised in Part I of this chapter. In Part II the main issues arising are discussed. The theoretical implications of the study, together with its methodological context, are the subject of Chapter 9.

Part I : Summary of the Field Study

The field study conducted into the transfer of training posed and tested four null hypotheses. Some of those null hypotheses were upheld and some were rejected. What is the relevance of their outcome?

The different perceptions held by managers about the programme they attended, the climate in which they work and the new behaviour they feel able to exhibit on their

return depended more heavily on some features of the managerial profile than on others. Table 8.1 summarises the significant differences found when each of the null hypotheses was tested. It shows how the determinants of differences fall into three groups. These were, in order of influence:

Features of Greatest Importance

1. type of programme attended;
2. C & W category of managers;

Features of Some Importance

3. age at date of programme;
4. Myers-Briggs dimensions;
5. professional background;

Features of Little Importance

6. length of service in the Company;
7. CCL category of management style.

Managers Profile Null Hypotheses	Prog Type	Age	Service	Prof	C & W Type	CCL Type	MBTI dimension
Attributes H ₀ 1 : Managers	2	4	5	2	2	3	N/T
Perceptions H ₀ 2 : Programme	6(13)	1	-	1	-	-	N/T
H ₀ 3 : Climate	6	6	N/T	3	12	2	18
H ₀ 4 : Performance Resolutions	14	6	2	4	7	-	N/T
Totals	26(39)	13	2	8	19	2	18

Table 8.1 : Summary of Significant Differences between Managers by Profile

(Figures in brackets include possible double-counting - these are not used in the discussion . N/T = Not tested)

1-2 : Features of Greatest Importance

Type of programme attended and C & W category of manager accounted for 51% of the differences found between the managers' perceptions.

The MMPs differed from the others in that the managers were younger and included national staff. Managers on the MRPs tended to be much older although a few younger men were included. The Fls attending the programmes were unlike the HOs and Nats in that two-thirds of them had between 16-25 years service whilst the others were fairly evenly spread between 1-35 years.

Some of the differences in perceptions of the programmes were accounted for by the type of programme attended but none were accounted for by the C & W type of manager.

At the end of the programmes all managers shared very favourable perceptions of the programme they had attended but later, looking back, many of them changed their minds. Although there were differences within the programme types, that is between individual programmes, the over-riding message was that MMs were the most satisfied and MRs were the least satisfied. SMs had mixed feelings. The satisfaction they felt with the programme content was reiterated in the benefits they perceived in their jobs: three-quarters of the MMs; two-thirds of the SMs and one-half of the MRs made positive observations.

The managers' comments about the programmes varied with the type of programme they had attended. Their priorities and interests were clearly different. SMs were more interested in the business environment, MRs in their specific jobs and MMs in the people with whom they worked. These preferences were echoed in the choice of resolutions made at the end of the programme and undertaken back at work.

In their perceptions of the climate there was virtually no difference between the level of managers (as reflected by the type of programme attended) other than in the characteristics of their jobs. MRs found their workload a hindrance and SMS were hindered by their lack of contact with others and general lack of evaluation criteria. MMs on the contrary found these all to be positive in their jobs. MMs also found the opportunities for experimentation and the relevance of Cranfield to be more helpful to their transfer efforts than did the SMS and MRs.

More important to different perceptions of climate was whether the manager was HO, Nat or Fl. The most prevalent difference on aspects of the external environment, the internal environment and the managers job was that HO managers, particularly those who were former Fl staff, perceived the climate as inhibitive whilst the Nats perceived it as facilitative to their transfer of training. On the influence of other people there was no difference but on the other aspects of climate, particularly the organisational structure, the difference was marked.

The difference was continued into the perceptions of performance back at work. On everyone of the 20 tasks the Nats reported more transfer than did the other types. This was most significant on the topics to do with Company policy and procedure. Again, at the opposite end of the scale, were those Fls who had become full-time HO staff.

Even more significant on the 20 tasks was the success reported by the MMs. They perceived greater transfer on all 14 tasks not directly associated with Company policy and procedure. The SMS and MRs shared the lowest

scores (7 each) and all three groups scored their personal best on "recognising my own strengths and weaknesses".

On the setting of resolutions, SMs set more than MMs and on different subjects. The resolutions set by MMs were overwhelmingly in the area of IPOS whilst SMs set relatively few in this area and many more in the other areas, especially business environment.

3-5 : Features of Some Importance

Age, professional background and preferences on the Myers-Briggs dimensions accounted for 44% of the differences in perceptions. As the Myers-Briggs dimensions were only set against climate they create a special case (discussed in Chapter 6, pp 340 - 8) but the other two had more general application.

Age and professional background were linked: managers over 40 were more likely to have an engineering background than those under 40. Age was also linked with length of service and type of programme attended.

Non-engineers found the influence of HO a help but the links between Departments a hindrance. Young managers (under 40) also found the influence of HO helpful. They felt that their physical working environment hindered them but found the opportunities for experimentation and freedom to act on their own judgements helpful. The older managers (over 50) were unmoved by such considerations.

The youngest group of managers (under 40) had the highest scores in 14 of the 20 transfer tasks and the oldest group (over 50) had the lowest scores on all 20. Non-engineers made more progress than engineers on all 20

tasks, although only four were significantly different.

6-7 : Features of Little Importance

Length of service with the Company and CCL category of management style were responsible for only 5% of the differences in perceptions regarding the transfer of training.

Part II : Issues Arising from the Findings

Amongst the many findings a number of themes recur to the extent that they provide issues for further discussion. Those selected for consideration here are: the programmes, selection, change, opportunities, benefits and self-awareness.

The Cranfield Programmes : Were They Successful?

The programmes had their ups and downs but overall they can be said to have enjoyed considerable success. Managers express an equally high level of satisfaction at the end of their programmes. This agreement, however, is not sustained after their return to work when a number of managers change their minds as to the value and relevance of certain subjects taught them. The implication of this for Cranfield, is that end-of-programme evaluation is not enough : suspected by Miles (1964) as euphoric, this does seem to be the case. A second phase of evaluation should always be conducted after the managers have returned to work.

The C & W managers enjoyed being at Cranfield, they found the atmosphere and the facilities conducive to study and discussion. They also gained great pleasure and value from meeting one another, academic staff and visitors from the

Company and, with them, being able to take a dispassionate look at the problems facing the Company and themselves as managers within it. It would appear that the benefits to be gained from keeping the programmes residential and on neutral ground far outweigh any arguments to the contrary. Closer involvement with managers from other companies could perhaps have been engineered to increase the breadth of experience encountered. However, there is a limit to the amount of new information a person can absorb in a short space of time and, as there are a high proportion of introverts in the Company who "switch off" if they become over-stimulated, one new input might be at the expense of another. It is important that they are not "overloaded" otherwise, like any system they break down or, at best, feel inadequate to cope. This problem could perhaps be overcome by a "consortium" approach to management development whereby a limited number of companies share programmes on a regular basis. The experiences of MMP9 (held in Al Ain) militate against locating the programmes anywhere other than in a custom built training school with all the facilities on hand and a wide range of academic and support staff readily available.

Looking back on their programmes, the MMs expressed the most satisfaction; the MRs the least. SMs held mixed views on the extent to which the aims of the SMP had been reached and the value they had experienced back at work. The undeniable success of the MMPs has to be set in the broader context of all programmes and Cranfield has to ask itself - can it only teach MMs? C & W has to ask itself - is this the appropriate sort of training to meet the needs of the MRs and the SMs?

The aims of all the programmes were met, although two from the SMP were poor runners. The message to Cranfield is to stay firmly within its areas of proven competence

unless strenuous efforts are made to meet unusual and highly specific programme aims.

The subject area that stands out as having had the greatest impact is that of interpersonal and organisational skills (IPOS). This also includes the broad fields of organisational behaviour and personnel management. They were found to be extremely valuable from the practical, theoretical and personal points of view. The questions this raises are : is IPOS meeting a genuine need or is it an interesting diversion, avoiding excursions into the 'real' world, or is it doing both? Is it a soft option or the key to a number of problems?

In retrospect, the 'value' of all the programmes is consistently seen as having been firstly theoretical, secondly personal and thirdly practical. Too academic? Cranfield is an academic institution. One of its greatest contributions is to give managers a theoretical understanding of situations and events. Practical application of this knowledge and understanding is the result of transfer. The responsibility for transfer still is, as Barlow said in 1937, a responsibility to be shared by the teacher and the taught. To what extent are Cranfield lecturers "teaching for transfer"? How conscious are they of preparing the participant for his role as change agent on his return to work? How conscious is the manager of this great responsibility being placed upon him?

Managers continually expressed a preference for Cranfield lecturers over those speakers brought in from the Company. This is not to deny the interest aroused by many of those speakers but it does imply a need for closer liaison between Cranfield lecturers and their counterparts in the Company. The C & W speakers need tutoring in the selection of content, the structuring of classroom time, the range of methods for presenting their material and practice in doing all this.

All managers would appear to benefit from attending at least one general management programme during their career. This should ideally be timed to coincide with their transition from a job which is mostly "technical" to one which is mostly "managerial". Such a programme should form part of a life-long training and development pattern and not a one-off event to be grabbed at or bullied into regardless of its true appropriateness.

In summary, the programmes have been successful and worthwhile. Many lasting benefits have been described by managers after their return to work. The MMP has been particularly successful. The MMs are the most satisfied group. They were the most positive before their return to work and afterwards. Messages for Cranfield are to keep the curriculum uncluttered and the themes clear; to help their counterparts in C & W so that they might construct and present their materials more professionally; to make a conscious effort to teach for transfer; and, if they want "true" feedback, to evaluate later. Messages for C & W are to keep the programmes residential; to ask "why do we want to train this man" before selecting him as a participant; to identify where general management programmes fit in a manager's career; and to identify where they fit in the broad range of management development activities.

Selection of Participants

Selection is something of a problem area. This is witnessed by the comments made by a number of managers after their return to work. There are two main issues. These are firstly, that participating in a major programme such as the MMP, MRP or SMP must be a logical part of a manager's overall career development. This assumes that the manager has a future and that he is not about to retire or be "shelved". It also assumes that he has reached a managerial level of responsibility and that this

is reflected in his job. Secondly, there is the necessity of establishing selection criteria. This helps avoid the first problem and should lead to the "best" managers being picked out. However, if the criteria are too narrow and are rigidly applied, the resultant group will conform to one another too closely and there will be insufficient variety between them. This variety is essential if the participants are to create lively discussion groups and 'spark' ideas off one another. Thus a paradox can develop, as was discovered by the second MRP.

C & W have taken two major steps in solving the problems posed by selection by establishing manpower planning and the system of DTMs company-wide. The two must be used in alliance and they must also be seen to work. The DTM network must develop an image (with foundation!) of being strong, powerful and responsible. Its decisions must be seen as important. This will ensure that there is never a lack of able managers bidding for the role of DTM rather than reluctantly taking it on as an extra chore or delegating it way down the line. To achieve this, DTMs need guidance and extensive information on managers. "Information" should include the results of tests on vocational interest, personality, motivation and intelligence as well as performance appraisals and personal recommendations. They must also take on the responsibility of liaising with participants' superiors regarding opportunities for applying what they have learnt and for undertaking follow-up training.

Change is Just Around the Corner

The lack of opportunity to transfer their training was a recurrent theme of the field study findings. It does not simply reflect not being in the "right" job, although some people patently are not. It is also about having the authority to take decisions and the confidence to act as a

change agent. Getting the formal and informal support of the Company to be allowed to try out new behaviour should not be a struggle. Strangely enough, in C & W, the informal support is generally acknowledged as stronger than the formal. This is an important finding for the Company which must not let the two get too far apart. Managers are making great efforts to transfer their training. If the formal structure of the Company: the constraints of his job, the "system" and the prevailing values prevent him from growing, one of three outcomes will result. He will either escape to the apparent freedom of another job or he will put up resistance or he will withdraw. None of these are to the benefit of the Company. Only the bold and energetic look outside, only the best are offered other jobs. Resistance may be active or passive but either way, traditional values are rejected and concern is increasingly for the "self" rather than for the Company. Withdrawal is the route of the timid, the very people who need encouragement to reach their full potential and save them from becoming uninspired and submissive.

At the same time, those managers who do have the opportunity to effect transfer are busy reaping the benefits and growing as managers. A critical mass of trained managers is being built up in the Company as more and more attend the programmes. Eighty percent of those who have been to Cranfield recommend attendance to someone else; managers who have not been selected wait their turn or request it - it will gradually be seen as an entitlement rather than a privilege. The changed perceptions, attitudes and behaviour of the participants on their return to work will lead to broad changes within the Company. The Company must anticipate these and change to match up to new expectations. The organisational structure is already a problem, especially in HO; so are some people's job; so are many of the values. All these must change if managers are to develop and the Company is to benefit.

These are all aspects of the climate and half of the managers report being unaffected by them. The other half are consciously affected by them. This is the half that is growing in numbers. When all the individual helping and hindering scores are totalled there is a 3:1 relationship in favour of the helping factors but at the time those managers left Cranfield it was only 3:2. The same proportions exist later if the managers are measured as "mostly helped" or "mostly hindered" individuals. Ignoring the unaffected 50%, 30% of all managers are actively helped in their transfer activities (i.e. in growing and developing as a manager) and 20% of all managers are actively hindered by the climate. Whilst managers find that they do not actually have quite the autonomy and opportunity they imagined, they do find some aspects of the climate extremely helpful. Other people, in particular, are helpful, competent and reliable. This is one of C & W's greatest strengths and must not be abused. Managers also agree on the importance of their job; these either have opportunities or frustration built into them. Jobs are never neutral. Jobs can, and sometimes should be redesigned. The JDS can provide guidelines - the benefits of a challenging, stimulating and meaningful job are boundless.

The major, and all pervading, inhibitor of transfer is the internal environment of C & W: its tangible structure, its intangible values. These have to be investigated, particularly in HO. The local personality of individual branches shields them from some of the impact but HO has problems. Hong Kong employs about the same number of personnel as HO yet suffers few of the same symptoms of obesity. There perhaps the comparison ends as HK is an operational unit, revenue-earning and with limited responsibilities. Nevertheless, one cannot help speculating on the outcome should their roles be reversed!

The help and hinder dimensions of the various factors considered in this study are bi-polar so an increase in one also means a decrease in the other. This makes any efforts at improvement well worth the Company's while: it also has implications for neglect.

The Opportunities for Transfer

The managers like working for C & W. They are proud of their Company. They find the people they work with supportive. They want to make a meaningful contribution and are frustrated when not given the opportunity. Too many are not given the opportunity and too many are resigned to the inevitability of that.

The Company has spent a lot of money setting up these programmes, on flying participants across the world to attend them, and on paying the opportunity cost of not having managers in their usual working roles. The Company has also put a lot of time and effort into making sure that the programmes suit their needs, that participants are well selected and that visiting speakers and host departments for projects are available and willing. Much of this is over and above the management training and development effort usually made by companies. All is noted and appreciated by the participant manager whose expectations of his future rise higher and higher.

The Company has a moral obligation to that manager to follow through with an opportunity for him to put some of his new learning into action. Without the opportunity, transfer cannot occur and without transfer everyone's time, money and efforts have been wasted, not least the participant himself who feels bewildered, annoyed, embarrassed depending on how he interprets the situation. His feelings of self-worth are damaged and, if he returns to the same job he left he will resent those who appear to be blocking his

progress. If he goes to a new job that does not allow him scope for growth then he will turn his disappointment against the Company in general.

The "provision" of opportunities is part of the chain of activities which comprise management development. To recall the model at the end of Chapter 1 (figure 1.11, p.63), there is a continuous link between the translation of training needs into learning experiences and the transfer of these into action in the place of work where the new training needs are then perceived and so on as an iterative process. A second iterative process focusses on the individual who, to recall Whitehead, is moving to a continual rhythm of freedom - discipline - freedom. Both of these processes will be damaged, or even destroyed, if any of the activities are omitted. To deprive a manager of the freedom to generalise from what he has disciplined himself to learn is a breach of faith. It leaves him in developmental limbo and perpetual frustration. All the writers on transfer recognised the need for the opportunity to transfer training and then to practice it repeatedly. The context in which the learner later finds himself is widely regarded as being of vital importance.

There is a danger that the Company could overlook the fact that it is buying in transfer not management programmes. The product is not trained managers, it is trained managers in action. Only then can they grow and develop as managers; only then will they and, even more so, the Company, receive any benefit from their investment. It is imperative that more effort is expended inside the Company to ensure that the responsibility for opportunity to transfer is understood and taken on by the managers themselves, at every level.

Benefits Vary Between Managers

The managers who reported the greatest change on the 20 transfer tasks were MMs, Nats, Non-engineers and those aged

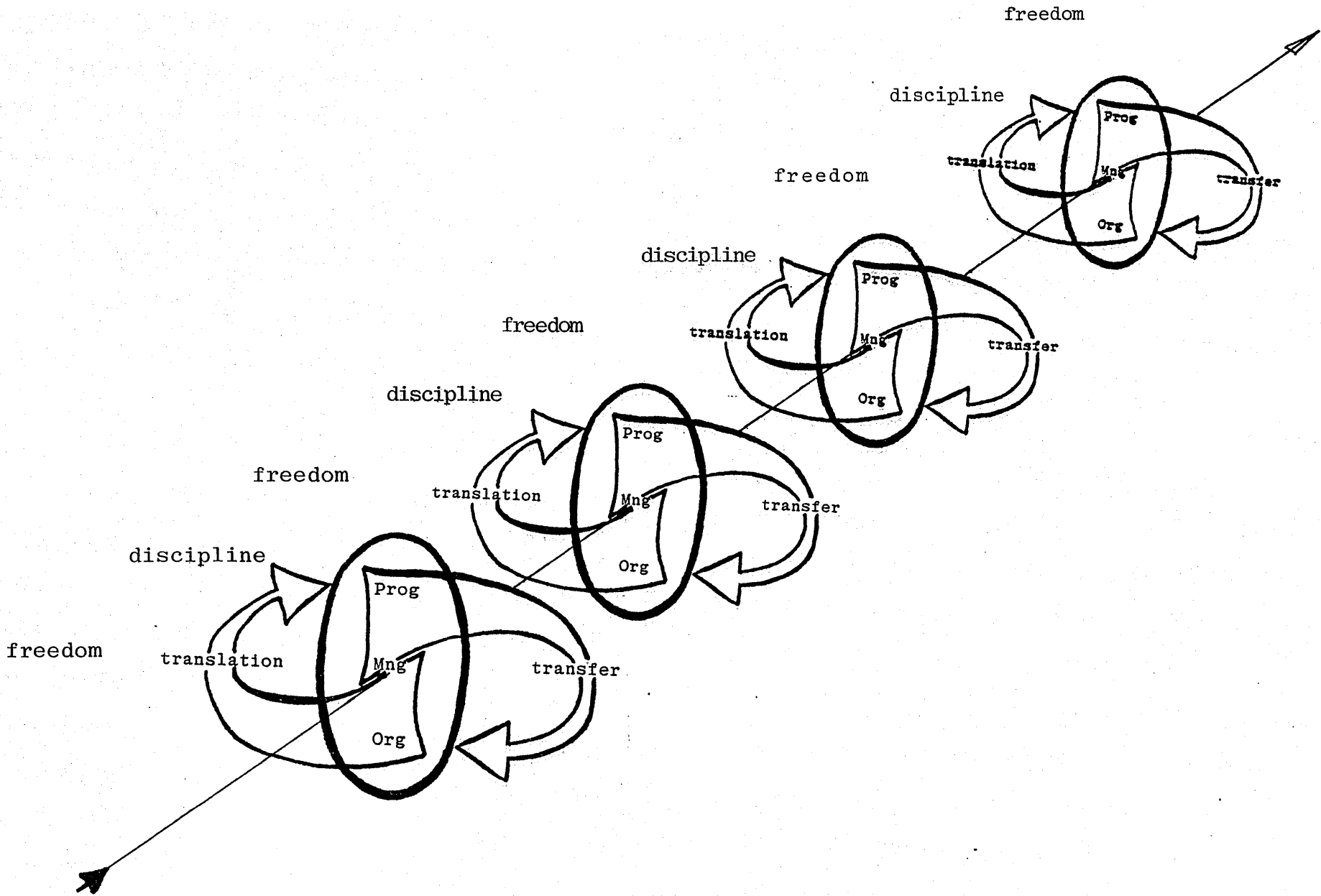


Figure 8.1 : The Rhythm of Career Development for Every Manager

under 40. This is perhaps not surprising: they have the most to learn and the energy and enthusiasm to put it into practice. The implications of this for C & W are twofold - train more managers with this profile and build on the strengths of those already trained with further training. The implication for Cranfield is that they must try harder with managers who do not share these attributes.

When reporting on their own choice of transfer task, their resolution, it was the SMs who were most successful, although their comments were mixed. MMs made the most positive comments and MRs made the most negative comments. SMs often had more authority to carry out change but the resolutions they set were often far-reaching and required more than personal influence to effect. SMs also set more resolutions than the other groups. They did not shirk the task as often as others. The implication here for both Cranfield and C & W is to encourage MMs and MRs to recognise greater responsibilities as their own and to broaden their horizons. The first step in doing this would be to share more Company information with them so that they can identify more closely with taking responsibility for the Company's future and not just be carried along by it.

In the general comments, MMs were the most forthcoming group: they were the most open. The longest-serving managers were the grumpiest. Over half of the negative comments came from managers who had been with the Company for more than 25 years. The older participants took the least away with them and were the least affected by their environment. This rather suggests that they are immune to stimuli and will carry on as always regardless of any influence, good or bad.

A distinction between the MM, MR and SM groups was noted from their comments about the programmes attended. It was later reinforced by their perceptions of the climate and their transfer performance. Essentially, it was that the

SMS were environmentally-oriented; MRs were job-oriented and MMs were people-oriented. This gives some interesting pointers for the content and style of further training. For SMS a series of seminars, held regularly and lasting about two hours should be conducted in HO and large branches. Outside speakers, mainly from the business world, and the SMS themselves would lead the seminars. The MRs would prefer to attend short (2-5 days) courses on specific job related skills and computing. For the MMs, a series of experiential workshops on topics such as team building and negotiation should be conducted. This could be run successfully in-house with carefully-selected outside tutors brought in.

Such activities are recommended as "follow-up" management development to be attended after a general management programme, not instead of one.

Self-awareness Development and the Value of the Individual

"Development of the individual" is often felt to be a far cry from the benefits an organisation wants to get from management development. Yet every organisation is made of just such individuals - it depends on them. In C & W the calibre of colleagues is rated very high. This was not anticipated by the participant managers as important; it was only acknowledged in retrospect. "Contact with others" was described by 77% of managers as a factor helping them with their transfer of training. The day they left Cranfield only 33% thought it helpful. This recognition of the value of others is a dramatic development. Aspects of the people with whom managers work to receive similar leaps in recognition were their general motivation, particularly, their keenness and enthusiasm and their ability "to come up with the goods".

One slightly disturbing observation was the extent to which superiors are felt to inhibit transfer. They are so

influential that they must be involved, by the DTM, with the aims and objectives of management development in general and transfer opportunities and performance in particular.

Hand in hand with an increased awareness of other people came a greater acknowledgement of Company values as being important to the transfer of training. The implication of all these developments is the growing awareness, appreciation and questioning of what previously went unnoticed.

Of the twenty items measuring transfer performance, most progress was made on recognising 'my own strengths and weaknesses', next was doing something about them; and then "selling" myself. All three are in the area of self-development and it was in furthering this in the future that much energy and interest lay. Coan (1974) has, through factor analysis, identified an "optimal self" comprising five modes: efficiency, creativity, inner harmony, relatedness and transcendence. They relate closely to Maslow's self-actualising traits (1954) which were collected and categorised using purely qualitative methods. Maslow emphasised the need for a person to achieve self-actualisation through productive, meaningful work. Such needs surface after those for physical comfort, security, belonging and prestige have been met. For a manager who has spent 20 years in a Company such as C & W where great care is taken to meet these very needs, the desire for self-actualisation is ripe. Landsman (1980) talks about developing a "healthy personality" the characteristics of which extend beyond the working day but would incorporate the increased self-confidence, tolerance, better understanding of self and others described by so many of the managers as benefits received from attending the programmes. The Company would do well to adopt the existentialist goal of helping its managers to become their best, and strongest, selves.

In this way they will develop employees who are as independent, effective, self-reliant, and creative as managers as many of them have been as engineers. They can, and must be more than simply competent. For their impact to reach beyond the status quo they need to be alert, aware and proactive. This requires the inner strength of a balanced personality and self-knowledge just as much as it requires the more obvious expertise and opportunities to effect change.

The Useems (1958) identify three sources of stress for middle managers. These are:

1. lack of co-operation from associates
2. too much or too little guidance from superiors
3. insufficient information about what is going on within the Company

The findings of this study have, interestingly enough, focussed on these very three points. The first, the co-operation of others, is a source of great strength in C & W, especially among the MMs. The second, the influence of superiors, has already been noted as a problem for some managers. The Useems have observed that MMs are "much concerned" with their superiors. The relationship is an important one and worth working on. The third source of stress is the lack of knowledge about what is going on in the Company. In C & W the corporate plan is closely guarded and corporate level thinking is unknown even to many SMS. Is it a paternalistic hang-over from the past or is it a cover-up for a lack of clear thinking at the top? Whatever the reason, it causes anxiety, speculation, gossip; it denies the opportunity to set goals lower down, in the global knowledge of a corporate context; and it suggests a lack of trust in those with

whom information is not shared. None of this is in the interests of the Company.

Much of the stress experienced at the MM level should diminish as the manager moves up the hierarchy. Whether this is the case in C & W is not clear from this study and could be an interesting area for further, extremely illuminating research. As well as being "taken care of" by the Company and protected from knowing too much internally (a policy already shown to have ironic consequences), C & W managers are also sheltered from the outside world. This research has shown that it doesn't reach in and touch them - and they certainly are not going to reach out and touch it! (Perhaps with the exception of one or two bold SMS) The danger of this situation for C & W is that of not keeping in touch with the realities of the market place, with the activities of competitors and with political, economic and social changes taking place in the many countries in which they operate. Other less obvious but equally important implications are the problems created for the transition from MM to SM; the proper fulfilment of an SM role; and the barriers it sets between SMS and others in the Company. Cranfield, as well as C & W, should be directing energy to these problems.

One final theme demanding discussion under the broad heading of the individual is the shift in CCL types towards fewer Traditionalists and more Visionaries and Catalysts. Although the differences between CCL categories were responsible for few significant differences between managers, the Myers-Briggs dimensions on which the types and clusters of types are founded were seen to be far more important. The shift essentially represents a move from sensing to intuition in the gathering of information. Hard facts and concrete situations will give way to a greater concern for ideas and the possibilities inherent

in a situation. Greater creativity will be at the expense of concern for routine efficiency. But, given the implications of microchips for office administration of the future, this might not be a loss at all. In classroom discussions at Cranfield, managers expressed a desire to become more extraverted and less introverted. Theoretically, it is not possible to "change" this most fundamental attitude to life, but it is possible to learn how to behave in a more extravert manner. Taken to extremes this creates stress and can have dysfunctional consequences but, handled responsibly, could have many benefits to the individuals and the Company.

Final Words

The final words of this chapter focus attention on the joint-venture between Cranfield and C & W which provided the broad context for the entire adventure. Did it work? And, has it a future? These are the two key questions: "Yes" is the quick answer; "Yes, but" is the long answer. It was not a smooth ride; people from both sides fell away for many different reasons. A fundamental problem was the scope of the venture - was management development restricted to running programmes or did it extend to following them through into the organisational context? Who was in control of transfer? After some territorial skirmishes, the participant manager has been left to carry responsibility for himself. It is here, in the borderlands, that energy must next be concentrated.

What has been achieved is a working relationship between key personnel in both organisations who are totally committed to identifying and grappling with the real problems of management development facing the Company. These people have become skilled at working at the boundaries; the future of the joint-venture lies very much in their hands.

Because managers in C & W perceive the programmes as having been valuable, the climate as essentially facilitative and people they work with as supportive, the joint-venture has great opportunities for continuing success. The implications for both Cranfield and C & W are that they must work hard to capitalise on this happy combination; they must not sit back and let it provide an effortless but mediocre level of impact and achievement. If the objectives of the joint-venture are too narrow, this is a real danger. The "Summary of Action Required" which concludes the Research Report presented to the Company (See Appendix H) should help avert such dangers.

Summary of Action Required

Part 1 : Career Development of a Cable and Wireless Manager

- * Create guidelines for selection of managers for appropriate training and development throughout their career.
- * Give priority to the backlog of managers still awaiting a general management programme.
- * Prepare managers for their programmes and follow them up on their return.
- * Build on management training with further activities - these may be common to all levels of management or vary between levels.
- * Run in-Company policy and procedure sessions.
- * Set up a consortium of companies for joint training.
- * Train Cable and Wireless managers to act as effective tutors.
- * Re-examine training needs regularly.

Part 2 : Opportunities for the Transfer of Training in Cable and Wireless

- * Enlarge the role of the DTM so that he might take responsibility for the trained manager after his return to work.

- * Authorise research on how best to make transfer effective and whether this requires changes to be made on the programme or to the organisational climate.

Part 3 : Broader Issues

- * Improve internal communication by publicising the Company's goals and strategies, debating issues more openly and relaxing confidentiality.
- * Face up to overmanning.
- * Keep all managers properly informed, expect them to make their own decisions and to take responsibility for them.
- * Expect and encourage all managers to think about the future, contribute to it and develop those around them for it.
- * Run team-building workshops to improve relationships between different levels of management.
- * Share responsibility through increased delegation.
- * Recognise and build on new skills, knowledge, interest and enthusiasm as managers return from Cranfield.
- * Research and evaluate change within the Company and outside.
- * Encourage greater participation in management development - don't leave it all to the Personnel Department.

CHAPTER 9

METHODOLOGICAL OVERVIEW AND THEORETICAL IMPLICATIONS OF THE STUDY

Bulmer (1977) draws attention to three separate levels at which the methodological context can be examined. These are:

1. the general principles guiding the study;
2. the research strategy adopted;
3. the research techniques used to collect and analyse the data.

These divisions are also used in this summary.

Part I : General Principles

Underpinning the entire study were a number of important and inter-related factors:

1. The researcher had to please two masters - each with different expectations. One master was the academic community, represented by her supervisor and, ultimately, the Board of Examiners. The other master was the host Company, represented by the Steering Committee for the joint-venture in management development and, ultimately, the Managing Director, to whom they reported. The former were concerned with academic rigour and sought evidence of the skills and insights consistent with a "research training" paradigm; the latter wanted practical and relevant results, uncluttered with justifications, in keeping with a "consultative" paradigm. The academic demands were given precedence but the need to be "useful" was always felt and undoubtedly influenced the final outcome (see Appendix G).

2. The usual constraints of time, money and access all led the researcher to the inevitable pruning of research ideals and ambitions, but it was the less usual constraint of external approval that perhaps led to the greatest methodological compromises being made.

3. The previous work that had been undertaken in the chosen areas of research, namely the conducting of a joint-venture in management development and the transfer of training by managers, provided the theoretical context. . . Nothing of note had been researched on the former so no theories had been developed against which this experience could be tested. As a result the task would be one of observation, description and hypothesis generation. Research on the latter, although not extensive with regard to managers, had drawn attention to possible causal factors for the successful transfer of training by managers. In addition, a number of theories relating to aspects of transfer in general were identified and provided some foundation for the work that had been conducted on managers. The task with this area of the research would be primarily hypothesis testing - the hypotheses being drawn from the findings of earlier research - and, to a lesser extent, hypothesis generation. As a result both inductive logic and deductive logic would be used but the emphasis would be on the latter.

4. The philosophical perspective adopted by the researcher was to play a much more dynamic and disturbing part in the research activity than she expected. This was partly because, having been brought up firmly in one tradition, actually doing the research exposed some of its shortcomings - a very unsettling side-effect of the process - and partly because she and her supervisor held fundamentally different views as to appropriate and acceptable methodological approaches.

The researcher's perpetual concern was that the methods of research adopted should be academically sound so that any conclusions drawn would have some underlying authority and acceptability. Hughes (1980) asks on what basis can claims to intellectual authority be made and whether there is any universal source of intellectual authority? He points out that terms such as "knowledge" and "understanding" are ambiguous and that claims to either of these states depends upon collectively - held conceptions about the world and how people relate to it. This meant that the methodology adopted by the researcher must also be acceptable to those with whom she wanted to share her work or wished to influence. These were, in the short-term, the supervisor and, in the long-term, the academic examiners and the Company officials.

Crudely stated, there are two philosophical camps, although there are many distinct sub-divisions within them and extending from them. These are the "positivist" and the "humanist" approaches. The researcher and the supervisor found themselves in different camps espousing different approaches. The two approaches are outlined below in an attempt to illustrate the conflicts with which they had to wrestle and to put the methodology adopted into its broader philosophical context.

The Positivist Approach to Social Science Research

Positivism recognises only two sources of knowledge as legitimate: the empirical and the logical. It holds the natural sciences and mathematics as its models and places tremendous emphasis on systematically observed facts. These "facts" must remain free of values and speculation at all times. Developing in the wake of scientific discovery, first Comte and then Mill, Spencer and Hume played down "human" attributes such as emotion, chance and

free-will. Instead, they stressed the importance of experimentations, quantification and objectivity. At the end of the nineteenth-century, Durkheim set out The Rules for Sociological Method and, in doing so, justified sociology (and, implicitly, the other social sciences) "as an autonomous discipline characterised by rigour, precision, and scientific method" (Hughes p24).

Durkheim identified the "social facts" that make up society - laws, customs, language, organisations etc - as sharing all the critical characteristics of scientific facts: they possessed externality, constraint, diffuseness and generality; they could be defined, observed, classified, connected and compared; they existed independently of the researcher's ideas and values. Durkheim gave to sociological research, scientific legitimacy - providing that it adhered to his Rules. Essentially, these comprised the need to unveil social reality by objective and systematic observation; by careful definition and by the testing of assumptions in the search for laws of causality. As true experimentation was rarely possible, causation was readily substituted by correlation, as illustrated by Durkheim's own study of Suicide (1897). Research efforts were then shifted from "grand theories" and philosophical discussion to empirical problem-solving.

An elaborate system of procedures and criteria grew up around the Positivist approach the two most important of which were the language and the hypothetico-deductive model of scientific explanation. Both reflected the two major tenets of positivism: namely that the social world, like the natural world, operates according to causal laws and that the foundation of scientific discovery is sensory observation.

A language was developed by which observations could be objectively defined as "facts" and be subjected to quantification and analysis. This allowed a scientific

approach to be adopted and generalisations to be made. As the language had to express the general, rather than the particular, a number of mathematical terms were adopted. Social phenomena became neutral "variables" with certain properties that could be measured via indices and then, adopting safeguards and assumptions, be correlated with other variables using statistical procedures. Standardised data collection instruments eliminated bias and "social facts" became defined in terms of the instrument used in their collection.

In this way a neutral observational language was developed and generalisations could be made and used to verify theory through the formulation and testing of hypotheses.

Hypotheses, deduced from past empirical observation, were tested against new empirical observations. Events could, therefore, only be explained if they were shown to be the logical consequence of theoretical statements. Hypotheses are necessary to verify generalisations and, strictly speaking, should over-rule post-hoc interpretation. The hypothetical-deductive model of scientific explanation thus combined empirical findings with the certainties of deductive logic.

Wallace (1969) building on the work of Merton (1957) and Stinchcombe (1968) identifies five principal components of social scientific research : methods, observations, empirical generalisations, hypotheses and theories. Although separate, he acknowledges that they often blur into one another. However, despite the overlapping, they can be distinguished by their "degree of formalization". This differentiates between "exploratory" research and that "testing" specific hypotheses; it also emphasises differences in degree of formal attention given to each aspect.

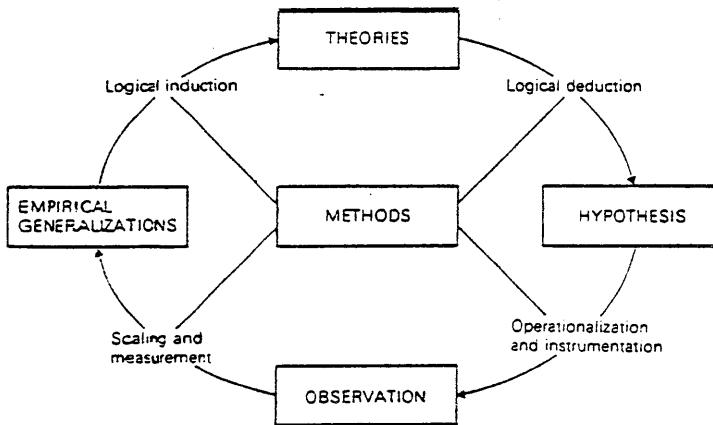


Figure 9.1 : Principle components of social scientific research (Wallace 1969)

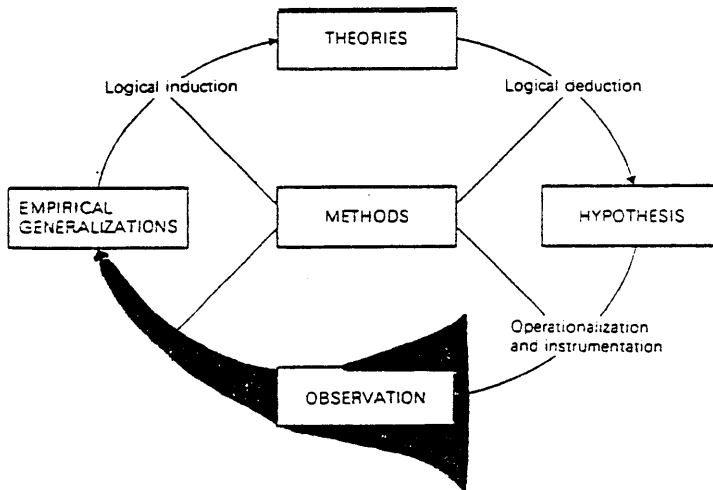


Figure 9.2 : Methods used in the research into the joint-venture in management development

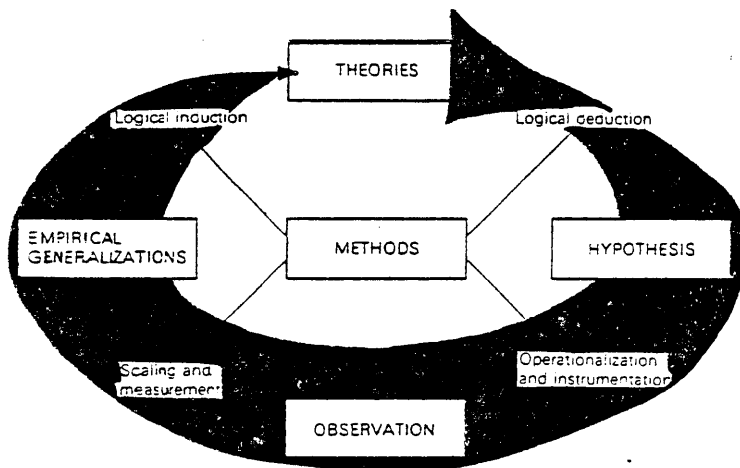


Figure 9.3 : Methods used in the research into the transfer of training

The relationships between the five components are shown in Figure 9.1. Information is represented as going through a succession of manipulations (moving clockwise around the diagram), each transformation being controlled by a particular method - logical induction; logical deduction; operationalisation and instrumentation; and scaling and measurement. Empirical generalisations yield theories through induction; hypotheses are yielded from theories through deduction. Both are "internal" processes, using the researcher's ability to make the appropriate conceptual leaps. Deciding on the observations by which the hypotheses will be tested and the generalisations that can subsequently be made, are "external" processes using the procedures and conventions developed and accepted by the profession. In this research, the emphasis for the joint-venture was on the observation component leading to some empirical generalisations as shown in Figure 9.2. The transfer study, started with existing theories induced from previously developed generalisations. From these theories, hypotheses were deduced and the emphasis was then placed on the research design, for the systematic and objective collection of observations and their systematic and objective analysis, to arrive at empirical generalisations, which may in turn verify or modify existing theory. In this way the complete cycle was undertaken as shown in Figure 9.3.

Giddens (1977) identifies four key elements in the positivist viewpoint:

1. reality is sensory;
2. philosophy depends upon the findings of science;
3. social science shares the same logic and methodology as physical science although procedures are often different;

4. facts and values are entirely separate from one another. Science deals only with facts; values are beyond its scope and therefore are either rejected or are synthesised with the facts.

The strength of belief in the positivist approach to social research has stood the test of time. In the late eighteenth-century David Hume wrote:

If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, Does it contain any abstract reasoning concerning quantity or number? No. Does it contain any experimental reasoning concerning matter of fact and existence? No. Commit it then to the flames: for it can contain nothing but sophistry and illusion.

Two centuries later, Kraus and Miller (1974) reaffirmed these feelings:

"(We regard) the social research procedure as a scientific enterprise striving after objectively derived facts about the real world, and the systematic organisation of these facts in general explanations (theories) of social behaviour." (p 3)

In 1980, Hughes, who like Giddens (1976) regards Positivism as having failed social research and suggests alternative approaches, acknowledges that positivism "is the philosophical epistemology which currently holds intellectual sway within the social sciences" (p 16).

Some Problems of Positivism

A number of shortcomings were recognised in the positivist approach right from the beginning. Attempts were made to overcome them but never totally succeeded. Other problems have only been identified with the passing of time. There are two major problem areas.

The just problem area lies in the nature of social reality and how human action can be described scientifically. "Social facts" were defined by Durkheim

as collective phenomena: "Society is not a mere sum of individuals. Rather, the system formed by their association represents a specific reality which has its own characteristics" (Rules p. 103). Organisational climate in this research is a good example of such a collective phenomenon. In other words, social reality transcends individual experience; it is greater than the sum of its parts and is not, therefore, reducible to them. But - and here is the paradox - the empirical evidence on which the social facts are based, is collected from individuals, because only their behaviour and attitudes can be observed and measured. As Lessnoff (1974) points out "nothing about social facts is observable except their individual manifestations" (p. 77). So, if social facts cannot be concretely observed - because "reality" is restricted to sensory observations and these are limited to individual experience - then are they simply theoretical collectives and not scientifically legitimate at all?

It has been suggested that social reality is the outcome of individual interactions rather than individual properties. This controversy between factual and perceived reality created a number of methodological factions. At one extreme were the Behaviouralists, who decided that introspection was irrelevant and chose to ignore anything other than overt behaviour, and at the other extreme were the Ethnomethodologists who believed that nothing need be said about objectivity and truth. They saw all knowledge as residing in the everyday life of common-sense man. An example resembling each approach can be found in this research. When the managers were asked to set a resolution for new behaviour back at work (see Chapter 7) their behaviour was recorded in terms of how many resolutions, of what classification, were or were not set. No attempt was ever made to discover why these particular choices had been made or why some people chose not to take part. Only overt behaviour was recorded in keeping

with Behaviouralist principles. The Ethnomethodological approach was adopted at a different stage - when collecting information on the conduct of the joint-venture (see Chapter 2). Here the researcher was closely involved in the daily life that she was monitoring and actively inquired as to individual interpretations of what significant events and other people's behaviour meant for them.

Somewhere inbetween these two extremes, the mainstream of opinion, including that of this researcher, tried to report inner states of consciousness - such as attitudes, beliefs, values, feelings and preferences - as primary data via carefully constructed questionnaires and interviews. These were the "facts" of individual reality which collectively contributed to societal reality. Most of the questionnaires used in this study fall into this category - the Myers Briggs Type Indicator, the Transfer of Training follow-up booklet and some, if not all, of the interviews.

A second, and closely-linked problem is that, unlike the "facts" of the physical or natural sciences, the data to be measured in the social world, has a mind of its own, opinions about itself and about its interactions with others including the researcher. The researcher is also involved, he interacts with the world he explores and could, perhaps should, be described as a variable in the research design, however hard he tries to remain an impartial, neutral observer of the social process.

A third problem, imposed in the nineteenth-century, was the deterministic view of social life and, therefore, of human endeavour. The comparative method; the underplaying of "human" attributes; and the search for underlying explanatory "laws", like those discovered by the true scientists, all necessitated a deterministic structure

which could be described quantitatively and formally. Social scientists have, over the years, lessened the unpalatable implications of harsh determinism by no longer seeking laws that dictate human behaviour but generalisations that help understand human nature. Every situation is recognised to influence its own outcome to some extent but characteristic tendencies or trends can, nevertheless, be identified. In this study for example, middle managers, under the age of 40, especially members of the National staff, were most likely to report improvements in their performance back on the job after participating in the Cranfield programme.

A second group of problems revolve around the role of theory in positivism : the relationship between theory and facts and the role of language in this relationship. Theory is only a problem if "the task of the social scientist is to give some theoretical account of social life" (Hughes 1980). If, however, "the primary goal of the social sciences is to obtain organised knowledge of social reality" (Schutz 1954) or if theory is defined as "a set of interrelated hypotheses or propositions concerning a phenomenon or set of phenomena" (Shaw and Costanzo, 1972) then the role of theory presents less of a problem.

Hughes accuses positivism as failing social science in four fundamental ways:

1. FAILED to live up to its claims of providing laws of social life equivalent in scope, certainty and predictive capacity to those offered by natural science.
2. FAILED (as shown by research methods) to take account of the fact that social life is constructed of meanings

3. FAILED in the provision of an appropriate language
4. FAILED to recognise that researchers have an active not passive role.

The force of his criticism stems from the belief that positivism is based on a misconception of science.

"Positivism emphasised some aspects at the expense of others science is empirical but is also profoundly theoretical Laws are not causal empirical generalisations but rationally connected statements" (p. 61). He describes empiricism as a system of trial and error which relates facts to facts and rational thought as a system which relates ideas to ideas largely through the languages of logic and mathematics. Science, he claims, uses both and connects the two through abstraction to theoretical concepts such as deterministic laws. In doing this, science is able to move back and forth between the empirical and the theoretical - the observable and the unobservable - each one sharpening the other's scope of application and explanatory power. He concedes that the hypothetico-deductive model rationalises the importance of logic and mathematics but notes that this attempt is still firmly within the empiricist framework.

Hughes also criticises the language developed by the positivists. This was basically an "observational" language encouraging the collection of empirical data, quantitatively measured, in an objective manner. In parallel with this theoretically-neutral language developed a subordinate "theoretical" language to handle the non-observables. These two languages were linked by a series of rules which translated theoretical concepts into empirical concepts where they could be verified or falsified by the "facts". This introduced some flexibility into the search for causation and allowed the "certainty" of laws to be replaced by the "probability" of theories

which could be continually refined by testing. BUT, it reinforced the belief that reality was made up of facts and that these existed independently of theories; theories didn't shape the world, only respond to it. There is some truth in these accusations but they are rather alarmist. The researcher into the transfer of training, in common with the majority of social scientific studies, was guided by existing theoretical premises; it was in these that the four hypotheses were grounded.

Hughes also draws attention to a major problem that has severely hampered the social scientist's progress in searching for generalisations. It is the measurement problem and is encountered everytime that theoretical concepts are translated into the observation of facts and vice versa. Hughes believes that measurement is "impossible" without an already understood theory. In science, measurement is a consequence of theory - "length", for example, has a purely theoretical meaning; no-one asks the scientist "what does this concept "length" really mean?" Yet for the positivist social scientist that is exactly the nature of questioning because observations are made in terms of the measurement instrument. The validity and reliability of the observations are dependent upon the acceptability of the instruments and the explicit working definitions and assumptions identified (or overlooked) by the researcher. Resort is continually being made to surrogates and indices of social reality. For example, in this study, observations of managers as being "Traditionalists" or "Visionaries" means that their management style reflects a certain profile as measured by the four indices which operationalise Jung's theory of work preference : extraversion - introversion, sensing - intuition, thinking - feeling and judgemental - perceptive. Sometimes, "scientific" measures could be made, for example the age of each manager and his length of service with the Company at the date of the programme.

Until the social sciences can break the mould of positivism, with its dual obsession for empirical generalisation and theoretically-neutral observation, they will never achieve the intellectual freedom of a higher order of thinking. But, for those who distinguish between philosophising and theorising, seeing theory as simply "explanation", and hypotheses as "possible explanations", concern will remain with the logical testing of theories, rather than with their formulation. Indeed, Stinchcombe (1968) insists that "theories ought not to be invented in the abstract by conceptual specialists; they should be adequate to the tasks of explanation posed by the data" (p. 3). And Smith (1975) devotes a chapter to "Generating Testable Theory" of which one sentence considers the formulation of theoretical problems : "Perhaps the best way to start research is for you to examine some phenomena you wish to understand, or understand better. The next step is to start maintaining a file in which you will record (facts).... As a check on faulty accumulation of knowledge (i.e. facts), we have spoken of a need for theory which (1) has observable consequences (2) is verifiable through observation, and (3) is internally consistent and logical". Everything is geared to testing, nothing to what is being tested or why. Theory is conveniently conceptualised in terms of operationalisation.

These problems do not deny the interest provoked by positivist studies of the social world but they do question its scientific legitimacy and the intellectual authority that it affords.

The Humanistic Approach to Social Research

The broad methodological alternative to positivism is "humanism", a form of intellectual enquiry long pre-dating

the scientific approach. Essentially, in its modern form, it rejects the application of scientific methods to social life, stressing interpretation, empathetic understanding, imaginative reconstruction and moral commentary. Even in the nineteenth century not everyone could accept the positivist view that the scientific method was appropriate for all forms of investigation. This led to an anti-positivist school of thought which drew attention to the contrasts between itself which wanted "to grasp the individual and unique features" of phenomena and the scientific researchers who sought "generalizations about reproducible and predictable phenomena". (Von Wright, 1971) The different perspectives were labelled as ideographic (those concerned with individual descriptions and unique situations) and nomothetic (those seeking laws). The former were looking for differences, the latter for commonality (Windelband, 1894).

A critical distinction had already been drawn between the two approaches in terms of their aims : these were explanation (or Erklaren) in the case of the positivists and understanding (or Verstehen) in the case of the humanists (Droysen, 1858). An important aspect of "understanding" lay in its psychological features which Simmel (1892) identified as empathy with the object of study. This active "subjectivity" on behalf of the researcher flew in the face of the objectivity demanded by the positivists. Another important aspect of understanding lay in its natural links with intentionality.

These concepts were further developed by Dilthey and Rickert. Dilthey, who believed that "mind" and "matter" represented completely different realities - neither reducible to the other - recommended their study by different methods. Rickert, on the other hand, saw reality as indivisible (as did the positivists). But, he saw "facts" as being created in the human mind - they were

subjectively constructed through individually selected perceptions. Reality could therefore be represented differently depending on the principle of selection - nomothetic or ideographic. True objectivity perhaps requires both view points.

Weber, writing in the early twentieth-century, was influenced by both Dilthey and Rickert. He recognised the difficulties inherent in the positivist approach to social research but believed it was possible to overcome them. He attempted to create a working relationship between the two approaches. Weber recognised that social research had a distinctive character but did not believe that it need be unscientific or reject objectivity. His fear was, according to Hughes, that positivist methods used for social research were likely to produce valid knowledge but of largely irrelevant and unimportant activities. He regarded the essential distinction between the natural and social sciences as being the way in which the research was conducted not in what actually existed.

"Interpretative understanding" would be the distinctive form of knowledge leading social scientists to objective knowledge. It provided great opportunities for social scientists to study their subjects in great depth even if the price might be reduced objectivity, precision and conclusiveness. It was a means to an end and, in reconciling those means, Weber introduced two methodological principles : value neutrality and the ideal type.

"Value neutrality" implied an ethically neutral stance on behalf of the researcher. He never allowed his own values to interfere with his research activities. This would ensure his objectivity. The "ideal type" was a rationally constructed action, role or situation against which reality could be compared. It helped the social researcher in several ways : it rendered the subjective

more objective; it permitted some generalisation from case studies; and it allowed for what Weber described as "experiments in the mind".

The major criticism against positivism was that, by taking the "human" elements out of social reality, research could only produce a partial, often hollow, account of what really existed. To combat this, Weber introduced the concept of "social action" which related to the meanings inherent in social interaction at all levels. However, he insisted that any insights so gleaned must be supported by statistical data, scientifically collected. "Adequate causation" was to be identified, providing probabalistic explanation rather than laws.

"Meaning" is the subjective (internal) component of behaviour whilst "observation" is the objective (external) appearance of behaviour. In this research, the external behaviour implied by "the transfer of training" is tapped by open-ended questions regarding progress with resolutions set at the end of the programme attended. Responses are purely subjective, providing personal meanings for individual behaviour or its absence. As describing an action requires more than simply observing concrete behaviour, description will almost always be incomplete. This is because the relevance and relative importance of the many factors involved will vary from person to person. Describing social reality is as big a problem for the social actor as for the observer.

A "vocabulary of action" has developed by which meanings are described. It revolves around "reasons" rather than "causes" reflecting the search for understanding rather than explanation. It shows up the fundamental differences between human life and inanimate matter in that the former is not as predictable or as pre-determined as the latter. Human beings can, and do, make choices about their

interactions; decisions are often multi-causal and are perceived as such; interpretation of the same action varies between actors and can change with events. Awareness of these factors has led present-day "humanists" to regard concepts of human action as logically incompatible with the idea of causal necessity and, therefore, with scientific causal explanation. They see social reality as being made up not of external facts but of interpersonal relationships. These relationships are conducted and given meaning through the language they use. This interpretation of social reality, they claim, cannot be studied using positivistic methods. (Winch 1963, Taylor 1978, Hughes 1980).

These developments, like those of the positivists, have been far more evident in the U.S.A. than in Europe. The "humanist" approach in the U.S.A. is known as "symbolic interactionism."

This recognises that all humans - and nothing else - assign "symbolic" meaning to people, things and events and then behave or "interact" in accordance with those meanings. Symbols, including words, are representative of the meanings and values held by social actors; reality comprises the interpretation and organisation of those symbols : they create the environment in which men exist. Language is the basic system of symbols and any other system can only be created or understood through language. That is why language is so important to philosophy and scientific methodology. Language organises perception - what cannot be identified may not be perceived or thought about. (Mead 1934). If words are the instrument of our selection then what is not in the vocabulary cannot be observed.

"Reality" in this study was couched in individual perceptions and managers responded in accordance with

those perceptions. Manis and Melzer (1967) explain that the identification and interpretation of symbols is assigned as a result of interactions with others; hence the importance of the other people in the organisational climate. Individuals are believed to grow in "humanness" as a result of interacting with others, of understanding themselves, and of being conscious of their own thoughts and behaviour. Self-awareness is a topic that has already emerged from this research, so too is the ability to "grow" as an individual and as a manager.

The Researcher's Paradigm

This study was conceived in true positivist style. It's early development encompassed an experimental design and a purely objective stance on behalf of the researcher. This approach had to be modified before the design was acceptable to the host Company but, nevertheless, the structure of positivism was adhered to as closely as possible and provided a framework for the study into the transfer of training. The second strand of the research, into the nature of the joint-venture, was always regarded as "humanistic" in its approach.

Hughes, drawing on Taylor (1978), describes the positivist social scientist as constructing his version of social reality by distinguishing between identifiable acts, structures, institutions etc. (i.e. objective social reality) and values, beliefs, attitudes, reasons etc. (i.e. subjective social reality) and then correlating the two to provide generalisations. "Meanings" are only allowed as quotes, attributed to individuals as their version of social reality. This rationalization effectively denies the social reality which ("humanists" believe) exists only as a function of those meanings and the language used. This description is fairly accurate

of the research undertaken : objective social reality was defined in the unequivocal terms of the attributes held by the managers (including their Myers Briggs type); these are detailed in Chapter 4. Subjective social reality was then measured in terms of managers' perceptions of their satisfaction with the learning experience (Chapter 5), the supportiveness of the organisational climate (Chapter 6), and their own transfer performance (Chapter 7), against questionnaire scales and open-ended questions. The resultant information was categorised as "facts" and set against the categories inherent in the objective facts. In this way the null hypothesis that there would be no significant difference was tested and some generalisations about the data could be made.

Individual "meanings" were sought and, although social reality was increasingly seen as a function of those meanings (p. 282+; 387+) "quotes" were reported rather than summarised by the researcher as being reality. One of the reasons for this was to overcome the fears of subjective bias when working under objective "rules"; but another, more powerful, reason was the desire of the researcher for the Company to see the raw facts for themselves; in summary form, they may become bland or be attributed to the researcher's imagination - either way they could easily be rejected.

In the monitoring and exploration of the joint-venture no such inhibitions existed (Chapter 2). The nature of the research was different : nothing was being "tested", the researcher was blatantly part of the research domain, the objective was to describe the existence of an abstract notion and the impact that this had on the actors involved. There were plenty of objective facts in the arena - meetings, contracts, programmes, record profits, new teaching materials etc. - but the emphasis was continually on the meanings that these had for the individuals involved,

and the implications of the meanings that others held - whether these were shared or assumed. This part of the research was strongly influenced by the supervisor. Strangely enough, although the researcher enjoyed undertaking that section of the study, she could not really regard it as "proper" or "acceptable" research until it was completed, when its power and validity were authenticated by the social actors themselves and by readers who had not actually "been there" but felt a deep understanding for the important issues.

This experience together with the valuable qualitative data collected in the transfer study, leads her increasingly to accept the humanist interpretation of social reality; although this is not to reject entirely the positivist viewpoint. Shipman (1972) acknowledges the "staggering variety of perspectives and procedures" in present day social science and that "even when empirical evidence exists, it produces more questions than solutions" which rather suggests that no single approach is able either to explain or understand the social world with repeated and clear-cut success.

Just as the research paradigm in this study consisted of an amalgam of methodological approaches, so the researcher, as a result of conducting the study, finds herself adopting a more flexible yet, at the same time, more critical attitude to potential methodologies. An attractive alternative is naturalism (Denzin, 1971). Denzin describes the naturalist as one who "employs any and all sociological methods admits into his analyses any and all data that are ethically allowable is committed to sophisticated rigour but takes a skeptical stance towards those research protocols that dictate how one approaches the empirical world details in careful fashion the nature of his sampling framework, triangulates his observations and continually assesses the empirical grounding of his casual propositions." Naturalism

attempts to get "the best of both worlds" as did Weber at the beginning of the century. And so the search continues. Looking into the future, Hughes sees the aim of social science shifting from verification and prediction to "a reconstruction of fragments of social reality" relying on insight and bound up with the options open to the researcher and researched. "Truth" he suggests, "if it can be attained at all, becomes a matter of negotiated agreement between social scientists and those they study." Negotiation, in this research, encompassed the researcher, the supervisor, the host company and the individual managers. As a result, the outcome has a greater chance of having reached the truth.

Part II : Research Design

The procedure by which the researcher arrived at her final design was, after careful consideration of the nature of the situation in which she found herself, to identify the most pertinent problems for investigation and match these to the resources at her disposal.

Practical limitations reduced the scope of study to management development within the experiences of the joint-venture between Cable and Wireless Limited and the Cranfield School of Management. Three broad areas of study were proposed : the joint-venture itself; the impact of management training on participant as against non-participant managers; and the determinants of successful transfer back to the workplace. Each aspect of the study required a different research design. The joint-venture was a case study; the impact of training was a classic experimental study with random assignment to experimental and control groups; and the transfer of training was a longitudinal study. However, the proposals still exceeded the resources available and, moreover, were largely unacceptable to the clients. The host company were against

the involvement of non-participants; the School of Management thought the joint-venture too politically sensitive for investigation.

The transfer study remained. It posed, and still poses, important questions for research for it is critical not only in this situation but in all management training activities world-wide. Long-term evaluation of management training is rare; the "take-home" benefits of participating on management programmes are largely unknown; vast sums of money are spent on management development almost as on act of faith. Existing academic research into this vital question of transfer was minimal.

Runkel and McGrath (1972) identify eight research strategies (see Figure 9.4). They regard the three most desirable features of the design as being:

1. concreteness of behavioural systems,
2. precision of control and measurement,
3. generality of the conclusions.

They point out that no single strategy combines all three characteristics; none of them is "correct" or "incorrect" but one will be most appropriate to the questions that the research is attempting to answer and the constraints within which the researcher is working.

The strategy decided upon was to conduct a field study into the transfer of training and set it within the context of a case study on the joint-venture in management development. Access was agreed as being limited to individuals who had participated in the programmes and/or the policy-making. Runkel and McGrath recommend the field study as maximising naturalness (concreteness) and having a good chance for generalising

to similar "fields" but warn against its lack of control and precision. They also see it as requiring more resources - time, money and manpower - than other strategies.

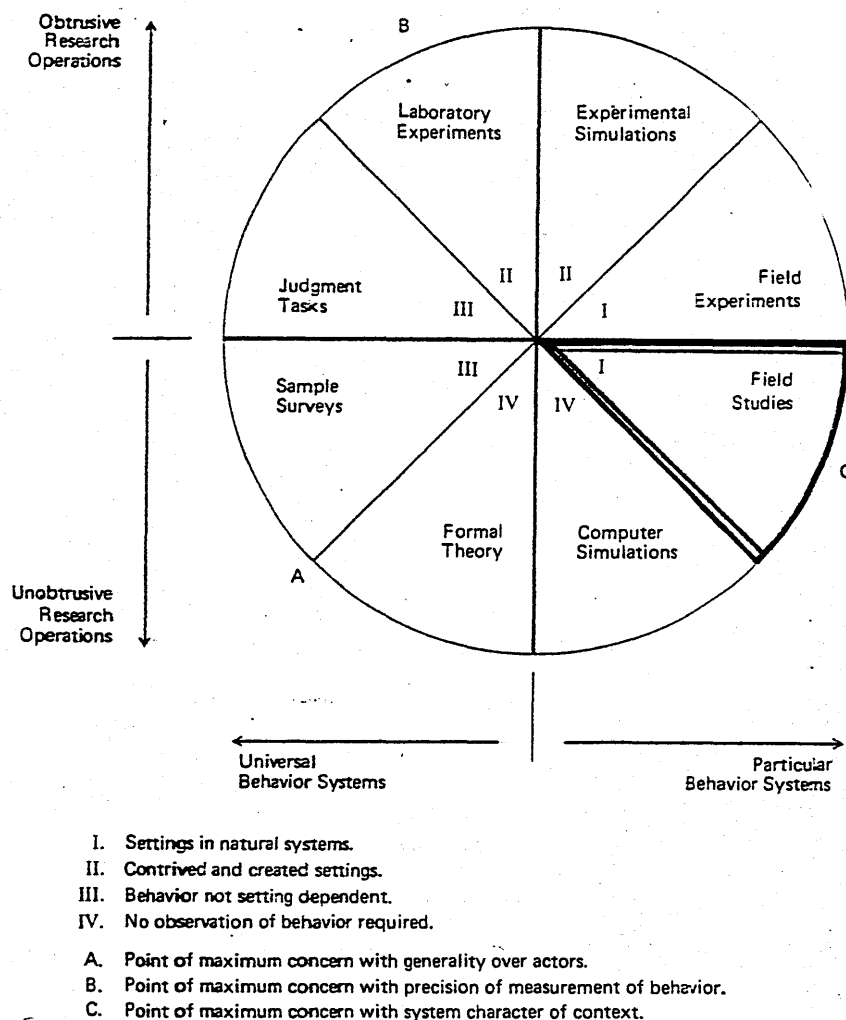


Figure 9.4 : A Framework for Comparing Some Major Research Strategies (Runkel & McGrath, 1972)

The detail of the design depended entirely on the approach taken. The possibility of a predictive study had been effectively removed by the limiting of access to past participants. This ruled out a non-experimental control group and any pre-testing. Causal hypotheses, on which

prediction rests, could not be tested under these conditions. A comparative study was not really feasible as no similar in-company programmes were being run at Cranfield at the time. However, comparable general management public programmes existed but the problems of seeking access to such a range of companies and accounting for the variety of organisational cultures to which the participants returned, were greater than the resources available to overcome them. In retrospect, the importance of the organisational climate to successful transfer would have exacerbated these problems.

To set the research design into its methodological context, it is necessary to refer to some of the taxonomies proposed by earlier researchers. The most famous taxonomy is that of Campbell and Stanley (1963) later developed by Cook and Campbell (1976). Together, they have established rigorous guidelines for the application of the scientific method in social research. They distinguish between experimental, quasi-experimental and non-experimental research designs. Within each broad type are a number of possible designs, each with different shortcomings and limitations. True experiments are characterised by random assignment to treatment groups. They are the preferred scientific approach, as causal hypotheses can be tested and predictions made on the outcomes but, as Cook and Campbell admit, although feasible they are not easily set up or maintained; nor are they immune to the threats of internal, external, statistical or content validity. Nevertheless, they advocate their adoption whenever possible. As a second-best they recommend an appropriate quasi-experimental design. They identify 16 alternatives but regard the range as much larger as designs can be combined to overcome aspects particularly susceptible to the many threats to validity. They regard quasi-experiments as especially vulnerable to problems of internal validity.

Amongst the quasi-experimental designs are four correlational designs, one of which - cross lagged panel correlations - is the nearest any of the quasi-experimental designs resembles the transfer study. However, Cook and Campbell are scathing of all correlation designs partly because the researcher is passive but largely because their "concern is for causal inference and these methods can be viewed as at the very least weak quasi-experimental designs" (p. 285). They go on to acknowledge "that while correlation does not prove causation, causal theories imply correlations, and thus checking for their presence can be a useful probe for causal hypotheses" (p. 286).

It is amongst the designs that these champions of the scientific method describe as "generally uninterpretable" that this research falls. The "one-group post-test only" identifies the joint-venture case study and some aspects of the transfer study. The "one-group pre-test post-test" design, which they recognise as being "widespread in organisational research", encompasses most other aspects of the transfer study. Both of these designs are regarded as appropriate for hypothesis generation but not for hypothesis-testing.

Bulmer (1977) summarises the experimental research designs as being the "ideal type" as they meet the logic of the positivists most fully by identifying causal relationships between independent and dependent variables. He sets three criteria for identifying causal relationships in non-experimental designs. These are that correlations must be genuine, not contingent on other factors; they must hold up in other situations and under other conditions; and that the time order of variables must be specified. By these criteria, the findings of this research have greater value than that supposed by Cook and Campbell. Bulmer simplifies the non-experimental research design typology to four basic alternatives. These are:

1. The case study where a single group is studied over a single time period. The joint-venture research belongs to this category.
2. The static group comparison where more than one group is studied at one time. If the partitioning of managers into mutually exclusive, exhaustive classes qualifies the managers in this study to be described as different groups (e.g. HO, F1 or Nat) then Null Hypothesis 1 belongs to this category; if not, it too is a case study.
3. The comparison of different groups at different times - this was not done at all.
4. The longitudinal study where the same group is observed on more than one time period. Null hypotheses 2, 3 and 4 where perceptions of the programme, the climate and transfer performance are all measured at different time periods and differences over time are compared, all belong here.

The research into the joint-venture is clearly a case study and restricts its objectives to the limitations of such a design. In other words, it is purely exploratory, seeking to describe and understand what is happening in an environment that is functioning naturally. This is regarded as valuable in its own right and hypothesis generation is the limit of its scientific ambition.

The research into transfer is most accurately described as an ex-post facto one-group study with some time-series factors. Kerlinger (1973) argues that ex-post facto research is no different in basic logic than experimental research. They share the same purpose - the empirical validity of hypotheses, the only difference between them is that the ex-post facto researcher cannot control through experimental manipulation or random assignment as can the experimental researcher. This is the fundamental weakness of the ex-post facto approach; it cannot assert

the "truth" of its findings with the same confidence as the experimental. In the experimental situation, the researcher is "active" and can "control" independent variables; in the ex-post facto situation the researcher "must take things as they are and try to disentangle them" (p. 380). The emphasis in the transfer study was in disentangling perceptions in order to explain what was happening and discover any differences between managers. Proving causation was not the priority because the design did not allow it.

Kerlinger regards ex-post facto research as just as important as experimental research and far more frequent: "it is probably no exaggeration to say that a large proportion of research in sociology, education, anthropology and political science has been ex-post facto, (even) psychological studies, perhaps half or more than half, are ex-post facto" (p. 383).

He does, however, draw attention to three major weaknesses of ex-post facto research. These are:

1. the inability to manipulate independent variables;
2. the lack of power to randomise;
3. the risk of improper interpretation (as a result of 1 and 2).

This research, in keeping with much behavioural and educational research (see Kerlinger p. 392), could not avoid the first two weaknesses; with caution and care the third can be minimised.

Smith (1975) regards ex-post facto designs as being subject to a high level of distortion due to the memory attrition and reactivity of respondents. This is a valid criticism

to which could be added the forces of cognitive dissonance and wishful thinking. Awareness of these dangers helps overcome them as, too, does careful questionnaire design and interviewing technique. As a result, Smith agrees with Cook and Campbell that field methods are more conducive to hypothesis generation than to hypothesis-testing.

There are three approaches to field studies, according to Krausz and Miller (1974). These are:

1. statistical sampling procedure followed by interviews or postal questionnaire;
2. participant observation (open or concealed);
3. interviewing of key subjects without sampling.

In this research, the first approach was adopted in the transfer study and the other two approaches were adopted in the joint-venture study. Krausz and Miller believe that the approach adopted depends upon the information sought together with the resources (time, money, researchers) available and the access permitted. They see complex designs being necessary when a study requires both qualitative and quantitative data - as indeed this study did.

Zelditch (1962) categorised both information sought and the methods of obtaining that information. A 3 x 3 matrix (see Figure 9.5) suggests the best match between them. Figure 9.6 shows how the two studies used the most appropriate methods to collect their data.

When conducting field/case studies the researcher has to adopt a clear role along the observer - participant continuum. Gold (1958) specifies four "ideal-typical"

Information Types	Methods of Obtaining Information		
	<i>Enumerations and Samples</i>	<i>Participant Observation</i>	<i>Interviewing Informants</i>
Frequency distributions	Prototype and best form	Usually inadequate and inefficient	Often, but not always, inadequate; if adequate it is efficient
Incidents, histories	Not adequate by itself; not efficient	Prototype and best form	Adequate with precautions, and efficient
Institutionalized norms and statuses	Adequate but inefficient	Adequate, but inefficient, except for un verbalized norms	Most efficient and hence best form

Figure 9.5 : Types of Information by Methods of Obtaining Information (Zelditch, 1962)

Information Types	Methods of Obtaining Information		
	<i>Enumerations and Samples</i>	<i>Participant Observation</i>	<i>Interviewing Informants</i>
Frequency distributions	t of t		
Incidents, histories		j - v	j - v
Institutionalized norms and statuses			j - v

Figure 9.6 : Approach Adopted In This Research

(j-v = research into the joint-venture)

(t of t = research into the transfer of training)

field roles : the complete participant; the participant as observer; the observer as participant; and the complete observer. This researcher took the role of "observer as participant" in the joint-venture and "complete observer" in the transfer study. The danger with both of these, especially the latter, is "ethnocentrism" whereby the researcher imposes his own interpretations rather than understanding those of the subject of study.

Krausz and Miller think that perhaps the three major determinants of the methodological approach adopted are firstly, the level of analysis - that is, the degree of abstraction - with "grand theories" at one extreme and great detail at the other; secondly the preference for qualitative as against quantitative data; and thirdly, in scientific studies, the choice between experimental or correlational methods - both systematically observe but the former can manipulate whilst the latter can only measure. The research into the joint-venture lay mid-way between theory and detail and was entirely qualitative; the research into the transfer process, on the other hand, was concerned with extremely detailed data, was highly quantitative and adopted correlational methods.

Despite the many attempts to classify and categorise research designs "the rules of good research design cannot be specified precisely there are inevitably points in the design process where decisions are based more on intuition than on rational analysis, and where the costs and payoffs cannot be sensibly predicted ... Research design is then both a technology and an art. Its purpose is to transfer raw facts into evidence for or against a particular theory or hypothesis, and to the extent that it does this economically and validly it is "good" research design." Krausz and Miller (p. 105-6).

The design selected, that of statistical field study set within a descriptive case study, was not without its shortcomings. These include the problems of measuring essentially qualitative data in a quantitative manner, researcher bias in interpretation, the post hoc nature of the study and the generality of the findings. They were inherent in the chosen style of investigation. As a result, certain reservations must be kept in mind when considering the findings.

The Null Hypotheses

The field study hung on four null hypotheses. Kerlinger regards the hypothesis as a researcher's most powerful tool for achieving dependable knowledge; they are "indispensable" in his view. Krausz and Miller describe hypotheses as central to the dual role of the social scientist - "to test and support existing hypotheses or theories and to generate new hypotheses and construct new theories" (p. 9). The researcher found them invaluable in helping to clarify the problems of transfer in terms which would allow empirical evidence to be collected and analysed. However, not all hypotheses are equally testable and the specific nature of these hypotheses has important implications for their use. Kerlinger distinguishes between "statistical" and "substantive" hypotheses; Krausz and Miller between "descriptive" and "explanatory" hypotheses; Smith between "descriptive" and "causal" hypotheses; and Rigby between "facts" and "relationships". Essentially, they are all drawing attention to the same dichotomy: that of identifying important variables or of establishing causal relationships between them. The hypotheses in this study fell into the former categories rather than the latter. This was to be expected given the relative infancy of the research topic but it does limit the value of the findings in terms of causality and prediction. The precise nature of the

relationships between variables has not been discovered; only that relationships do exist and that certain sub-variables appear to be more important than others in these relationships. But, even here, any attempt at explanation is tainted with the danger of spurious correlation.

Hyman (1967) identifies two stages in empirical research: the first is to find the relevant facts, the second is to explain them. The existing state of knowledge in the subject will define the stage at which the research must, to build constructively on what has gone before, be pitched. This study was set carefully in the context of all other known studies. It's first task was to establish the probable truth or falsity that certain variables - the nature of the individual manager, his learning experience, his perception of his organisational climate and the relationship between the School and the Company - were relevant for the successful transfer of managerial training in Cable and Wireless Limited. Beyond that, attempts were made to relate them to one another and to identify the most important sub-variables. The study, then, emphasised exploration rather than explanation. Less triumphant than final confirmation of causality but perfectly legitimate: "hypotheses may be of a broad nature, emanating from background studies" wrote Krausz and Miller (p. 8).

There are, however, two features of the hypotheses that substantially reduce their power. One is that they are "null" hypotheses which tests the facts against chance but not against prediction so that the range of the relationship has full scope, both positive and negative. One knows that "differences" exist but not what they are. The second, according to Merton (1949) lies in the ex-post facto nature of the design: regardless of the observations, explanation can be sufficiently flexible to allow the

introduction of new interpretations to "fit the facts". But, Kerlinger believes, to conduct ex-post facto research "without hypotheses in which data are just collected and interpreted, is even more dangerous in its power to mislead" (p. 391).

Despite these shortcomings, there are a number of criteria for "good" hypotheses that were met. Krausz and Miller cite three: parsimony (the null hypotheses were simple and concise); relevance (they were grounded in the findings of earlier research); and quantifiability (variables were "translated" into scores and scales whenever possible). Kerlinger has only two criteria: hypotheses are statements about relationships and they carry clear implications for testing those relationships (the null hypotheses were phrased as simple "no difference" relationships between two variables; these variables were then broken down into sub-variables and tested independently). Smith provides a detailed breakdown of nine "Rules" for conducting "good" hypotheses and, thereby, generating "testable theory." Many of them are drawn from Davis (1970) who believed that "assertions about relationships between variables are the heart of research." The nine "rules" emphasise quantifiable rather than qualitative variables; careful refinement of variables and the importance of explicit scales of measurement; a strong preference for ratio data, formal analysis, the use of conventions to link variables; and the linking of propositions through shared variables whenever possible. The researcher had some difficulty assigning quantitative scales for the measurement of largely qualitative phenomena and ratio data was rare but "facts" were systematically collected and analysed and each activity undertaken was described in sufficient detail for evaluation and replication, as the "rules" recommend.

Generalisability of the Findings

Generalisability is important in applied research for it addresses the questions how much, to whom or what, and in what circumstances can the findings of this research be used? It is discussed by Campbell and Stanley as the "external validity" of a research study. Field studies and, even more, case studies, have limited external validity because of the highly specific circumstances in which the research is conducted. Rigby draws attention to this very point: "Generalisations should not be thought of as true or false, but rather as applying or not applying under various circumstances" (p. 29). Lupton (1966) also warns of the dangers of generalising from the facts of a single case but nevertheless, believes "there is much to be said for the study of single cases" particularly in the identification of relevant variables and proposals concerning their inter-relationship.

The "dangers" of generalisation stem from the convenience of "a shorthand that facilitates communication without excessive elaboration." So writes Shipman (1972) who warns against facts, and the meaning of evidence, being treated as "elastic" not only by the original researcher but by subsequent researchers. Even Krausz and Miller, who insist that "the only basis for generalising is random sampling" (p. 91), go on to acknowledge that it can be "intuitively obvious that the experimental findings are independent of particular research circumstances" (p. 92). Nowhere in this study is random sampling evident, yet there are many "intuitively obvious" generalisations that could be made. Caution is clearly in order if the findings are to be genuinely useful.

There is another aspect to generalisation, highlighted by Wallace's model, that relates to theory development. This is where inferential logic can transform factual results

into generally accepted principles. The danger here, in abstracting to models is, as Blalock (1961, p. 8) points out, "how much to oversimplify reality?" Perceptions of reality are, he observes, ongoing processes which vary over time and between individuals. Certain assumptions must be made and some will be more realistic than others. The dilemma is to use concepts and models that are simple enough to manipulate thoughts yet are realistic enough to lead to fairly accurate predictions. In this research, the model of transfer is built upon former theories which, according to Merton (1967), consolidates understanding and increases their generalisability. Two illustrations of very different approaches to the consolidation of theories, in this research, would be the taking of internal characteristics of transfer based on research into children and applying them to managers; and the simultaneous investigation of the external agencies of transfer.

To what extent then can empirical generalisations be drawn from this study and what are the limitations to be imposed on their use? The case study into the joint-venture is a typical example of a particular series of events developing from a particular combination of circumstances, personalities and ideas. The co-occurrence of all the variables in exactly the same manner or mood will never recur yet there are a number of experiences which can usefully be recalled of relevance to joint-ventures "in general". These include the need for a common vision; the recognition of an evolutionary process which requires flexibility and the confidence to rethink as events take place (p. 99+); the basing of curriculum design on broadly perceived training needs (p. 103+); the creation and maintenance of commitment to the joint-venture in both institutions (p. 106+). Nothing may have been "proved" but a number of important lessons can be learned and passed on through the continuous monitoring of events and of the individual meanings they aroused.

The four null hypotheses present a rather different picture for generalisation. They too reflect only a moment in time for a number of specific individuals in special circumstances. However these are carefully described and are typical of their kind within the Company (Chapter 4 Part 1). Outside the Company, similarities can be drawn with managers sharing the same attributes. In this way the findings of Hogarth, Vandenput, Baumgartel and Jeanpierre and Bakke could be compared. Reference to managers in other studies (or companies) must always be circumspect but, if conducted with sufficient care, can become a source of external validity.

Null hypothesis 1: that participant managers were not significantly different from one another (Chapter 4, Part II), was tested to discover the extent of conformity to the "company man" image. Sufficient differences were discovered to allow personal attributes to be used as variables against which perceptions could later be correlated. The outcome of testing null hypothesis 1 is not generalisable beyond the confines of this study.

Null hypothesis 2: that no manager was significantly more satisfied with his learning experience than any other manager (Chapter 5) was tested with a view to evaluating the programmes through the perceptions of specific groups of managers. The value of the detailed findings are therefore limited to Cranfield and Cable and Wireless. There is, however, one observation that could usefully be compared elsewhere: it is the shift away from an immediate widespread approval of the programme to a more qualified appreciation of its value in retrospect.

Null hypothesis 3: that there is no significant difference between managers' perceptions of aspects of the organisational climate in helping or hindering them to transfer what they have learnt, is the area of study most readily

generalised outside the field study (Chapter 6). This is partly because the checklist used to define organisational climate is grounded in the earlier exploratory research of Vandepuut (1973). It is also because of the great interest amongst organisational researchers in climate and its constituent parts - especially the manager's job - as a theoretical concept. To pursue some of the many opportunities for generalising the findings - which remain context-specific - the researcher devoted Chapter 6 Part III to an interpretation of them in the light of other researchers. She selected, as being of obvious interest, research into Jungian work preferences using the MBTI conducted by Hays (1964), Collings (1965), Barron and Egan (1968), and Myers (1980); Herzberg's motivation-hygiene theory (1966); Hackman and Oldham's job description survey (1974); and Baumgartel and Jeanpierre's transfer study (1972). Implications of the various results for one another are discussed in turn; some earlier findings were confirmed, some were not and there were some additional insights.

Null hypothesis 4: that there is no significant difference in the transfer performance between participant managers, brings generalisation firmly back to within the Company. Discussed in depth in Chapter 7, the findings are highly specific to Company operations and, although of importance there, cannot be used elsewhere.

Thus, it is only in the areas of existing theory that these research findings can be generalised. Unless they can be abstracted to theories (such as those surrounding "climate") or compared directly with similar studies (such as Baumgartel and Jeanpierre's), they cannot be generalised beyond the environment of their own data base.

Part III : Research Techniques

Different techniques for data collection and analysis were adopted for the two studies. (These are explained at length in Chapter 3, Part III). This reflected their philosophical stances rather than the nature of the data, which in both cases comprised overwhelmingly subjective perceptions. The case study into the joint-venture was intended to monitor the whole process as it occurred. This led to the use of a variety of data collection methods - the most important of which were participant observation, semi-structured interviews and documentary evidence. Personal opinions and interpretations of what went on were systematically collected. The semi-structured interview schedules helped here. They were content analysed by the researcher who tried to present a "true and fair view" in keeping with the accountant's convention (Reid and Myddelton, 1974). Concern was for consistency in interpretation and efforts were made to ignore the trivial. There was no conscious attempt to introduce the beliefs and values of the researcher into the final account, nor were any perceived by other actors, who acknowledged its face validity.

The field study, in contrast to the flexibility of approach typifying the conduct of the case study, was formal with every manager receiving identical questionnaires, first at Cranfield, then through the post, back at work. Some interesting problems were posed by the subjective nature of so much of the information collected by questionnaire. A basic problem lay in selecting key words or phrases to tap the experiences and feelings of the participant managers. Current perceptions were sought of past, present and even future experiences - for example: "Looking back, to what extent do you now feel that these aims were achieved?; How much better do you now feel you would undertake the following activities?; On your return to

work, which aspects of the organizational climate do you anticipate will help or hinder the transfer of what you have learnt at Cranfield back to your place of work? " All of these broad questions were followed by a series of statements which focussed on important aspects of the variable being examined. The critical question raised here is that of "shared meanings" (Hughes, 1980 pp 97-100). Do the respondents interpret the questions in the same way as the researcher and as one another?

A linked problem was the selection of an appropriate "scoring" system for the responses made, given that they must subsequently be coded for statistical analysis. The three examples given above used a "score out of ten"; a 5-point Likert-type scale; and a "forced" choice between "help", "hinder" and "neither help nor hinder".

To overcome these problems - so far as that is possible - large numbers of unidimensional measures were taken in the context of a multidimensional approach. For example, null hypothesis 2 addresses "satisfaction with the learning experience", yet there is no generally accepted measure of satisfaction. To give this construct a concreteness and to overcome its inherent ambiguity, six different tests were used to build up a composite picture. Between them they measured the extent of satisfaction in different time periods and in different contexts. Test 1 was an immediate end of programme measure, utilising scores out of five for the appropriateness of the content and presentation of each lecturer. Test 2 was a retrospective view of the programme, using a five-point scale for the perceived practical, theoretical and personal value, of each subject taught. Open-ended questions were also asked with regard to recommended changes that could usefully be made. Test 3 asked participants to assess the publically stated aims of their programme by scoring each of them out of ten, some months after their return to work. Test 4 measured the value of the people they met on the programme -

other participants as well as lecturers, tutors and visiting speakers from the Company - on a five-point scale. Test 5 was an indirect measure of personal satisfaction through the proportion of managers recommending attendance on the programme to their colleagues, be they subordinates, peers or superiors. Test 6 comprised three open-ended questions which asked participants, after their return to work, what benefits they had gained from the programme attended, with respect to their current job, their future career and in any other way.

In this way, the focus of attention - satisfaction - is "triangulated" from a number of different perspectives to provide a multi-dimensional view incorporating many aspects and interpretations of the variable under consideration. In attempting to overcome one problem, however, another was created. The quantity of detailed data collected was enormous. Test 2, cited above, for example comprised 2,268 separate assessments. Even with the aid of a computer, this was time consuming, requiring a painstaking attention to detail. To make calculations manageable and to reduce the risk of spurious correlations being made, data had to be classified and categorised before it could be analysed.

Part IV : Value of the Study

The research conducted into the transfer of training and discussed in this thesis is of value to three separate groups. First, it is of value to the researcher herself for whom it provided a thorough grounding in the procedures and associated problems of applied research. It created an effective arena for "learning by doing". Second, it is of value to Cable and Wireless PLC, the host company who have received a number of insights into the management development process. An evaluation of the formal programmes has been built upon by attention being directed

to the importance of other aspects such as a supportive organisational climate and a commitment to ongoing development activities. These are discussed at length in Chapter 8 and in the Research Report submitted to the Steering Committee at the end of the study. The third group who will find this research of value is the academic community. The "literature" has been enhanced by this in-depth case-study and the disparate findings of separate subject areas - psychology, education, sociology and management - have been brought together for the first time. Previous theoretical, experimental and empirical results are combined to provide an integrated foundation for this and future research. The findings of this study build on those of others, particularly Hogarth, Vandemput and Baumgartel and Jeanpierre.

In addition, a model for the transfer of management training was developed and opportunities for future research highlighted.

A Model for the Transfer of Management Training

No-one has, until now, developed an effective model for transfer. This researcher has attempted to do exactly this. She started off by combining and building upon the suggestions of Hamblin and Warr, Rackham and Bird to produce the model shown in Figure 3.8 (p. 165). This model was subsequently modified in the light of her findings. All previous research suggested that the transfer of training was dependent upon the nature of the learning experience, the type of manager and the influence of the organisational climate. The findings of this research suggest that rather than three independent variables, there are only two, the programme and the climate, but that both are modified by the type of manager.

On 55 occasions, perceptions of the value of their programme and the influence of the climate varied by type

of manager. On a further 33 occasions, perceptions of transfer performance also varied by type of manager. Certain types of manager consistently reported that they did or did not find aspects of their programmes valuable, features of their climate helpful and efforts at transfer successful. Perceptions, therefore, varied with the "type" of manager rather than simply with the individual manager. With the differing perceptions rested differing "realities" of the situations facing each manager. Aspects of the climate, for example, constrained and even inhibited the INTP type of manager yet the ESFJ was unaffected or helped by the "same" climatic factors. Some of the differences may not have been based on the "same" factors: for example, amongst the factors making up the climates of the HOs, FIs and Nats, some are the same but others are clearly different; likewise, SMs, MRs and MMs attended different programmes. But engineers and non-engineers, young and old, and the 16 Myers-Briggs types were to be found on all programmes and in all parts of the Company. In addition, many of the features of climate and programme were common to all managers, regardless of type.

The revised model expresses the relationships between the variables and is shown in Figure 9.7 and described below.

The flow still begins with the Cranfield input and the questions "has the manager discovered anything worth transferring?" At the end of the programme, the immediate reactions and evaluations of the experience were unanimous, although the resolutions set did vary by type of manager. The extent to which managers later felt they had gained lasting value did vary by type of manager and thus learning has been split off from reaction.

The manager's job is still the focal point of the transfer effort and begs the question "does the manager have the opportunity for transfer?" Job is now seen as an aspect

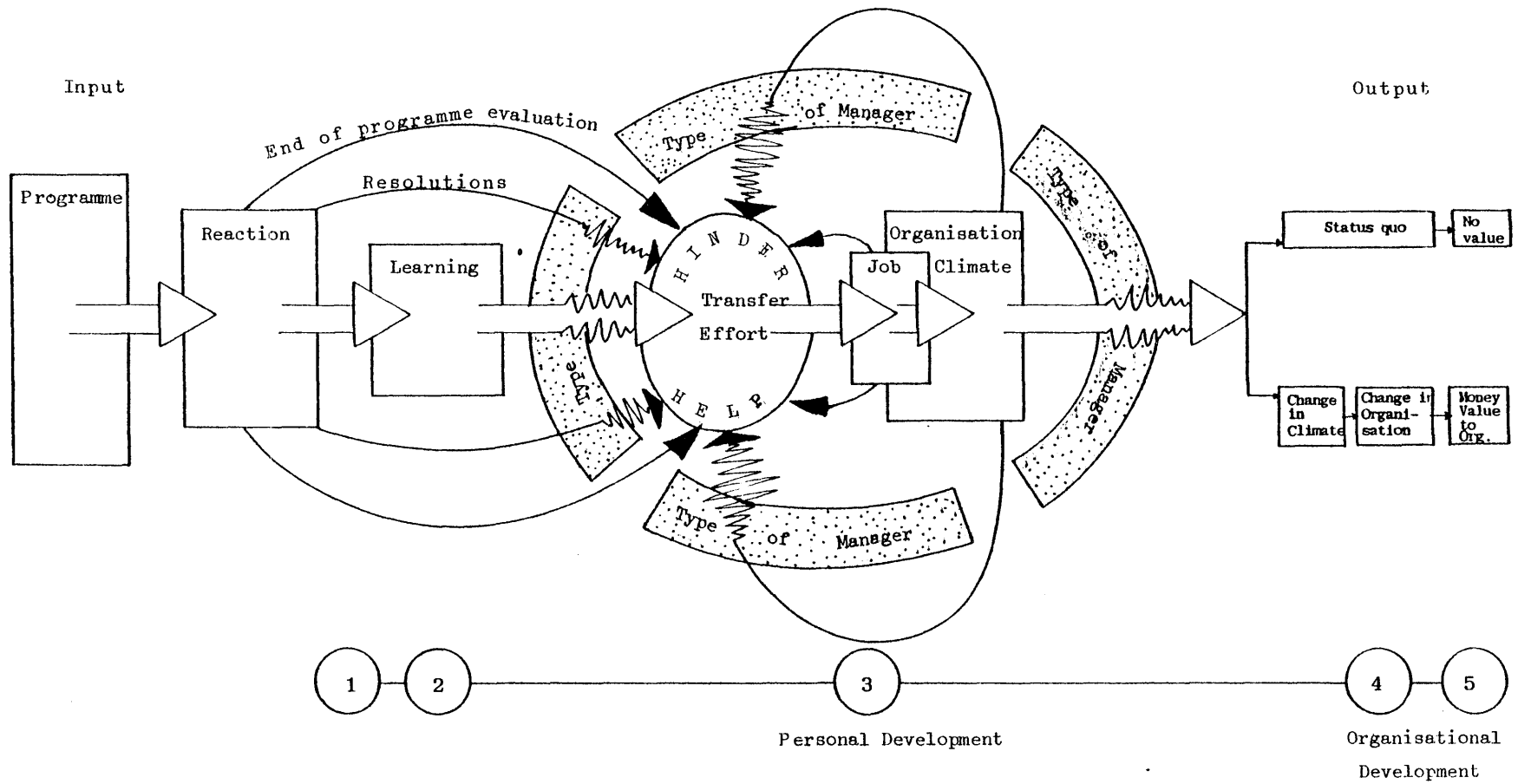


Figure 9.7 : Revised Model for the Transfer of Training

of climate but it has a crucial influence over transfer regardless of the type of manager. The many other factors of organisational climate may help or hinder or be irrelevant to the transfer process depending on the type of manager. Some managers feel that aspects of the climate encourage them to innovate; others feel that they are "not allowed" to adopt new behaviours; and others never conceive of the need to seek "permission" or approval.

The final outcome of the transfer effort - whether or not change has been effected - discussed in the findings as transfer performance (Chapter 7) also varies with type of manager. If no change has been attempted, the status quo will be maintained and no value will be accrued by the organisation from the programme. But, if change is attempted, even if it is unsuccessful, there will be some impact on the climate at least. If the attempts at change are successful and become institutionalised, the real value to the organisation will result. The transition will have been made from management development to organisational development through the successful transfer of training.

Some Recommendations for Further Study

The importance of the problems posed by transfer together with the paradoxical nature of the research already conducted - in that there is so much and yet so little - provides plenty of scope for more research in this area. This research, with its emphasis on "exploration" has identified a number of directions for further research activity.

Some comparative studies, using managers from other companies attending Cranfield programmes, should be conducted using the same, or similar, measures to those in this study. Confirmation of the findings would allow them to become predictive variables in future hypothesis-

testing research and thus increase their generalisability. The transfer model could be used to hypothesise the relationships between the variables and, again, confirmation through the emergence of common patterns would enhance its external validity.

Follow-up studies in Cable and Wireless itself should investigate how best to make transfer effective in this Company. The programmes should also be reworked, in the light of the findings of this study, to facilitate learning and its subsequent transfer; aspects of the organisational climate needing attention should be researched with improvement in mind. An experimental study with specially-designed "follow-up" encouragement to be given to selected groups of managers--but not to others - on their return to work, should identify worthwhile activities for transfer success.

Another possibility stems from the recognition, given by the social interactionists, of a "soft determinism" at play throughout life whereby managers are influenced by external factors but, at the same time, have some control over their own destiny. One cannot help wondering "soft for whom?" in view of the differences observed between the various types of manager. One is reminded too of Hogarth's internal and external personalities and Bray's enlargers and enfolders. This leads to a natural recommendation for further research into the nature of managers. Why are some influenced to a greater or lesser extent by the world around them and others by the world within them? Should they change? Indeed, can they change? Which does a company like Cable and Wireless need where? The Jungian dimensions, measured by the MBTI, usefully discriminate between managers and could be used as a predictive variable for their attitudes and behaviours.

In symbolic interactionist terms, management development

itself could be seen as a symbol of career development. This would result from it being perceived as a pathway to what is most valued in terms of jobs, power, opportunity, advancement, recognition and so on. Further explorations of the perceptions held by managers, symbols thus created and the extent to which they are shared by certain types of managers could bring about insights into many aspects of organisational life.

This research discovered that the meanings assigned to reality by different types of managers - and through which reality was then interpreted - were strong enough to modify the two major determinants of successful transfer: the nature of the learning experience and the supportiveness of the climate to which they returned.

Summary

Taken as a whole, this study furthers the knowledge and understanding of two important areas of management development: joint-ventures and the transfer of training. There is immediate and practical value for those involved in the actual case studied and a substantial contribution is made to the literature. Also, in recording the experiences of a researcher "in action" it may be of some "cautionary" value to those who follow.

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APPENDIX A

WORK PREFERENCES

Everyone has a preferred way of conducting their working life. The way in which a person interacts with others, collects information, makes decisions, handles problems, responds to change, allocates priorities and initiates action all reflect his preferred style of behaviour. The preferred ways of working of each of the C & W managers attending the Cranfield programme were measured using the Myers-Briggs Type Indicator (MBTI).

The MBTI is a self-report inventory founded upon Carl Jung's theory of psychological type (1923). As a typology the MBTI possesses two important strengths (Mitroff and Kilmann, 1975). These are firstly, a wide-ranging application to many different situations and secondly, the identification of different categories of equal worth. Each of the 'types' is made up of strengths and weaknesses but none is regarded as inherently superior to any other.

The MBTI measures personal preferences on four dimensions. Each is a continuous scale and although they are labelled as though bi-polar, distribution along the scales is not bimodal but approximates a normal curve (Stricker and Ross 1964, 1966).

The four dimensions are:

1. Extravert - Introvert (E - I)
2. Sensation - Intuition (S - N)
3. Thinking - Feeling (T - F)
4. Judgemental - Perception (J - P)

The first three dimensions were identified by Jung (1923); the final one, implicit in Jung's writings, was added by Katharine Briggs and included in all versions of the MBTI. A total of 16 different "types" can be constructed by combining the measurement taken on each scale. The mid-point on each scale is 100 so the individual being measured has both a continuous score for each dimension and can also be categorised depending on whether he is positioned before or beyond 100. These two levels of measurement (interval or nominal) allow scores to be compared between individuals and between industries. Jung's contention was that whilst individuals could operate in either mode of each dimension, they could not do so simultaneously. A discrete choice had to be made by the individual who has a natural, initially unconscious, preference for one approach rather than another. Behaving in his preferred mode means that an individual is continually practising that behaviour, becoming increasingly skilled in it and reinforcing his preference for it. In this way, an individual chooses and develops the characteristics of a particular type.

What then are the implications of identifying these various preferences? At the individual level, there is a heightening of self-awareness leading to personal development and an increased understanding of others. A manager's efficacy at work depends to a great extent on his success in managing relationships and information. An understanding of his work preference will help a manager in this, be it motivating his staff, delegating work, conducting interviews and negotiations, chairing meetings or handling conflict. At the departmental level, appropriate jobs can be matched to the preferences of particular "types" of managers. When working in his preferred way a manager will be more relaxed, more natural and more successful than when working in a non-preferred manner. At the corporate level, it is important to recognise the work preferences of employees, particularly those in policy-setting and decision-making roles.

The Four Dimensions

1. Introvert - Extravert

The four dimensions, mentioned earlier, are fundamental. The first, extraversion - introversion (E - I) measures how a manager relates to the world. In placing emphasis on either the activities around him or on the personal effect they have on him, the manager directs his psychic energies into the outer world of people and things or into the inner world of concepts and ideas. This emphasis influences the amount of personal contact he makes with others and makes him either extravert or introvert in his behaviour. The extravert, always seeking stimulation, likes variety and action; he also likes being with other people, tends to communicate well and makes newcomers feel welcome. Extraverts are interested in results, in getting things done by the simplest, speediest methods. They don't mind interruptions but become impatient with long slow jobs. Introverts are far more quiet and reflective. Unlike the extravert who can be slap-dash, the introvert is inclined to be something of a perfectionist and likes to be able to concentrate on what he is doing without interruption. He will happily work alone and can stay with a single project over a long period of time. Introverts are careful with details and dislike sweeping generalisations. They tend to be self-contained but sometimes have problems communicating with others - particularly at the superficial level of small talk and remembering names and faces. A rather typical difference between the extravert and the introvert is that the former "act without thinking" whilst the latter "think without acting".

2. Sensation - Intuition

The second dimension is sensation - intuition (S -N). This measures how a manager prefers to generate information. In gathering information a manager can either use his senses (eyes, ears etc) to collect hard facts or he can use his

imagination and intuition to collect "possibilities" and seek out relationships. The effect of these preferences in the work place are that the sensing types prefer to work steadily according to an established routine. They are thorough and have a respect for details and concrete knowledge. Although they are good at precise work, they avoid letting situations become too complicated. They seldom make factual errors and are realistic about how long a job will take to complete. Sensing types dislike new problems unless they can apply a standard solution and they prefer using existing skills to acquiring new ones. Intuitive types, on the other hand, enjoy solving new problems and learning new skills. They work in bursts of enthusiasm interspersed with slack periods. They are quick to see connections between things and are patient with complicated situations. However, they dislike spending time on factual details, routine and repetition. The intuitive manager is imaginative and creative, inventive and generalist.

3. Thinking - Feeling

The third dimension is thinking - feeling (T - F). This measures how a manager prefers to use the information he has collected. In making decisions, a manager might analyse a situation in an impersonal manner, coming to a logical conclusion based on cause and effect; alternatively he can take into account his personal values and let these influence his final decision. The thinking type of manager is rational and realistic with a strong analytical and critical faculty. He tends to be unemotional and unconcerned with people's feelings, indeed he might hurt others without even realising it. He doesn't worry about harmony and may even seem hard-hearted. However, he has a strong sense of fair play and is not afraid to take unpopular decisions provided they reflect the truth as expressed by logical analysis. Contrary to these characteristics, the feeling type of manager is very conscious of other people and their feelings. He enjoys pleasing others, even in small ways and can be relied upon

to be tactful. He relates well to most people and, having a sympathetic nature, may well let his decisions be swayed by the likes and dislikes of others. His decisions tend to be guided by his personal beliefs and convictions be they political, religious, social, moral or business. The thinking type is naturally brief and businesslike; the feeling type finds this more difficult.

4. Judgemental - Perceptive

The fourth and final dimension is judgemental - perception (J - P). This measures a manager's preference for dealing with people and situations. When interacting with the world in general, a manager can try to control it or simply respond to it. He may prefer a planned, orderly and well-regulated life or just to adapt to whatever happens. The judgemental type of manager likes to plan his work and then to keep to the plan until the task is completed. He is loath to interrupt a schedule even if new evidence is found or a more important task crops up. He likes issues to be resolved, decisions to be made and life to be lived in an orderly fashion. He gets things done but at the risk of satisficing. Well-marked judging managers will not only try to organise their own lives, but those of their colleagues too. At his extreme, the judging manager can become prejudiced. The perceptive type of manager is much more adaptable and indeed rarely regards a situation as fixed, always welcoming new information and views. For this reason he may start many more jobs than he will even complete. His tendency is to put off unpleasant jobs and the making of decisions in the anticipation of changing circumstances. Whilst the judgemental type likes to take a stand (this does not mean that he is too inflexible to change that stand), the perceptive type is loath to commit himself. The former aims to organise the world; the latter to understand it.

Extravert (people and things)	E	<u>on facing the world and meeting others</u>	I	Introvert (ideas and concepts)
Sensing (facts)	S	<u>on generating information</u>	N	Intuitive (possibilities)
Thinking (logical analysis)	T	<u>on using information to make decisions</u>	F	Feeling (beliefs and values)
Judging (order and control)	J	<u>on dealing with the world and establishing priorities</u>	P	Perceptive (understanding and adaptation)

Figure A1 : The Four Dimensions

The Mutual Usefulness of the Opposites

As will be apparent, there is a mutual usefulness in the opposites. The intuitive manager needs a sensing type to seek out pertinent facts; to check records, read through contracts and keep track of detail; to notice what needs doing, to inspect quality and progress and to have patience. In return, the sensing manager needs an intuitive to look ahead and come up with new ideas; to deal with complexity and to explain what other intuitives are talking about; to provide the energy and ingenuity to make the impossible happen. Likewise, the thinking and feeling types need one another. The thinking manager needs a feeling type to forecast how others will react, to persuade and conciliate them; to create enthusiasm; and to support, help, teach, advertise and sell his products and solutions. The feeling manager, himself, needs a thinking type to do the analysis and organisation; to weigh evidence, find flaws and make reforms. He needs him to stand firm against the opposition and hold consistently to a policy. (Myers, 1980 p 121).

As will also be apparent, both sides of each dimension has its strengths and weaknesses. The J - P dimension serves as an example, strengths such as orderly, planned, controlled on the one hand and flexible, adaptable and spontaneous on the other, can be replaced by weaknesses such as close-minded, insensitive and rigid in the former case and inconsistent, indecisive and feckless in the latter. They are alternative manifestations of the same characteristics. Knowledge of his preferences allows a manager to develop the strengths and avoid the pitfalls inherent in his combination of measures. Knowledge of the preferences of others with whom he works helps him to better understand his colleagues, draw out the best in them and form closer working relationships with those who complement his own preferences. Thus, in addition to personal development, balance can be sought at every level of team work, in small groups, committees, departments and organisations as a whole.

The Sixteen Types and their Clusters

As soon as a manager has his scores on the four dimensions he can identify which of the sixteen Myers-Briggs types he is. These are located on a grid as shown in Figure A2.

ISTJ	ISFJ	INFJ	INTJ
ISTP	ISFP	INFP	INTP
ESTP	ESFP	ENFP	ENTP
ESTJ	ESFJ	ENFJ	ENTJ

Figure A2 : The Sixteen Types

The sixteen types cluster into groups that share strong characteristics. The researcher sees four approaches to the clustering of types. These are:

1. The CAPT approach
2. The CCL approach
3. The Castle Keep approach
4. The MODRC approach

The first approach (CAPT), espoused by the Centre for the Application of Psychological Type, was first developed by Isabel Briggs-Myers (1962). It is made up of the four columns of the grid (ST, SF, NF, NT) and is the most widely used in research studies. The second approach (CCL) is a modification of the traditional clustering. It has been developed by Bates and Keirsey (1976) and is used by the Centre for Creative Leadership, again with four groups but these highlight management style. This approach is adopted as being most appropriate for this research study. The third (Castle Keep) and fourth (MODRC) approaches are still in their experimental stages. The researcher has identified them from the empirical work undertaken by the MODRC with British managers. All four approaches are shown in Figure A3.

a	b	c	d

1. CAPT Clusters

a		
b	c	d
a		

2. CCL Clusters

a	b	a
b	c	b
a	b	a

3. Castle Clusters

a	d
b	c
a	d

4. MODRC Clusters

Figure A3 : The Four Clusters

The alternative clustering of types serves as a reminder not to use the typology blindly. Sensitivity of interpretation is required at all times.

The researcher decided to use the CCL approach to clustering as a result of comparing alternative analyses of some of the C & W data. It discriminated between types to a greater extent than did the others, particularly the traditional CAPT approach. The MODRC clustering also looked promising but more exploratory work was required before it could be relied upon. This would entail a major exercise in discriminant analysis and arrangements were made for it to be further investigated at a later date. Essentially the MODRC model would take the CCL modification one step further, resulting in a completely horizontal, rather than vertical (as CAPT) clustering of types. Both the CCL and the MODRC approaches emphasise the importance of the J-P dimension, the only one of the four for which few opportunities for practice are available until the individual takes on adult responsibilities. This has particular importance for the work preferences of managers who carry a heavier load of responsibilities than most people. They certainly carry more than the thousands of 12th grade and university students on whom the CAPT clusters are founded.

The CCL Approach

Four distinct management styles are identified, as shown in Figure A4. Two are the same as those of the CAPT approach. The other two are further sub-divided but the division is semantic and therefore overlooked. Each style is described below.

Tradition- alist (ISTJ)	Loyalist (ISFJ)	Catalyst {all} {NFs}	Visionary {all} {NTs}
Trouble- Shooter (ISTP & ESTP)	Negotia- tor (ISFP & ESFP)		
Tradition- alist (ESTJ)	Loyalist (ESFJ)		

Figure A4 : CCL Management Styles

1. The Catalyst

This style is preferred by all the NFs. They value integrity, authenticity, meaning and worth. Their great strength lies in their commitment to those with whom they work and the personal charisma which they so often exhibit for others. As a result they excel in working with or through people, making for sympathetic and considerate managers. They communicate well with all types and levels of people within and outside their organisation. They are great givers of praise and encouragement but this needs to be reciprocated. They have a strong need for the approval and appreciation of others and can find the lack of this so disheartening that it can lead them to disassociate themselves from the activities in which they are involved.

Catalysts make excellent leaders provided the organisation for which they work does not constrain them with too much bureaucracy. They can also become rebellious if they see

"authority" as being in conflict with their personal values and belief systems. They give to an organisation warmth, energy, enthusiasm and a conscience.

2. The Visionary

This style is preferred by all the NTs. They value ability, knowledge and competence. They are natural "system thinkers" seeing everything as component parts of interacting systems. They are highly analytical and focus their energies on the possibilities inherent in ideas and situations. They have great drive during the creative stage of any project but tend to lose interest once the problems have been solved. They set high levels of achievement for themselves and others and will honour commitments even when under great pressure. They give frank opinions and are not afraid to stand alone against, or ahead of, the crowd.

Visionaries are impatient with incompetence and tend to devalue those of lesser ability than themselves. They are often insensitive to the feelings of others and frequently forget the social rituals so important to other types. They easily become restless and feel unfulfilled; if an organisation does not make demands on their talents it will lose them. They have been described as "the architects of progress" by Bates and Kiersey who praise their intellectual ingenuity and pioneering spirit. An organisation needs them if it is to keep in step with an ever-changing world.

3. The Traditionalist and the Loyalist

These are described as one for they share the same style but for somewhat different reasons. The Traditionalist is an ISTJ or ESTJ; the Loyalist or Judicial type is an ISFJ or ESFJ. They share the values of belonging and social solidarity. They also share the strengths and weaknesses outlined below. Their differences lie in the emphasis they place on things in the case of the Traditionalists

and people in the case of the Loyalists. From here on they will be referred to only as Traditionalists.

Traditionalists are the backbone of any organisation. They are steady hard-workers who are sensible and reliable. They set up smooth running systems for routine work and behave in accordance with the rules, regulations and established procedures of the organisation. They are efficient, competitive, well-briefed and totally dependable. The maxim "a fair day's work for a fair day's pay" typifies their approach to a job. The details with which they are working and the schedules to which they are working means that, to be efficient, they must keep a regular flow of activity passing through their Department. This means weighing alternatives and making decisions quickly. Their preference for orderliness and control makes this possible. The danger is, of course, that they can preserve the bad along with the good and will be slow to adapt to change, maybe even actively resist it. They like tasks to be completed and are impatient with interruptions. Pressure of work brings out the worst in them; the atmosphere becomes tense and they can behave in a negative, blaming and punitive manner. They can also be over-cautious, wasting effort on unnecessary contingency plans or non-existent crises.

They tend to be harsh critics, noticing weaknesses rather than strengths and find it awkward to both give and receive praise. Instead they are inclined to rely on the giving and withholding of symbolic rewards. Organisations need Traditionalists to keep them going. They provide stability and continuity. They ensure the efficient use of resources and smooth running of the system.

4. The Trouble-Shooter and the Negotiator

These two groupings also share their characteristics. Again the differences between them are the result of underlying emphases on things and facts as against people. The ISTP

and ESTP are the Trouble-shooters; the ISFP and ESFP are the Negotiators. Hereon they are referred to collectively as Trouble-shooters. The values they uphold are those of action and sponteneity. These managers, more than any other, know what is going on in the organisation. They are careful observers of detail and methodical analysts of problems. They are also extremely pragmatic. Not interested in changing the system, they prefer to work within existing situations to find a solution acceptable to all parties. They live totally in the present. Their concerns are with current issues. They are easy-going and adaptable to internal change which they help to make effective amongst their colleagues. They hold little as sacred, so are willing to negotiate with a wide range of trade-offs; they are not afraid of failure so they are willing to take risks. Unlike the other types, they waste no effort or energy on theorising, speculation or caution. They live day-to-day and respond to demands as they occur. Trouble-shooters and Negotiators catch and correct problems before they have time to escalate. The former those of equipment and systems; the latter those of employees. Without this type, an organisation will experience a good deal more friction than it need.

The descriptions are something of a caricature, taken to extremes to highlight the important features. Any single manager is going to be a unique blend of characteristics. That blend, however, will be influenced by his work preference profile. He will have a natural leaning towards one or other management style. This being the case, managers should try to complement their preference with a person of the opposite type. Visionaries and Trouble-shooters should work together, so too should Traditionalists and Catalysts. This does not need to be on a one-to-one basis; one catalyst for example, is probably sufficient balance for several traditionalists. Even so, it happens less

frequently than one might expect. This is because the different types find one another rather tiresome. By definition they do not share the same interests, values or priorities. They prefer to share their thoughts, their time and their work with like-minded individuals. The various types select co-workers in their own image, they are attracted to particular jobs and organisations; enclaves are built-up in departments, companies, institutions and entire industries. With shared strengths come shared weaknesses, blind spots and a lack of balance.

APPENDIX B:

INTERVIEW MAPS

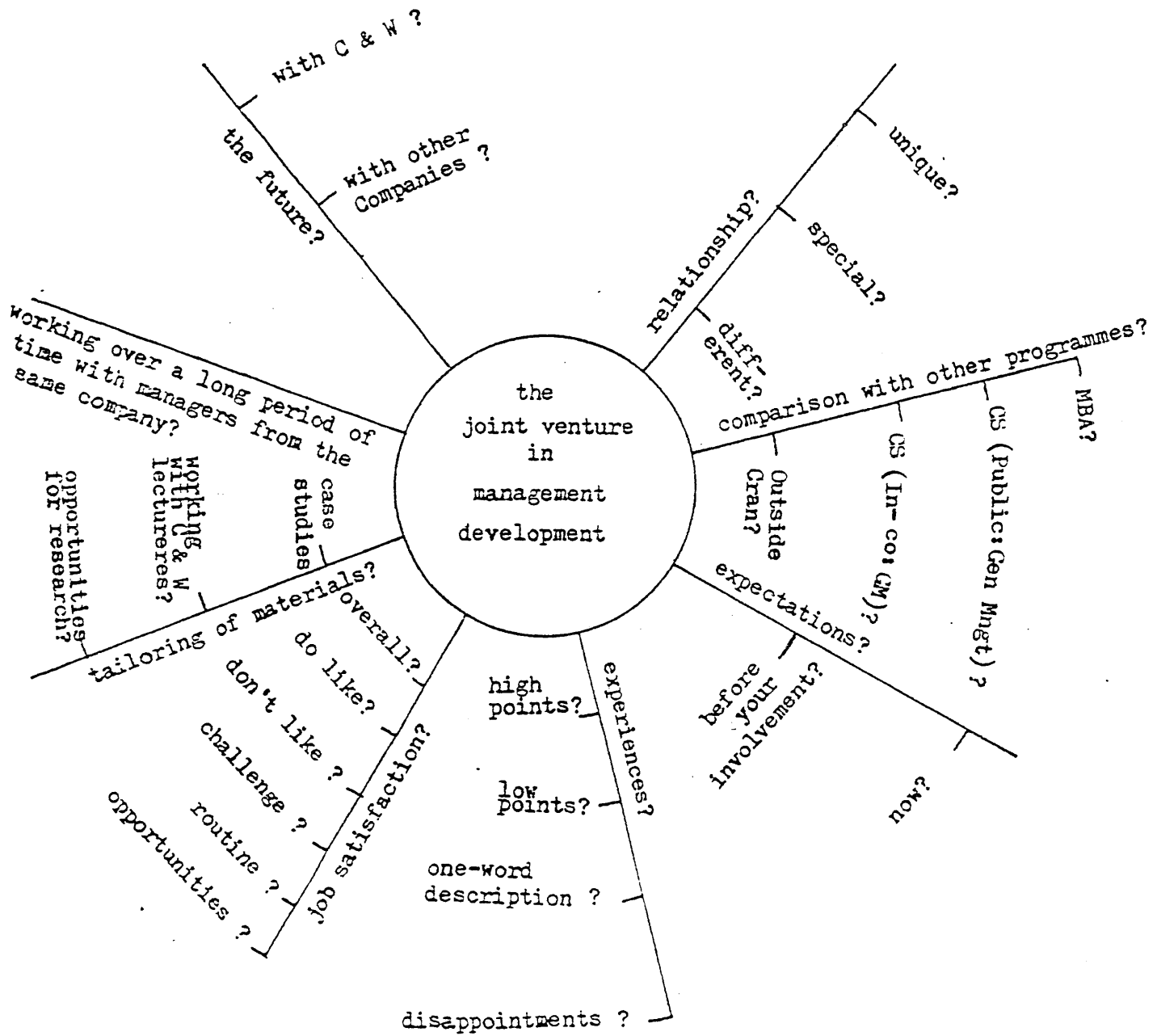


Figure B1 : Buzan-style map for interviewing Cranfield staff about the joint-venture

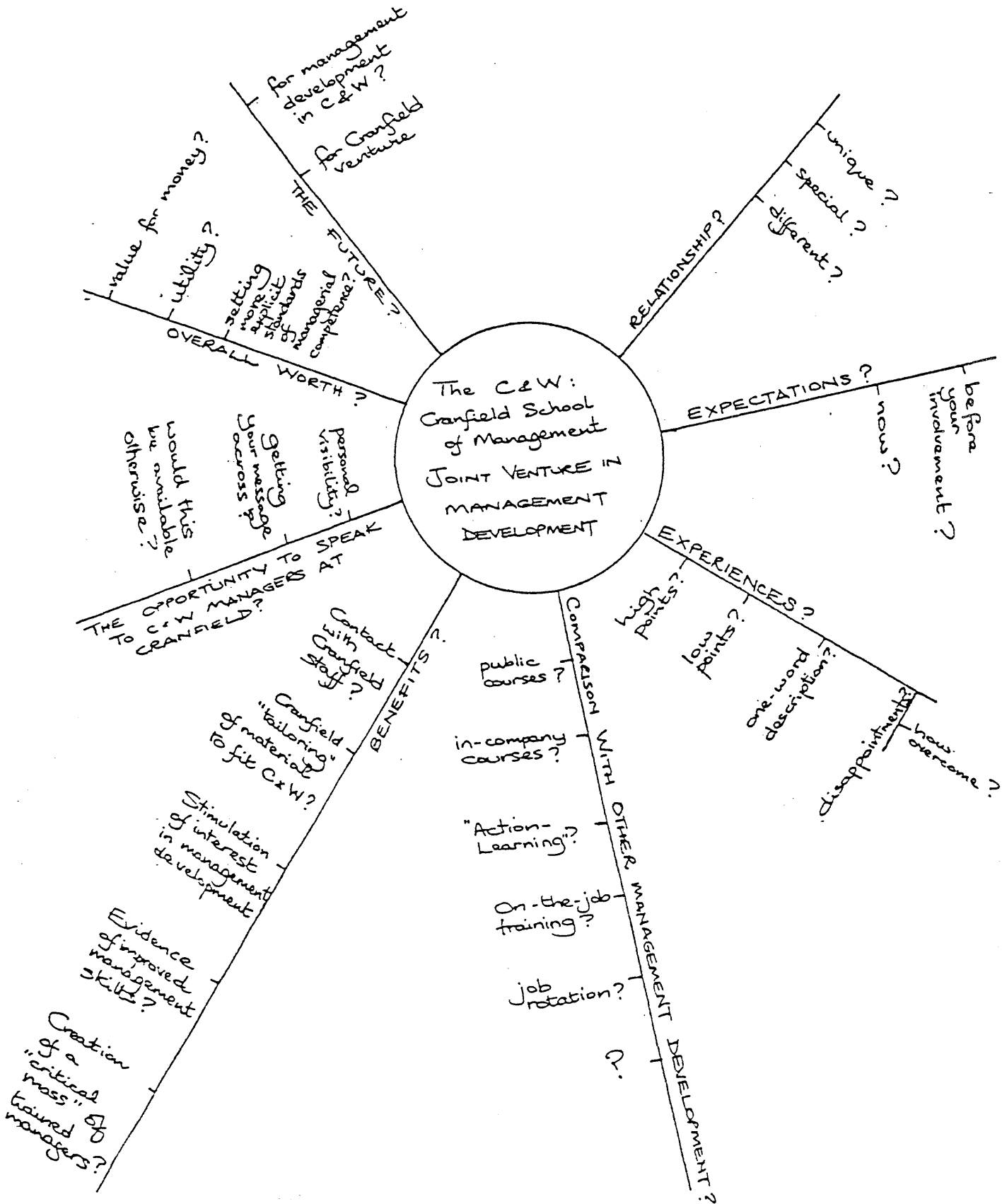


Figure B2 : Buzan-style map for interviewing C & W staff about the joint-venture

APPENDIX C

INSTRUMENTS FOR DATA COLLECTION

- Figure C1 : End of Programme Evaluation Questionnaire.
Figure C2 : End of Programme Request for Resolutions.
Figure C3 : The Transfer of Training Postal Questionnaire.
A 20-page A4 spiral bound booklet in glossy card covers.
Figure C4 : Bibliographical Data Sheet
Figure C5 : Reminders to Postal Questionnaire.
Figure C6 : Non-Respondents' Questionnaire.

SESSIONS REVIEW

PROGRAMME TITLE _____ DATE _____

It would be valuable if you could let each staff member know your views about his teaching sessions with you.

TOPIC AREA _____

STAFF MEMBER _____

1. What did the staff member do that you found helpful/useful.

2. What changes if any do you suggest.

3. Any other points that should be considered.

4. Please indicate your overall summary on content and presentation, by reference to the following scale, in the boxes.

Very Inappropriate	Inappropriate	Fairly Appropriate	Appropriate	Very Appropriate
(1)	(2)	(3)	(4)	(5)

	SCORE
CONTENT	

	SCORE
PRESENTATION	

Figure C1 : End of Programme Evaluation Questionnaire.

Figure C2 : End of Programme Request for Resolutions.

INTERNAL MEMO

RESOLUTION A

FROM: Jacquie Drake
Management and Organisational
Development Research Centre

TO: All members of Cable and
Wireless Management
Development Programmes

cc Professor of Management
Development
Course Tutor

Write a brief description of one change you propose to make on your return to work as a result of an idea acquired on this Management Development Programme.

THE TRANSFER OF TRAINING TO THE WORKPLACE

Before you leave Cranfield, we would like you to think about any new ideas or methods of working that you have come across during your time here that you are going to try and put into practice on your return to work.

We would like at least one and a maximum of three changes that you propose making. Write a brief description of each on the attached sheets labelled Resolution A, Resolution B and Resolution C.

Please bring the completed forms to the Course Review on Friday.

Do you anticipate that any particular aspect of your organisational environment will (a) help you or (b) hinder you in achieving this resolution in the next six months?

If so, please give a brief description below.

In six months time, we will follow you up to record your actual experiences.

ALL RESPONSES ARE CONFIDENTIAL.

The Transfer of Training



Cable and Wireless Limited



Cranfield School of Management

Figure C3 : The Transfer of Training Postal Questionnaire.

A 20-page A4 spiral bound booklet in glossy card covers.



Cranfield School of Management

Cranfield, Bedford, MK43 0AL England
Telephone Bedford (0234) 751122 Telex 825072



Jacqueline Drake, BA, MBA
Management and Organisation
Development Research Centre

Some months have now passed since you were on the Senior Management Programme here at Cranfield.

As you may recall, we said we'd be following you back into the Company at a later date to see what impact - if any! - we actually made on your working life.

Much as I'd like to, I very much regret that I can't visit each of you personally, so this short booklet must be our vehicle for discussion. This research has two aims. First, we would like to know how valuable you now feel your Cranfield programme to have been. Second, we are keen to identify which aspects of organisational life have helped and which have hindered the transfer of what you had learned from Cranfield to your place of work. I hope you will help us achieve these aims by completing and returning this booklet and the loose sheet requesting details of your 'organisational biography'.

This exercise is completely confidential. Please do not put your name on either the booklet or the biographical data sheet. They already have randomly assigned code numbers to which only I have the key. Incidentally, they are filed separately, in code number order.

Your responses are seen only by me. No-one else at Cranfield or in the Company has access to them. When the analysis is complete, this booklet, the data sheet and the checklist some of you completed whilst at Cranfield, will be shredded. Envelopes are enclosed for your replies which you may send separately or together as you wish and should be addressed to me personally at either the above address or, if you prefer, at my home address (44 Parklands, Great Linford, Milton Keynes MK14 5DZ). If you encounter any problems that you wish to clarify or discuss then please write, telex or phone me on the above numbers or at home: 0908-612618.

Continued

I will be submitting my conclusions (which will not name individuals) and making any recommendations that I feel to be necessary in a general Report to the Cable and Wireless/Cranfield Steering Committee on Management Development. It is planned that the Report will be circulated to everyone participating in the study, subject to the agreement of the Steering Committee.

This booklet will probably take you about 45 minutes to complete. I know how busy you are but do hope that you are able to spare the time.

I hope everything is going well for you and look forward to hearing from you.

With all best wishes

Jacqueline Drake

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SECTION 1

WHAT PRICE THE PROGRAMME?

On the following pages are a number of questions concerning the way you now feel about the programme you attended at Cranfield.

Question 1 refers to the inputs we at Cranfield made to the programme.

Question 2 refers to the changes we could make to the programme.

Question 3 refers to the outputs you have experienced back at work.

Questions 4 and 5 look at future management development activities.

SECTION 1

Q1. We would like to know which of the subjects taught on the Cranfield programme have been of practical value in your job since you returned to work.

Please score each subject in the following way:

- 5 of great practical value
- 4 of some practical value
- 3 of occasional practical value
- 2 of little practical value
- 1 of absolutely no practical value
- x this subject was not included in the programme I attended

We would also like to know to what extent you found these subjects, and other aspects of the programme, of theoretical interest and personal value.

Please score each subject in the following way:

- | | |
|--------------------------------------------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> 5 of great theoretical interest | <input type="checkbox"/> 5 of great personal value |
| <input type="checkbox"/> 4 of some theoretical interest | <input type="checkbox"/> 4 of some personal value |
| <input type="checkbox"/> 3 of occasional theoretical interest | <input type="checkbox"/> 3 of occasional personal value |
| <input type="checkbox"/> 2 of little theoretical interest | <input type="checkbox"/> 2 of little personal value |
| <input type="checkbox"/> 1 of absolutely no theoretical interest | <input type="checkbox"/> 1 of absolutely no personal value |
| <input type="checkbox"/> x this subject was not included in the programme I attended | <input type="checkbox"/> x |

Please put your score for practical value in the square, theoretical interest in the circle and personal value in the triangle.

practical	theoretical	personal	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accounting and financial management
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Economics
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	International business environment
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Corporate planning
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Project management
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Marketing
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Business policy
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	C & W policy
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Business Game
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Presentation skills
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interpersonal skills
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Organisation development
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Management development
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Personnel management
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lectures from C & W senior managers

practical	theoretical	personal	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Contacts made with other C & W people at Cranfield
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(i) C & W course members
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ii) C & W visitors

practical	theoretical	personal	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Contacts made with people at Cranfield
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(i) Cranfield staff
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	(ii) managers from other companies attending Cranfield

Q2. Looking back on the programme are there any parts you would like to see changed or anything you would like to see added or omitted?

Q3. In retrospect, how do you feel you benefitted from attending the programme?

a) in your present job

b) in respect of your future career

c) in other ways (eg socially)

d) how much better do you now feel you would undertake the following activities? Circle the appropriate point on the scale.

(i) "selling" yourself

worse same a little better much better very much better



(ii) "selling" the Company

worse same a little better much better very much better



(iii) understanding Company policy

worse same a little better much better very much better



(iv) understanding Company procedures

worse same a little better much better very much better



(v) sorting out priorities

worse same a little better much better very much better

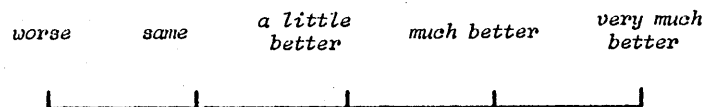


(vi) delegating work to others

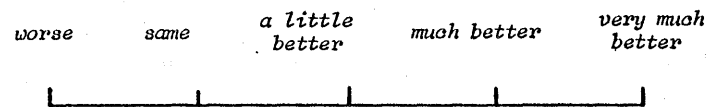
worse same a little better much better very much better



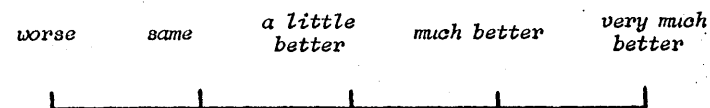
(vii) encouraging others to do their best work



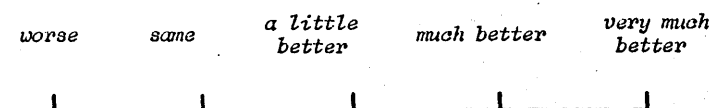
(viii) handling a meeting with Union representatives



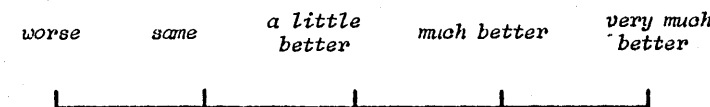
(ix) conducting a performance appraisal



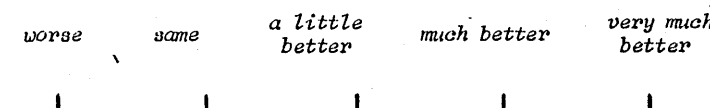
(x) preparing a case for internal approval, eg a request for increased resources



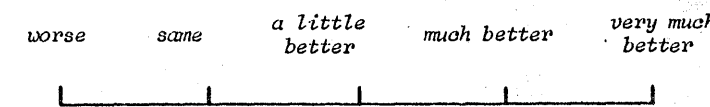
(xi) presenting such a case as (x)



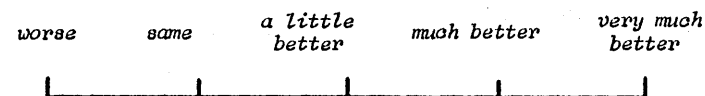
(xii) working with Head Office/National/Foreign-Service staff



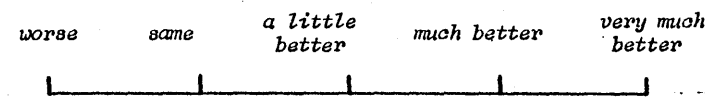
(xiii) working with Head-Office/National/Foreign Service staff



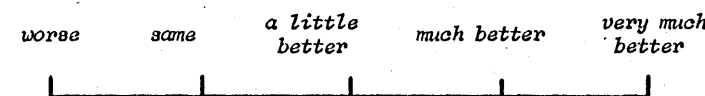
(xiv) making a personal approach to Head Office/another Department for assistance or advice in connection with some aspect of your job



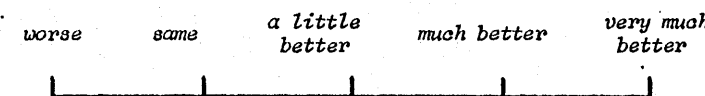
(xv) reprimanding a member of your staff who is older but of lower grading than yourself



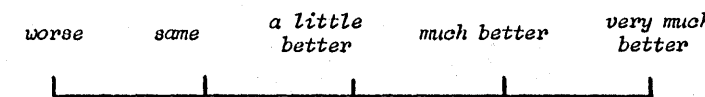
(xvi) dealing with a member of your staff whose general standard of work is unsatisfactory



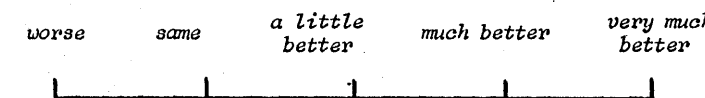
(xvii) coping with a member of your staff who has persistent personal problems



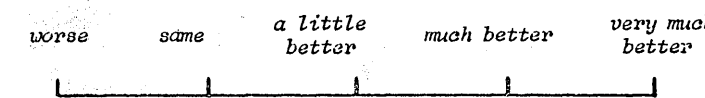
(xviii) handling instructions from above with which you do not agree



(xix) recognising your own personal strengths and weaknesses



(xx) doing something positive about developing these strengths and overcoming the weaknesses



The aims of the Senior Management Programme are set out below.

Looking back, to what extent do you now feel that these aims were achieved?

Give each aim a score out of ten.

Aims:

- 1. To identify the main sources of current success and develop corporate views of the means by which this success may be sustained. Score out of 10

- 2. To examine the international aspects of the business environment which are exerting pressures which may lead to change in the marketing, finance, operations and personnel functions of the organisation; and to produce specific recommendations to assist this. Score out of 10

- 3. To assist participants develop their personal skills in organisational development and group management. Score out of 10

- 4. To examine the essential elements of managing technological projects for owner clients as part of the new business strategy. Score out of 10

- 5. To examine the conflict of interests which may be involved in the use of new high and intermediate technology in developing countries. Score out of 10

Q4. Have you recommended attendance on a Cranfield programme to any of your

- superiors
- peers
- subordinates

please tick appropriate box

Have you recommended any other form of management development to them? If so, please give brief details.

Q5. What do you see as your next training and development needs?

NB You may like your suggestions to Q5 to be passed on to the Group Manager (Development and Training) with your name. If so, please write YES in the box; if not, please write NO.

SECTION 2

TRANSFER OF TRAINING

Before you left Cranfield many of you were asked to identify those aspects of your organisational life which you expected to (or anticipated would) help or hinder in the application of what you had learnt when you returned to work.

I am now asking all of you to identify those aspects which actually did help or did hinder you in putting your new knowledge and skills into action.

Please base your answers on the checklist on the next three pages. This checklist has been compiled from the responses of a substantial number of managers from a wide range of companies including Cable and Wireless.

To complete the checklist:

- Tick the box you agree with. For example, if you feel that union activities have prevented you from putting something you learnt at Cranfield into practice in Cable and Wireless then tick the second box, leaving the others blank.

	helped me	hindered me	neither helped nor hindered me
union activities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- Add any items you believe are missing. Spare boxes are provided at the end of each section.
- Put a circle around the box of any item that was of very special importance.

As far as possible, the items on the checklist have been worded so that each can be interpreted as either a help or a hinderance. In some cases this has been difficult to do, particularly in the more subjective areas. For example under People's Characteristics "their keenness and enthusiasm" could have helped, the lack of it might well have hindered. The scale of possibilities is always implied, if not actually stated. If you find this is too loose a framework for you, please feel free to modify or annotate the wording so as to make your responses more precise.

Remember, this is a record of what has actually happened.

TRANSFER OF TRAINING

	Tick box for helped me	Tick box for hindered me	Tick box for neither helped nor hindered me
THE ENVIRONMENT			
union activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
customer activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
political influences (UK)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
political influences (local)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
local culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
external consultants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
contact with other companies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	helped	hindered	neither
TECHNOLOGY			
complex technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
technical training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
technological change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	helped	hindered	neither
ORGANISATIONAL STRUCTURE			
the hierarchy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
links between departments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the flexibility of the system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
influence of the organisation on behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
official communication system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
relationship between power and responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
influence of Head Office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
awareness of the Company's goals and strategies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
freedom to meet during working hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
role of staff groups, eg Staff Development, management services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VALUES	Tick box for helped me	Tick box for hindered me	Tick box for neither helped nor hindered me
the essential but unspoken values of this organisation			
priority for the benefit of the Company as a whole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"looking after No 1"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
innovation is encouraged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"don't rock the boat"	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
paternalism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
openness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tendency to secrecy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a problem is only recognised when the catastrophe is emerging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
priority is given to short-term results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
long-term planning is encouraged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
active encouragement is given to training and self-renewal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
authoritarian culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>			
JOB CHARACTERISTICS	<i>helped</i>	<i>hindered</i>	<i>neither</i>
my personal workload	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
availability of criteria to evaluate performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
contact with others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the equipment at my disposal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the trained people at my disposal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the physical environment in which I work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the amount I get paid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the predictability of future tasks in this job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
opportunities for team work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
opportunities to initiate projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
opportunities for me to experiment and broaden my experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
appropriateness of the Cranfield training to my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AUTONOMY	Tick box for helped me	Tick box for hindered me	Tick box for neither helped nor hindered me
my autonomy at work			
the extent to which I have personal control over my working environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the extent to which I may participate in decision making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the amount of freedom I have to act on my own judgements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the amount of authority I have over the actions of others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>			
PEOPLE'S CHARACTERISTICS	<i>helped</i>	<i>hindered</i>	<i>neither</i>
personal characteristics of the people with whom I have contact			
their keenness and enthusiasm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
their motivation to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
their acceptance of new ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
their willingness to take responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
their willingness to share ideas and information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
their willingness to delegate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
their vision of the future	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
their ability to actually come up with the goods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>			
PERSONAL RELATIONS	<i>helped</i>	<i>hindered</i>	<i>neither</i>
characteristics of my relations with other individuals and groups			
the attitude of my superiors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the attitude of my peers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the attitude of my subordinates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the availability to me of relevant information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
the number of "contacts" I have in other parts of the Company	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SECTION 3

RESOLUTIONS

Before you left Cranfield you were asked to think about specific changes in your work that you would try to make on your return to work as a result of an idea acquired on the programme.

Some of you wrote down a "resolution" together with a short description of particular aspects of the organisational climate that you anticipated would help or would hinder your achievement of this resolution in the following six months.

If you did submit a resolution you will find it on the next page. I would now like you to describe what progress you were able to make, paying particular attention to those factors that have been and possibly still are helping or hindering you. Lack of success does not mean "failure" - I am just as interested in the process as the result.

Those of you who didn't submit a resolution have a more difficult task; that of describing how you got on in a more general way.

Your Resolution, submitted at the end of the programme you attended

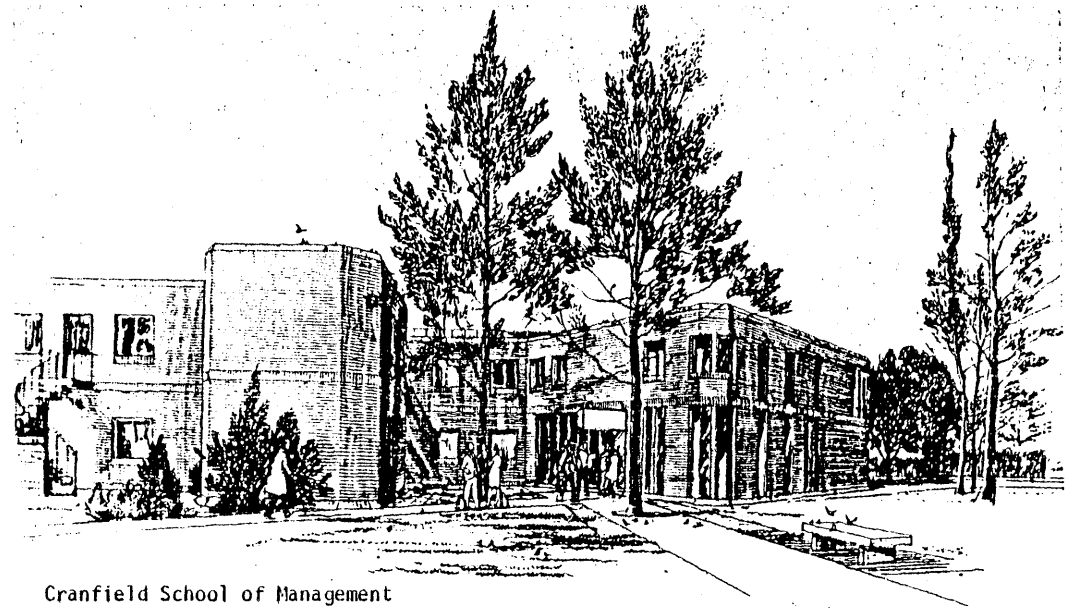
Aspects of the organisational environment that you anticipated would (a) help you or (b) hinder you in achieving your resolution in the following six months

Please describe the progress you were able to make with this (these) resolution(s) and what progress you have made in general

Thank you very much for participating in this follow-up exercise. In doing so you are contributing both to our understanding of the management development process and to the nature of future Cable and Wireless programmes at Cranfield.

Please return the completed booklet as soon as possible. An envelope is enclosed for your use.

BLANK



Cranfield School of Management

Figure C4 : Bibliographical Data Sheet

BIOGRAPHICAL DATA COLLECTION SHEET

Code Number

- 1. Date of birth
- 2. Date joined Cable and Wireless
- 3. Other management or non-technical training prior to Middle Management Programme at Cranfield

Date		Title of training activity	Place
From	To		

7. Experience:

Year		Job Title	Grade and Scale	Location (or company if not C&W)
From	To			

- 4. Job title
- 5. Category (eg F1, Nat, HO)
- 6. Grade and scale

Date of Prog	Today's date
--------------	--------------

When completed, please return to:
 Jacqueline Drake
 Management and Organisation Development Research Centre, Cranfield School of Management, Cranfield, Bedfordshire MK43 0AL, United Kingdom
 or, if you prefer to use my home address:
 44 Parklands, Great Linford, Milton Keynes MK14 5DZ, United Kingdom

/continued overleaf



Cranfield School of Management

Cranfield, Bedford, MK43 OAL England
Telephone Bedford (0234) 751122 Telex 825072

Dear

Some time ago I wrote to you asking for your views on the management development programme you had attended at Cranfield now that you are back at work. Although I heard from many of the managers, I was very disappointed not to have received a reply from you.

As the research is totally dependant on your co-operation, I would be grateful if you could complete the enclosed questionnaire. It really is important that I hear from you.

I have been asked to submit my Final Report to the Company this autumn so must complete the analysis of the data by September at the latest. This means that I need to receive your responses sometime in August.

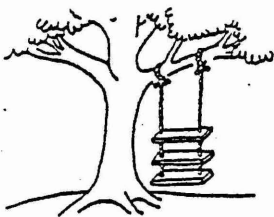
The importance of the role of management training is being increasingly recognised within the Company and this research is imperative to its future development. It is vital that the Report, which is destined for the most senior managers in the Company, reflects the views of all the managers who have participated in the management development programmes to date. It will not mention individuals but deal only with aggregate data.

Please don't let me down. Write back today.

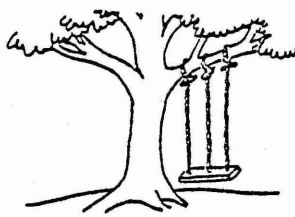
With all best wishes,

Yours sincerely

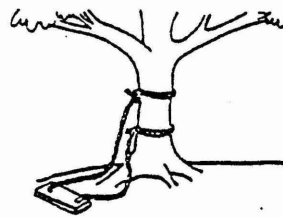
Jacqueline Drake BA MBA
Management and Organisation Development Research Centre



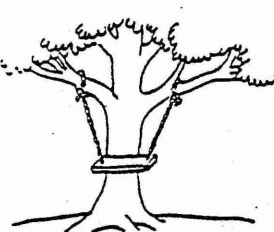
AS MARKETING REQUESTED IT



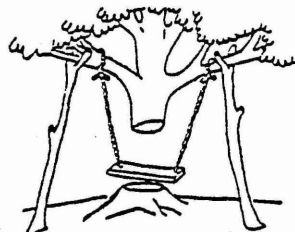
AS SALES ORDERED IT



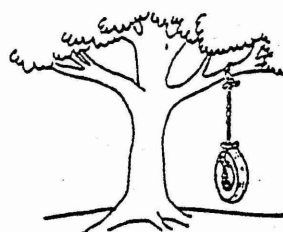
AS ENGINEERING DESIGNED IT



AS WE MANUFACTURED IT



AS FIELD SERVICE INSTALLED IT



WHAT THE CUSTOMER WANTED!!!

On reverse of card:

Where did I go wrong?
There is still time ... etc etc.

Figure C5 : Reminders to Postal Questionnaire.

Figure C6 : Non-Respondents' Questionnaire.



Cranfield School of Management

Cranfield, Bedford, MK43 0AL England
Telephone Bedford (0234) 751122 Telex 825072

CONFIDENTIAL

I am pleased to be able to tell you that the vast majority of managers who were asked to complete and return the Transfer of Training questionnaire have now done so. I was sorry not to have heard from you but appreciate that your time is very limited.

I would find it most useful to learn what prevented you from being able to reply. Some common reasons may emerge from your replies that help me to overcome a similar problem another time. I'd be most grateful if you could let me know. To make the task a little easier, I've listed on the accompanying sheet a variety of reasons, most of which have already been put to me. Please tick those which you feel applied to you on this occasion. Add any others that have not been mentioned. A reply-paid envelope is enclosed for your use.

With all best wishes,

Yours sincerely,

Jacqueline Drake

Reasons why I did not complete and return the Transfer of Training Questionnaire

Please tick appropriate boxed

- I intended completing the questionnaire but never got around to it, due to pressure of work.
- The questionnaire was too long.
- The Cranfield programme that I attended was so long ago that I felt unable to answer the questions.
- I have not had the opportunity to put anything that I learnt into practice.
- There were always other demands being made of me that were of higher priority.
- I found the questions so annoying that I could not bring myself to answer them.
- Cranfield has wasted enough of my time already.
- I never received the questionnaire.
- I lost the questionnaire.

Since attending the programme at Cranfield

- I have left the Company.
- I have retired from the Company.
- I have been on leave.

Other reasons:

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APPENDIX D

NATURE OF THE VARIABLES USED IN THE FIELD STUDY

VARIABLE NAME	VARIABLES VALUES (as coded)	TYPE OF DATA	ANALYTICAL MEASURES
<u>TYPE OF MANAGER</u>			
Type of programme attended	(1) SMP (2) MRP (3) MMP	Nominal	Non-parametric
Actual programme attended	(1) SMP1 (2) SMP2 (3) SMP3 (4) SMP4 (5) MRP1 (6) MRP2 (7) MMP7 (8) MMP8 (10) MMP10 (11) MMP11 (12) MMP12 (13) MMP13 (14) MMP14	Nominal	Non-parametric
Age at date of programme	actual age (1) 35 and under (2) 36 - 40 (3) 41 - 5 (4) 46 - 50 (5) 51 and over	Ratio Ordinal	Parametric Non-parametric
Years with Company at date of programme	actual number of years (1) 5 and under (2) 6 - 10 (3) 11 - 15 (4) 16 - 20 (5) 21 - 25 (6) 26 - 30 (7) 31 - 35 (8) 36 and over	Ratio Ordinal	Parametric Non-parametric
Telecommunications engineering background or not	(1) Yes, telecomms eng. (2) Not telecomms eng.	Nominal	Non-parametric
Cable & Wireless category of manager	(1) Head Office (2) National (3) Foreign Service (4) F1 turned permanent HO (5) Marine	Nominal	Non-parametric
Centre for Creative Leadership category of manager	(1) Traditionalist (2) Trouble Shooter/Negotiator (3) Catalyst (4) Visionary	Nominal	Non-parametric
Myers-Briggs Type	(1) ISTJ (2) ISFJ (3) INFJ (4) INTJ (5) ISTP (6) ISFP (7) INFP (8) INTP (9) ESTP (10) ESFP (11) ENFP (12) ENTJ (13) ESTJ (14) ESFJ (15) ENFJ (16) ENTJ	Nominal	Non-parametric
Other general management training*	(1) none (2) supervisory (3) IMP and/or Admin course (4) DMS or HND in management (5) HNC, BA or BSc in management (6) MBA, MA or MSc in management (7) other MMP	Nominal	Non-parametric
Other specialist management training*	(1) none (2) personnel or I.R. (3) marketing or purchasing (4) accounting or finance (5) stats, computers or O.M. (6) Diploma in personnel (7) Diploma in marketing (8) Diploma in finance or accounting (9) Diploma in O.M. etc.	Nominal	Non-parametric
Number of posts held in Cable & Wireless before attending Cranfield	Actual number	Interval	Parametric

Job variety in Cable & Wireless before programme*	(1) Engineering only (2) Eng & Management (3) Non-eng & Management (4) Personnel, Admin and/or Union only (5) Sales only (6) Accounts only	Nominal	Non-parametric
and Job variety in Cable & Wireless since programme*	(7) Management services only (8) Eng & non-eng, no management (9) Eng & non-eng and management		
Other job experience*	(1) C & W only (2) C & W and HM forces only (3) C & W and one other (4) C & W, HM forces and one other (5) C & W, and more than one other (6) C & W, HM forces and more than one other (7) Left C & W for another (8) Retired from C & W	Nominal	Non-parametric
Place located before programme*	(1) Head Office (perm) (2) Hong Kong (3) Middle East (4) West Indies (5) Europe, UKSD, USA (6) Africa, S. America (7) Gib, Altantic, Pacific and Indian Ocean Islands and at sea (8) PK or HO (temp) (9) Seconded	Nominal	Non-parametric
and place located when completing questionnaire*			

* These variables were not taken beyond the "descriptive statistic" level of analysis.

MANAGER'S PERFORMANCE ON HIS RETURN TO WORK

Self-rating on "how much better do you now feel you would undertake the following activities"

20 activities listed	(1) Worse (2) Same (3) A little Better (4) Much Better (5) Very much Better	Interval	Parametric
Resolutions:			
Was a resolutuion set?	(1) No (2) Yes	Nominal	Non-parametric
How many were set?	0, 1, 2, 3	Nominal	Non-parametric
What is the area of each resolution?	(1) Finance (2) Business environment (3) Operations management (4) Interpersonal and organisational skills	Nominal	Non-parametric
What is the aspect of each resolution?	(1) Bugetary control (2) Marketing (3) Planning & Forecasting (5) Decision making (6) Self Development (7) Subordinates (8) Superiors (9) Structural reorganisation	Nominal	Non-parametric
What kind of follow-up comments were made concerning the resolution?	(1) None (2) Negative (3) Positive (4) Mixed	Nominal	Non-parametric
What other general comments were made?	(1) None (2) Negative (3) Positive (4) Mixed	Nominal	Non-parametric

MANAGER'S SATISFACTION
WITH THE PROGRAMME

- at the end of the programme

Subject topics allocated into four groups:

(1) Finance and accounting	(1) Very inappropriate	} content and presentation	Interval	Parametric
(2) Business environment	(2) Inappropriate			
(3) Operations management	(3) Fairly appropriate			
(4) Interpersonal and organisational skills	(4) Appropriate			
	(5) Very appropriate			

- looking back on the programme

Subject topics allocated into four groups

(1) Finance and accounting	(1) of absolutely no	} practical theoretical and personal value	Interval	Parametric
(2) Business environment	(2) of little			
(3) Operations management	(3) of occasional			
(4) Interpersonal and organisational skills	(4) of much			
	(5) of great			

Contacts made with:

(1) Other programme participants	(1) of absolutely no	} practical theoretical and personal value	Interval	Parametric
(2) Cable & Wireless visitors	(2) of little			
(3) Cranfield staff	(3) of occasional			
(4) Managers from other companies	(4) of much			
	(5) of great			

Extent to which aims of programme met:

(1) SMP (5 aims)	scored out of ten	Interval	Parametric
(2) MRP (3 aims)			
(3) MMP (4 aims)			

Recommendations made to others to attend Cranfield

(1) Superiors	(1) No	Nominal	Non-parametric
(2) Peers	(2) Yes		
(3) Subordinates			

MANAGER'S PERCEPTIONS
OF ORGANISATIONAL
CLIMATE

61 Item checklist	(1) Hindered (2) Neither (3) Helped	Nominal Ordinal	Non-parametric Non-parametric
8 Groupings of 61 items	(1) Hindered (2) Neither (3) Helped	Nominal	Non-parametric

APPENDIX E

DISTRIBUTION OF PERCEPTIONS OF THE ORGANISATION CLIMATE

Tables E1 - E5

Perceptions of the influence of aspects of the organisational climate on the transfer of training before and after the return to work:

Table E1 : The External Environment

Table E2 : Company Structure

Table E3 : Company Values

Table E4 : The Manager's Job

Table E5 : Other People

Table E6 :

The influence of work preferences on the perceptions held concerning the effective of climate on transfer.

The External Environment	Percentage of Managers					
	Perceptions in Anticipation (t1 : n = 107)			Perceptions of the Actuality (t2 : n = 133)		
	Hinder	Neither	Help	Hinder	Neither	Help
E1, Union activity	16	78	6	8	78	14
E2, Customer activity	13	76	11	7	60	33
E3, Political influences (UK)	11	87	2	12	80	8
E4, Political influences (local)	33	64	3	23	64	13
E5, Local culture	10	84	6	18	69	13
E6, External consultants	9	81	10	6	73	21
E7, Contact with other companies	0	51	49	2	53	45
T1, Complex technology	16	76	8	18	74	8
T2, Technical training	1	57	42	29	67	4
T3, Technological change	21	55	24	26	64	10

Table E1 : Perceptions of the Influence of the External Environment on the Transfer of Training Before and After the Return to Work

Company Structure	Percentage of Managers					
	Perceptions in Anticipation (t1 : n=107)			Perceptions of the Actuality (t2 : n = 133)		
	Hinder	Neither	Help	Hinder	Neither	Help
C1, The hierarchy	16	74	10	35	42	23
C2, Links between departments	19	67	14	23	41	35
C3, Flexibility of the system	27	38	35	24	48	28
C4, Influence of the company on behaviour	22	66	11	27	51	22
C5, Official communication system	47	46	7	33	46	21
C6, Power and responsibility	30	57	13	32	44	24
C7, Influence of HD	13	81	6	25	52	22
C8, Awareness of C & W goals	50	28	21	13	40	47
C9, Freedom to meet at work	1	78	21	4	46	50
C10, Role of staff groups	1	59	40	7	55	38

Table E2 : Perceptions of the Influence of the Company Structure on the Transfer of Training Before and After the Return to Work

Company Values	Percentage of Managers					
	Perceptions in Anticipation (t1:n=107)			Perceptions of the Actuality (t2 : n = 133)		
	Hinder	Neither	Help	Hinder	Neither	Help
V1, Priority for Company as whole	5	72	23	13	46	41
V2, Looking after No. 1	19	77	4	27	68	5
V3, Innovation is encouraged	9	66	24	19	49	32
V4, Don't rock the boat	43	56	1	38	58	4
V5, Paternalism	36	53	11	26	63	11
V6, Openness	5	60	35	11	48	41
V7, Tendency to secrecy	28	67	5	44	50	6
V8, Problems recognised as catastrophies	47	51	2	53	38	9
V9, Priority for short-term results	35	59	6	44	46	10
V10, Long-term planning is encouraged	23	51	25	14	41	45
V11, Active encouragement for training	2	44	54	5	54	41
V12, Authoritarian culture	31	65	4	25	68	7

Table E3 : Perceptions of the Influence of the Company Values on the Transfer of Training Before and After the Return to Work

The Manager's Job	Percentage of Managers					
	Perceptions in Anticipation (t1 : n=107)			Perception of the Actuality (t2 : n = 133)		
	Hinder	Neither	Help	Hinder	Neither	Help
J1, My personal workload	42	46	12	26	34	41
J2, Availability of evaluation criteria	20	60	21	24	35	41
J3, Contact with others	8	56	33	1	23	77
J4, Equipment at my disposal	7	78	14	16	66	18
J5, Trained people at my disposal	28	44	28	14	38	47
J6, Physical environment in which I work	21	64	15	23	47	30
J7, Amount I get paid	15	72	13	3	72	25
J8, Task predictability	39	41	20	18	56	26
J9, Opportunities for team work	3	44	53	5	43	52
J10, Opportunities to initiate projects	2	45	53	7	44	49
J11, Opportunities to experiment	3	39	58	13	41	46
J12, Appropriateness of Cranfield	6	45	49	16	28	56
A1, My control over my working environment	6	27	67	16	28	56
A2, My participation in decision- making	13	35	52	15	26	59
A3, My freedom to act on my own judgements	6	30	64	15	32	53
A4, The authority I have over others	4	76	20	17	41	42

Table E4 : Perceptions of the Influence of the Manager's Job on the
Transfer of Training Before and After the Return to Work

Other People	Percentage of Managers					
	Perceptions in Anticipation (t1:n = 107)			Perceptions of the Actuality (t2 : n = 133)		
	Hinder	Neither	Help	Hinder	Neither	Help
P1, Keeness and enthusiasm	4	69	27	7	30	63
P2, Motivation to work	21	51	28	5	29	66
P3, Acceptance of new ideas	13	43	44	17	35	48
P4, Willingness for responsibility	25	53	21	18	32	50
P5, Sharing ideas and information	8	40	52	13	38	49
P6, Willingness to delegate	11	55	34	19	49	31
P7, Vision of the future	13	72	15	11	57	32
P8, Ability to come up with the goods	5	73	22	11	35	54
R1, Attitude of superiors	16	35	49	23	29	48
R2, Attitude of peers	4	60	36	4	46	50
R3, Attitude of subordinates	1	41	58	4	34	62
R4, Availability of information	21	47	32	25	41	34
R5, Contacts in the Company	30	35	34	2	27	71

Table E5 : Perceptions of the Influence of Other People with whom the Manager Works on the Transfer of Training Before and After the Return to Work

Aspect of the Organisational Climate	Perception of Climate's Influence on Transfer					
	Hinder		Neither		Help	
<u>External Environment</u>						
E1 - E7	E > I	4:3	I > E	5:2	E > I	5:2
	N > S	4:3	S > N	4:3	S > N	4:3
	F > T	4:3	T > F	4:3	F > T	6:1
	P > J	7:0	J > P	5:2	P > J	5:2
T1 - T3	I > E	2:1	E > I	3:0	I > E	3:0
	N > S	2:1	S > N	2:1	N > S	2:1
	F > T	2:1	T > F	3:0	F > T	3:0
	P > J	2:1	P > J	2:1	J = P	1 1/2:1 1/2
<u>Internal Environment</u>						
C1 - C10	I > E	10:0	E > I	6:4	E > I	8:2
	N > S	7:3	S > N	7:3	S > N	7:3
	T > F	7:3	T > F	7:3	F > T	7:3
	P > J	7:3	J > P	6:4	J > P	6 1/2:3 1/2
V1 - V12	I > E	12:0	E > I	9:3	E > I	10:2
	N > S	11:1	S > N	11:1	N > S	7:5
	T > F	9:3	T > F	7:5	F > T	10:2
	P > J	8:4	J = P	6:6	J > P	8:4
<u>Managers' Job</u>						
J1 - J12	I > E	9:3	E > I	8:4	I > E	7:5
	N > S	11:1	S > N	9:3	S = N	6:6
	T = F	6:6	T > F	11:1	F > T	12:0
	P > J	11:1	J > P	7:5	J > P	9:3
A1 - A4	I > E	4:0	E > I	4:0	E = I	2:2
	N > S	3:1	S > N	4:0	S = N	2:2
	T > F	3:1	T > F	3:1	F > T	4:0
	J = P	2:2	P > J	3:1	J > P	4:0
<u>Other People</u>						
P1 - P8	I > E	8:0	E > I	6:2	E > I	7:1
	N > S	8:0	S > N	7:1	N > S	5:3
	T > F	5:3	T > F	8:0	F > T	7:1
	P > J	8:0	P > J	5 1/2:2 1/2	J > P	7:1
R1 - R5	I > E	4:1	E > I	5:0	I > E	5:0
	N > S	4:1	S > N	3:2	N > S	3:2
	T > F	4:1	F > T	3:2	F > T	4:1
	J > P	3:2	J > P	4:1	P > J	3:2

Table E6 : The Influence of Work Preferences on the Perceptions Held Concerning the Effect of Climate on Transfer

APPENDIX F

RANKING OF PERCEPTIONS OF THE ORGANISATIONAL CLIMATE

Tables F1 - F8

The extent to which all managers agreed that various climatic factors would influence their transfer of training before and after their return to work.

Table F1 : Anticipated hindering factors

Table F2 : Anticipated factors neither helping nor hindering

Table F3 : Anticipated helping factors

Table F4 : Mean scores in anticipation

Table F5 : Actual hindering factors

Table F6 : Actual factors neither helping nor hindering

Table F7 : Actual helping factors

Table F8 : Mean scores of the actuality

Tables F9 - F17

The "Top Ten" factors helping and hindering different groups of managers:

Table F 9 : Top Ten Helping Factors for SMs, MRs and MMs.

Table F10 : Top Ten Hindering Factors for SMs, MRs and MMs.

Table F11 : Top Ten Helping Factors for Different Age Groups.

Table F12 : Top Ten Hindering Factors for Different Age Groups.

Table F13 : Top Ten Helping and Hindering Factors for Managers
With and Without an Engineering Background

Table F14 : Top Ten Helping Factors for Different C & W
Categories of Managers.

Table F15 : Top Ten Hindering Factors for Different C & W
Categories of Managers.

Table F16 : Top Ten Helping Factors for Different CCL Types
of Managers.

Table F17 : Top Ten Hindering Factors for Different CCL Types
of Managers.

(n = 107)

Ranked in order of HINDERING factors		% of all managers	
1.	C8,	Awareness of C & W goals and strategy	50
2.	C5,	Official communication system	47
	V8,	Problems recognised as catastrophes	47
4.	V4,	Don't rock the boat	43
5.	J1,	My personal workload	42
6.	J8,	Task predictability in this job	39
7.	V9,	Priority for short term results	35
8.	V5,	Paternalism	36
9.	E4,	Political Influences - Local	33
10.	V12,	Authoritarian culture	31
11.	R5,	My contacts in the company	30
	C6,	Power and Responsibility	30
13.	V7,	Tendency to secrecy	28
	J5,	The trained people at my disposal	28
15.	C3,	The flexibility of the system	27
16.	P4,	People's willingness for responsibility	25
17.	V10,	Long term planning encouraged	23
18.	C4,	Influence of the company on behaviour	22
19.	J6,	The physical environment in which I work	21
	R4,	The availability to me of relevant info	21
	T3,	Technological Change	21
	P2,	People's motivation to work	21
23.	J2,	Availability of evaluation criteria	20
24.	C2,	Links between departments	19
	V2,	Looking after No. 1	19
26.	E1,	Union activity	16
	C1,	The Hierarchy	16
	R1,	The attitude of my superiors	16
	T1,	Complex Technology	16
30.	J7,	The amount I get paid	15
31.	A2,	My participation in decision-making	13
	C7,	Influence of Head Office	13
	E2,	Customer activity	13
	P3,	People's acceptance of new ideas	13
	P7,	People's vision of the future	13
36.	E3,	Political Influences - UK	11
	P6,	People's willingness to delegate	11
38.	E5,	Local culture	10
	E6,	External consultants	9
	V3,	Innovation is encouraged	9
41.	J3,	Contact with others	8
	P5,	People's sharing of ideas and information	8
43.	J4,	The equipment at my disposal	7
44.	J12,	Appropriateness of Cranfield to my job	6
	A1,	My control over my working environment	6
	A3,	My freedom to act on my own judgement	6
47.	V6,	Openness	5
	P8,	People's ability to come up with goods	5
	V1,	Priority for company as whole	5
50.	P1,	People's keenness and enthusiasm	4
	A4,	The authority I have over others	4
	R2,	The attitude of my peers	4
53.	J11,	Opportunities to experiment	3
	J9,	Opportunities for team work	3
55.	V11,	Active encouragement for training	2
	J10,	Opportunities to initiate projects	2
57.	T2,	Technical Training	1
	C9,	Freedom to meet during working hours	1
	C10,	Role of staff groups	1
	R3,	The attitude of my subordinates	1
61.	E7,	Contact with other companies	0

Table F1 : The Extent to which Managers Anticipated that Various Climatic Factors would Hinder their Transfer of Training

(n = 107)

Ranked in order of NEITHER helping nor hindering		% of all managers
1.	E3, Political Influences - UK	87
2.	E5, Local culture	84
3.	C7, Influence of Head Office	81
5.	E6, External consultants	81
	C9, Freedom to meet during working hours	78
	E1, Union activity	78
	J4, The equipment at my disposal	78
8.	V2, Looking after No. 1	77
9.	A4, The authority I have over others	76
	E2, Customer activity	76
12.	T1, Complex technology	76
	C1, The Hierarchy	74
13.	P8, People's ability to come up with goods	73
14.	V1, Priority for company as a whole	72
	P7, People's vision of the future	72
17.	J7, The amount I get paid	72
	P1, People's keenness and enthusiasm	69
18.	C2, Links between departments	67
	V7, Tendency to secrecy	67
20.	C4, Influence of the company on behaviours	66
	V3, Innovation is encouraged	66
22.	V12, Authoritarian culture	65
23.	E4, Political influence - Local	64
	J6, The physical environment in which I work	64
25.	J2, Availability of evaluation criteria	60
	R2, The attitude of my peers	60
28.	V6, Openness	60
	C10, Role of staff groups	59
	J3, Contact with others	59
	V9, Priority for short term results	59
31.	C6, Power and responsibility	57
	T2, Technical training	57
33.	V4, Don't rock the boat	56
34.	P6, People's willingness to delegate	55
	T3, Technological change	55
36.	P4, People's willingness for responsibility	53
	V5, Paternalism	53
38.	E7, Contact with other companies	51
	P2, People's motivation to work	51
	V8, Problems only recognised as catastrophes	51
	V10, Long term planning is encouraged	51
42.	R4, The availability of me of relevant info	47
43.	C5, Official Communication system	46
	J1, My personal workload	46
45.	J10, Opportunities to initiate projects	45
	J12, Appropriateness of Cranfield to my job	45
47.	J5, The trained people at my disposal	44
	J9, Opportunitites for team work	44
50.	V11, Active encouragement for training	44
	P3, People's acceptance of new ideas	43
51.	J8, Task predictability in this job	41
	R3, The attitude of my subordinates	41
53.	P5, People's sharing of ideas and information	40
54.	J11, Opportunities to experiment	39
55.	C3, The flexibility of the system	38
56.	R1, The attitude of my superiors	35
	R5, My contacts in the company	35
59.	A2, My participation in decision-making	35
	A3, My freedom to act on my own judgements	30
60.	C8, Awareness of C & W goals and strategy	28
61.	A1, My control over my working environment	27

Table F2 : The Extent to which Managers Anticipated that Various Climatic Factors would Neither Help nor Hinder their Transfer of Training

(n = 107)

Ranked in order of HELPING factors		% of all managers
1.	A1, My control over my working environment	67
2.	A3, My freedom to act on my own judgements	64
3.	{ J11, Opportunities to experiment	58
	{ R3, The attitude of my subordinates	58
5.	V1, Priority for company as a whole	54
6.	{ J9, Opportunites for team work	53
	{ J10, Opportunities to initiate projects	53
8.	{ A2, My participation in decision making	52
	{ P5, People's sharing of ideas and information	52
10.	{ E7, Contact with other companies	49
	{ J12, Appropriateness of Cranfield to my job	49
	{ R1, The attitude of my superiors	49
13.	P3, People's acceptance of new ideas	44
14.	T2, Technical training	42
15.	C10, Role of staff groups	40
16.	R2, The attitude of my peers	36
17.	{ C3, The flexibility of the system	35
	{ V6, Openness	35
19.	{ P6, People's willingness to delegate	34
	{ R5, My contacts in the company	34
21.	J3, Contact with others	33
22.	R4, The availability to me of relevant info	32
23.	{ J5, The trained people at my disposal	28
	{ P2, People's motivation to work	28
25.	P1, People's keenness and enthusiasm	27
26.	V10, Long term planning is encouraged	25
27.	{ T3, Technological change	24
	{ V3, Innovation is encouraged	24
29.	V1, Priority for company as a whole	23
30.	P8, People's ability to come up with goods	22
31.	{ C8, Awareness of C & W goals and strategy	21
	{ C9, Freedom to meet during working hours	21
	{ J2, Availability of evaluation criteria	21
	{ P4, People's willingness for responsibility	21
35.	{ A4, The authority I have over others	20
	{ J8, Task predictability in this job	20
37.	{ J6, The physical environment in which in work	15
	{ P7, People's vision of the future	15
39.	{ C2, Links between departments	14
	{ J4, The equipment at my disposal	14
41.	{ C6, Power and responsibility	13
	{ J7, The amount I get paid	13
43.	J1, My personal workload	12
44.	{ C4, Influence of the company on behaviour	11
	{ E2, Customer activity	11
	{ V5, Paternalism	11
47.	{ C1, The Hierarchy	10
	{ E6, External consultants	10
49.	T1, Complex technology	8
50.	C5, Official communication system	7
51.	{ C7, Influence of Head Office	6
	{ E1, Union activity	6
	{ E5, Local culture	6
	{ V9, Priority for short term results	6
55.	V7, Tendency to secrecy	5
56.	{ V12, Authoritarian culture	4
	{ V2, Looking after No. 1	4
58.	E4, Political influences - Local	3
59.	{ E3, Political influences - UK	2
	{ V8, Problems only recognised as catastrophes	2
61.	V4, Don't rock the boat	1

Table F3 : The Extent to which Managers Anticipated that Various Climatic Factors would Help their Transfer of Training

(n = 107)

Ranked in order of Mean Scores

Rank	Various aspects of the organisational climate	Mean Score (1 = Hinder 2 = Neither 3 = Help)
1.	A1, My control over my working environment	2.617
2.	A3, My freedom to act on my own judgements	2.589
3.	R3, The attitude of my subordinates	2.570
4.	J11, Opportunities to experiment	2.551
5.	V11, Active encouragement for training	2.523
6.	J10, Opportuntities to initiate projects	2.514
7.	J9, Opportunities for team work	2.505
8.	E7, Contact with other companies	2.486
9.	P5, People's sharing of ideas and information	2.449
10.	J12, Appropriateness of Cranfield to my job	2.439
11.	T2, Technical training	2.411
12.	A2, My participation in decision-making	2.393
	C10, Role of staff groups	2.393
14.	R1, The attitude of my superiors	2.327
	R2, The attitude of my peers	2.327
16.	P3, People's acceptance of new ideas	2.308
	V6, Openness	2.308
18.	J3, Contact with others	2.243
19.	P1, People's keenness and enthusiasm	2.234
20.	P6, People's willingness to delegate	2.224
21.	C9, Freedom to meet during working hours	2.206
22.	V1, Priority for company as a whole	2.187
23.	P8, People's ability to come up with goods	2.178
24.	A4, The authority I have over others	2.168
25.	V3, Innovation is encouraged	2.150
26.	R4, The availability to me of relevant info	2.103
27.	C3, The flexibility of the system	2.075
	P2, People's motivation to work	2.075
29.	J4, The equipment at my disposal	2.065
30.	R5, My contacts in the company	2.047
31.	T3, Technological change	2.037
32.	P7, People's vision of the future	2.019
	V10, Long term planning is encouraged	2.019
34.	E6, External consultants	2.009
	J2, Availability of evaluation criteria	2.009
36.	J5, The trained people at my disposal	2.000
37.	E2, Customer activity	1.981
	J7, The amount I get paid	1.981
39.	P4, People's willingness for responsibility	1.963
40.	C2, Links between departments	1.953
	E5, Local culture	1.953
42.	C1, The Hierarchy	1.944
43.	J6, The physical environment in which I work	1.935
44.	C7, Influence of Head Office	1.925
	T1, Complex technology	1.925
46.	E3, Political influences - UK	1.907
47.	E1, Union activity	1.897
48.	C4, Influence of the company on behaviour	1.888
49.	V2, Looking after No. 1	1.850
50.	C6, Power and responsibility	1.832
51.	J8, Task predictability in this job	1.804
52.	V7, Tendency to secrecy	1.766
53.	V5, Paternalism	1.757
54.	V12, Authoritarian culture	1.729
55.	C8, Awareness of C & W goals and strategy	1.710
56.	E4, Political influences - Local	1.701
	J1, My personal workload	1.701
	V9, Priority for short term results	1.701
59.	C5, Official communication system	1.607
60.	V4, Don't rock the boat	1.579
61.	V8, Problems only recognised as catastrophes	1.551

Table F4 : The Extent to which Managers Anticipated that Various Climatic Factors would Help or Hinder their Transfer of Training

(n = 133)

Ranked in order of HINDERING factors		% of all managers
1.	J3, Contact with others	77
2.	R5, My contacts in the company	71
3.	P2, People's motivation to work	66
4.	P1, People's keenness and enthusiasm	63
5.	R3, The attitude of my subordinates	62
6.	A2, My participation in decision-making	59
7.	{ A1, My control over my working environment	56
	{ J12, Appropriateness of Cranfield to my job	56
9.	P8, People's ability to come up with goods	54
10.	A3, My freedom to act on my own judgements	53
11.	J9, Opportunities for team work	52
12.	{ C9, Freedom to meet during working hours	50
	{ P4, People's willingness for responsibility	50
	{ R2, The attitude of my peers	50
15.	{ J10, Opportunities to initiate projects	49
	{ P5, People's sharing of ideas and information	49
17.	{ P3, People's acceptance of new ideas	48
	{ R1, The attitude of my superiors	48
19.	{ C8, Awareness of C & W goals and strategy	47
	{ J5, The trained people at my disposal	47
21.	J11, Opportunities to experiment	46
22.	{ E7, Contact with other companies	45
	{ V10, Long term planning is encouraged	45
24.	A4, The authority I have over others	42
25.	{ J1, My personal workload	41
	{ J2, Availability of evaluation criteria	41
	{ V1, Priority for company as a whole	41
	{ V6, Openness	41
	{ V11, Active encouragement for training	41
30.	C10, Role of staff groups	38
31.	C2, Links between departments	35
32.	R4, The availability to me of relevant info	34
33.	E2, Customer activity	33
34.	{ P7, People's vision of the future	32
	{ V3, Innovation is encouraged	32
36.	P6, People's willingness to delegate	31
37.	J6, The physical environment in which I work	30
38.	T2, Technical training	29
39.	C3, The flexibility of the system	28
40.	{ J8, Task predictability in this job	26
	{ T3, Technological change	26
42.	J7, The amount I get paid	25
43.	C6, Power and responsibility	24
44.	C1, The Hierarchy	23
45.	{ C4, Influence of the company on behaviour	22
	{ C7, Influence of Head Office	22
47.	{ C5, Official communication system	21
	{ E6, External consultants	21
49.	{ J4, The equipment at my disposal	18
	{ T1, Complex technology	18
51.	E1, Union activity	14
52.	{ E4, Political influences - Local	13
	{ E5, Local culture	13
54.	V5, Paternalism	11
55.	V9, Priority for short-term results	10
56.	V8, Problems only recognised as catastrophes	9
57.	E3, Political influences - UK	8
58.	V12, Authoritarian culture	7
59.	V7, Tendency to secrecy	6
60.	V2, Looking after No. 1	5
61.	V4, Don't rock the boat	4

Table F5 : The Extent to which Managers Reported that Various Climatic Factors Actually Did Hinder their Transfer of Training

(n = 133)

Ranked in order of NEITHER helping nor hindering			% of all managers
1.	E3,	Political influences - UK	80
2.	E1,	Union activity	78
3.	T1,	Complex technology	74
4.	E6,	External consultants	73
5.	J7,	The amount I get paid	72
6.	E5,	Local culture	69
7.	V2,	Looking after No. 1	68
	V12,	Authoritarian culture	68
9	T2,	Technical training	67
10.	J4,	The equipment at my disposal	66
11.	E4,	Political influences - Local	64
	T3,	Technological change	64
13.	V5,	Paternalism	63
14.	E2,	Customer activity	60
15.	V4,	Don't rock the boat	58
16.	P7,	People's vision of the future	57
17.	J8,	Task predictability in this job	56
18.	C10,	Role of staff groups	55
19.	V11,	Active encouragement for training	54
20.	E7,	Contact with other companies	53
21.	C7,	Influence of Head Office	52
22.	C4,	Influence of company on behaviour	51
23.	V7,	Tendency to secrecy	50
24.	P6,	People's willingness to delegate	49
	V3,	Innovation is encouraged	49
26.	C3,	The flexibility of the system	48
	V6,	Openness	48
28.	J6,	The physical environment in which I work	47
29.	C5,	Official communication system	46
	C9,	Freedom to meet during working hours	46
	R2,	The attitude of my peers	46
	V1,	Priority for company as a whole	46
	V9,	Priority for short-term results	46
34.	C6,	Power and responsibility	44
	J10,	Opportunities to initiate projects	44
36.	J9,	Opportunities for team work	43
37.	C1,	The Hierarchy	42
38.	A4,	The authority I have over others	41
	C2,	Links between departments	41
	J11,	Opportunities to experiment	41
	R4,	The availability to me of relevant info	41
	V10,	Long term planning is encouraged	41
43.	C8,	Awareness of C & W goals and strategy	40
44.	J5,	The trained people at my disposal	38
	P5,	People's sharing of ideas and information	38
	V8,	Problems only recognised as catastrophes	38
47.	J2,	Availability of evaluation criteria	35
	P3,	People's acceptance of new ideas	35
	P8,	People's ability to come up with goods	35
50.	J1,	My personal workload	34
	R3,	The attitude of my subordinates	34
52.	A3,	My freedom to act on my own judgements	32
	P4,	People's willingness for responsibility	32
54.	P1,	People's keenness and enthusiasm	30
55.	P2,	People's motivation to work	29
	R1,	The attitude of my superiors	29
57.	A1,	My control over my working environment	28
	J12,	Appropriateness of Cranfield to my job	28
59.	R5,	My contacts in the company	27
60.	A2,	Availability of evaluation criteria	26
61.	J3,	Contact with others	23

Table F6 : The Extent to which Managers Reported that Various Climatic Factors Actually Were Neither a Help Nor a Hindrance to their Transfer of Training

(n = 133)

Ranked in order of HELPING factors		% of all managers
1.	V8, Problems only recognised as catastrophes	53
2.	V7, Tendency to secrecy	44
	V9, Priority for short-term results	44
4.	V4, Don't rock the boat	38
5.	C1, The Hierarchy	35
6.	C5, Official communication system	33
7.	C6, Power and responsibility	32
8.	C4, Influence of the company on behaviour	27
	V2, Looking after No. 1	27
10.	J1, My personal workload	26
	V5, Paternalism	26
12.	C7, Influence of Head Office	25
	R4, The availability to me of relevant info	25
	V12, Authoritarian culture	25
15.	C3, The flexibility of the system	24
	J2, Availability of evaluation criteria	24
17.	C2, Links between departments	23
	E4, Political influences - Local	23
	J6, The physical environment in which I work	23
	R1, The attitude of my superiors	23
21.	P6, People's willingness to delegate	19
	V3, Innovation is encouraged	19
23.	E5, Local culture	18
	J8, Task predictability in this job	18
	P4, People's willingness for responsibility	18
26.	A4, The authority I have over others	17
	P3, People's acceptance of new ideas	17
28.	A1, My control over my working environment	16
	J4, The equipment at my disposal	16
	J12, Appropriateness of Cranfield to my job	16
31.	A2, My participation in decision-making	15
	A3, My freedom to act on my own judgements	15
33.	J5, The trained people at my disposal	14
	V10, Long term planning is encouraged	14
35.	C8, Awareness of C & W goals and strategy	13
	J11, Opportunities to initiate projects	13
	P5, People's sharing of ideas and information	13
	V1, Priority for company as a whole	13
39.	E3, Political influences - UK	12
40.	P7, People's vision of the future	11
	P8, People's ability to come up with goods	11
	V6, Openness	11
43.	T3, Technological change	10
44.	E1, Union activity	8
	T1, Complex technology	8
46.	C10, Role of staff groups	7
	E2, Customer activity	7
	J10, Opportunities to initiate projects	7
	P1, People's keenness and enthusiasm	7
50.	E6, External consultants	6
51.	J9, Opportunities for team work	5
	P2, People's motivation to work	5
	V11, Active encouragement for training	5
54.	C9, Freedom to meet during working hours	4
	R2, The attitude of my peers	4
	R3, The attitude of my subordinates	4
	T2, Technical training	4
58.	J7, The amount I get paid	3
59.	R5, My contacts in the company	2
60.	E7, Contact with other companies	2
61.	J3, Contact with others	1

Table F7 : The Extent to which Managers Reported that Various Climatic Factors Actually Did Help their Transfer of Training

(n = 133)

Ranked in order of mean score

Rank	Various aspects of organisational climate	Mean Score (1 = Hinder 2 = Neither 3 = Help)
1.	J3, Contact with others	2.759
2.	R5, My contacts in the company	2.684
3.	P2, People's motivation to work	2.609
4.	R3, The attitude of my subordinates	2.571
5.	P1, People's keenness and enthusiasm	2.549
6.	J12, Appropriateness of Cranfield to my job	2.489
7.	{C9, Freedom to meet during working hours	2.466
	J9, Opportunities for team work	2.466
9.	R2, The attitude of my peers	2.451
10.	A2, My participation in decision-making	2.444
11.	E7, Contact with other companies	2.436
12.	P8, People's willingness to delegate	2.429
13.	J10, Opportunities to initiate projects	2.414
14.	A1, My control over my working environment	2.406
15.	A3, My freedom to act on my own judgements	2.383
16.	P5, People's sharing of ideas and information	2.361
17.	V11, Active encouragement for training	2.353
18.	C8, Awareness of C & W goals and strategy	2.331
19.	J5, The trained people at my disposal	2.331
20.	J11, Opportunities to experiment	2.323
21.	{P3, People's acceptance of new ideas	2.316
	P4, People's willingness for responsibility	2.316
23.	V10, Long term planning is encouraged	2.308
24.	C10, Role of staff groups	2.301
25.	V6, Openness	2.293
26.	V1, Priority for company as a whole	2.286
27.	E2, Customer activity	2.263
28.	A4, The authority I have over others	2.256
29.	R1, The attitude of my superiors	2.248
30.	T2, Technical training	2.241
31.	J7, The amount I get paid	2.218
32.	P7, People's vision of the future	2.203
33.	J2, Availability of evaluation criteria	2.173
34.	{E6, External consultants	2.150
	J1, My personal workload	2.150
	T3, Technological change	2.150
37.	P6, People's willingness for responsibility	2.128
38.	{C2, Links between departments	2.120
	V3, Innovation is encouraged	2.120
40.	T1, Complex technology	2.098
41.	R4, The availability to me of relevant info	2.090
42.	J8, Task predictability in this job	2.075
43.	J6, The physical environment in which I work	2.068
44.	E1, Union activity	2.053
45.	C3, The flexibility of the system	2.038
46.	J4, The equipment at my disposal	2.023
47.	C7, Influence of Head Office	1.970
48.	E3, Political influences - UK	1.962
49.	{C4, Influence of the company on behaviour	1.947
	E5, Local culture	1.947
51.	C6, Power and responsibility	1.925
52.	E4, Political influences - Local	1.910
53.	C1, The Hierarchy	1.887
54.	C5, Official communication system	1.880
55.	V5, Paternalism	1.857
56.	V12, Authoritarian culture	1.827
57.	V2, Looking after No. 1	1.782
58.	V4, Don't rock the boat	1.669
59.	V9, Priority for short term results	1.654
60.	V7, Tendency to secrecy	1.624
61.	V8, Problems only recognised as catastrophes	1.564

Table F8 : The Extent to which Managers Reported that Various Climatic Factors Actually Did Help or Hinder their Transfer of Training

Senior Managers		
Top ten HELPING factors		
1.	{ R3, The attitude of my subordinates	2.76
	{ P2, People's motivation to work	2.76
3.	P1, People's keenness and enthusiasm	2.62
4.	R5, My contacts in the company	2.59
5.	J3, Contact with others	2.55
6.	P8, People's ability to come up with goods	2.53
7.	A2, My participation in decision-making	2.49
8.	{ P3, People's acceptance of new ideas	2.48
	{ R2, The attitude of my peers	2.48
10.	J9, Opportunities for team work	2.45

Manager Refreshers		
Top ten HELPING factors		
1.	J3, Contact with others	2.82
2.	{ P1, People's keenness and enthusiasm	2.65
	{ R5, My contacts in the company	2.65
4.	A2, My participation in decision-making	2.59
5.	{ C9, Freedom to meet during working hours	2.53
	{ P2, People's motivation to work	2.53
	{ R2, The attitude of my peers	2.53
8.	{ J5, The trained people at my disposal	2.47
	{ A1, My control over my working environment	2.47
	{ R3, The attitude of my subordinates	2.47

Middle Managers		
Top Ten HELPING factors		
1.	J3, Contact with others	2.82
2.	R5, My contacts in the company	2.72
3.	J12, Appropriateness of Cranfield to my job	2.60
4.	P2, People's motivation to work	2.58
5.	R3, The attitude of my subordinates	2.53
6.	P1, People's keenness and enthusiasm	2.51
7.	A3, My freedom to act on my own judgement	2.49
8.	{ E7, Contact with other companies	2.48
	{ J9, Opportunities for team work	2.48
10.	C9, Freedom to meet during working hours	2.47

Table F 9 : Top Ten Helping Factors for SMS, MRs and MMs.

Senior managers Top ten HINDERING factors		
1.	{ V7, Tendency to secrecy	1.52
	{ V8, Problems only recognised as catastrophes	1.52
3.	V9, Priority for short-term results	1.55
4.	V4, Don't rock the boat	1.72
5.	{ C3, The flexibility of the system	1.86
	{ C5, Official communication system	1.86
	{ J2, Availability of evaluation criteria	1.86
8.	{ C1, The hierarchy	1.83
	{ T2, Technical training	1.83
10.	V2, Looking after No 1	1.80

Manager Refreshers Top ten HINDERING factors		
1.	V7, Tendency to secrecy	1.47
2.	V4, Don't rock the boat	1.59
3.	V2, Looking after No 1	1.65
4.	{ V8, Problems only recognised as catastrophes	1.71
	{ V9, Priority for short-term results	1.71
6.	J8, Task predictability in this job	1.76
7.	J1, My personal workload	1.77
8.	C5, Official communication system	1.82
9.	{ C4, Influence of the company on behaviour	1.88
	{ C6, Power and responsibility	1.88
	{ J6, The physical environment in which I work	1.88

Middle Managers Top ten HINDERING factors		
1.	V8, Problems only recognised as catastrophes	1.55
2.	V4, Don't rock the boat	1.67
3.	V9, Priority for short-term results	1.68
4.	V7, Tendency to secrecy	1.69
5.	E4, Political influences - local	1.89
6.	{ T2, Technical Training	1.87
	{ C1, The Hierarchy	1.87
8.	{ V2, Looking after No 1	1.81
	{ V5, Paternalism	1.81
10.	C5, Official communication system	1.90

Table F10 : Top Ten Hindering Factors for SMs, MRs and MMs.

Age 39 and under		
Top ten HELPING factors		
1.	J3,	Contact with others 2.81
2.	A3,	My freedom to act on my own judgements 2.69
3.	R5,	My contacts in the company 2.67
4.	{A2,	My participation in decision-making 2.57
	{J10,	Opportunities to initiate projects 2.57
6.	{J11,	Opportunities to experiment 2.55
	{J12,	Appropriateness of Cranfield to my job 2.55
8.	{R2,	The attitude of my peers 2.48
	{P2,	People's motivation to work 2.48
10.	R3,	People's acceptance of new ideas 2.45

Age 40 - 49		
Top ten HELPING factors		
1.	J3,	Contact with others 2.80
2.	R5,	My contacts in the company 2.74
3.	P2,	People's motivation to work 2.73
4.	{P1,	People's keenness and enthusiasm 2.67
	{R5,	My contacts in the company 2.67
6.	R3,	The attitude of my subordinates 2.61
7.	{P8,	People's ability to come up with goods 2.54
	{J9,	Opportunities for team work 2.54
9.	C9,	Freedom to meet during working hours 2.51
10.	J12,	Appropriateness of Cranfield to my job 2.50

Age 50 +		
Top ten HELPING factors		
1.	R3,	The attitude of my subordinates 2.65
2.	P1,	People's keenness and enthusiasm 2.60
3.	{A1,	My control over my working environment 2.55
	{P8,	People's ability to come up with goods 2.55
	{R5,	My contacts in the company 2.55
6.	{J3,	Contact with others 2.50
	{P2,	People's motivation to work 2.50
	{V10,	Long term planning is encouraged 2.50
9.	{C8,	Awareness of C & W goals and strategy 2.45
	{J9,	Opportunities for team work 2.45
	{E2,	Customer activity 2.45

Table F11 : Top Ten Helping Factors for Different Age Groups.

Age 39 and under		
Top ten HINDERING factors:		
1.	V8, Problems recognised as catastrophes	1.57
2.	V4, Don't rock the boat	1.69
3.	V7, Tendency to secrecy	1.71
4.	V9, Priority for short-term results	1.76
5.	{ V5, Paternalism	1.83
	{ V12, Authoritarian culture	1.83
7.	{ V2, Looking after No. 1	1.88
	{ J6, The physical environment in which I work	1.88
9.	{ J4, The equipment at my disposal	1.91
	{ E5, Local culture	1.91

Age 40 - 49		
Top ten HINDERING factors		
1.	V8, Problems recognised as catastrophes	1.50
2.	V9, Priority for short-term results	1.56
3.	V7, Tendency to secrecy	1.57
4.	V4, Don't rock the boat	1.64
5.	V2, Looking after No. 1	1.74
6.	E4, Political influences - Local	1.79
7.	V12, Authoritarian culture	1.81
8.	C1, The hierarchy	1.83
9.	{ C5, Official communication system	1.86
	{ V5, Paternalism	1.86

Age 50 +		
Top ten HINDERING factors		
1.	V7, Tendency to secrecy	1.65
2.	{ V2, Looking after No. 1	1.70
	{ V4, Don't rock the boat	1.70
4.	{ V8, Problems recognised as catastrophes	1.80
	{ V9, Priority for short-term results	1.80
6.	V12, Authoritarian culture	1.85
7.	{ V5, Paternalism	1.90
	{ J6, The physical environment in which I work	1.90
	{ J8, Task predictability in this job	1.90
10.	C1, C3, C7, E1	1.95

Table F12 : Top Ten Hindering Factors for Different Age Groups.

Engineering Background Top ten HELPING factors		
1.	J3, Contact with others	2.74
2.	R5, My contacts in the company	2.68
3.	P2, People's motivation to work	2.65
4.	P1, People's keenness and enthusiasm	2.61
5.	R3, The attitude of my subordinates	2.59
6.	J9, Opportunities for team work	2.51
7.	C9, Freedom to meet during working hours	2.49
8.	J12, Appropriateness of Cranfield to my job	2.47
9.	{R2, The attitude of my peers	2.46
	{P8, People's ability to come up with goods	2.46

Non-engineering Background Top ten HELPING factors		
1.	J3, Contact with others	2.86
2.	A1, My control over my working environment	2.82
3.	R5, My contacts in the company	2.73
4.	A2, My participation in decision-making	2.77
5.	J10, Opportunities to initiate projects	2.68
6.	A3, My freedom to act on my own judgements	2.64
7.	{J12, Appropriateness of Cranfield to my job	2.55
	{P2, People's motivation to work	2.55
	{R3, The attitude of my subordinates	2.55
10.	{J11, Opportunitites to experiment	2.50
	{R1, The attitude of my superiors	2.50
	{R2, The attitude of my peers	2.50

Engineering Background Top ten HINDERING factors		
1.	V8, Problems recognised as catastrophes	1.55
2.	V7, Tendency to secrecy	1.62
3.	V9, Priority for short-term results	1.64
4.	V4, Don't rock the boat	1.67
5.	V2, Looking after No. 1	1.76
6.	V12, Authoritarian culture	1.82
7.	E4, Political influences - Local	1.85
8.	V5, Paternalism	1.86
9.	C1, The hierarchy	1.87
10.	C5, Official communication system	1.90

Non-engineering background Top ten HINDERING factors		
1.	V8, Problems recognised as catastrophes	1.64
2.	{V4, Don't rock the boat	1.73
	{V7, Tendency to secrecy	1.73
4.	{V5, Paternalism	1.77
	{V9, Priority for short-term results	1.77
	{C4, Influence of the company on behaviour	1.77
	{C6, Power and responsibility	1.77
8.	C5, Official communication system	1.82
9.	{C2, Links between departments	1.86
	{C3, The flexibility of the system	1.86

**Table F13 : Top Ten Helping and Hindering Factors for Managers
With and Without an Engineering Background**

Head Office Managers Top ten HELPING factors			
1.	J3,	Contact with others	2.80
2.	R5,	My contacts in the company	2.63
3.	P2,	People's motivation to work	2.57
4.	R3,	The attitude of my subordinates	2.53
5.	P1,	People's keenness and enthusiasm	2.50
6.	{	A2, My participation in decision-making	2.47
		J5, The trained people at my disposal	2.47
		J10, Opportunities to initiate projects	2.47
		J12, Appropriateness of Cranfield to my job	2.47
10.	A1,	My control over my working environment	2.43

F1 turned H.O. Managers Top Ten HELPING factors			
1.	P2,	People's motivation to work	2.88
2.	{	J3, Contact with others	2.75
		R3, The attitude of my subordinates	2.75
4.	{	C9, Freedom to meet during working hours	2.63
		P1, People's keenness and enthusiasm	2.63
		P8, People's ability to come up with goods	2.63
7.	{	R5, My contacts in the company	2.56
		A1, My control over my working environment	2.56
9.	{	A2, My participation in decision-making	2.50
		A3, My freedom to act on my own judgements	2.50
		A4, The authority I have over others	2.50
		R2, The attitude of my peers	2.50

National Managers Top ten HELPING factors			
1.	J3,	Contact with others	2.85
2.	R5,	My contacts in the Company	2.81
3.	J12,	Appropriateness of Cranfield to my job	2.73
4.	{	A1, My control over my working environment	2.69
		J9, Opportunities for team work	2.69
		V11, Active encouragement for training	2.69
7.	C10,	Role of staff groups	2.65
8.	{	R2, The attitude of my peers	2.62
		C8, Awareness of C & W goals and strategy	2.62
		C9, Opportunities for team work	2.62

Foreign Service Managers Top Ten HELPING factors			
1.	J3,	Contact with others	2.70
2.	R5,	My contacts in the Company	2.68
3.	{	P1, People's keenness and enthusiasm	2.60
		P2, People's motivation to work	2.60
5.	R3,	The attitude of my subordinates	2.57
6.	J9,	Opportunities for team work	2.52
7.	J12,	Appropriateness of Cranfield to my job	2.48
8.	{	R2, The attitude of my peers	2.47
		J10, Opportunities to initiate projects	2.47
10.	C9,	Freedom to meet during working hours	2.45

Table F14 : Top Ten Helping Factors for Different C & W
Categories of Managers.

Head Office Managers Top ten HINDERING factors		
1.	V9, Priority for short-term results	1.60
2.	V8, Problems recognised as catastrophes	1.63
3.	V7, Tendency to secrecy	1.67
4.	C6, Power and responsibility	1.73
5.	C3, The flexibility of the system	1.80
	C4, Influence of the Company on behaviour	1.80
	C5, Official communication system	1.80
	V4, Don't rock the boat	1.80
9.	V2, Looking after No. 1	1.83
	V12, Authoritarian culture	1.83

F1 turned H.O. Managers Top Ten HINDERING factors		
1.	V8, Problems recognised as catastrophes	1.31
	V9, Priority for short-term results	1.31
3.	V4, Don't rock the boat	1.44
	V7, Tendency to secrecy	1.44
	C5, Official communication system	1.44
6.	C1, The hierarchy	1.56
7.	V2, Looking after No. 1	1.67
8.	C3, The flexibility of the system	1.69
	C6, Power and responsibility	1.69
10.	C4, C7, E1, J1, J2, V12	1.75

National Managers Top ten HINDERING factors		
1.	V8, Problems recognised as catastrophes	1.54
2.	V4, Don't rock the boat	1.65
	V7, Tendency to secrecy	1.65
4.	V5, Paternalism	1.85
	V9, Priority for short-term results	1.85
6.	V2, Looking after No. 1	1.89
	E3, Political influences - UK	1.89
	E4, Political influences - Local	1.89
9.	T1, Complex technology	1.92
10.	V12, Authoritarian culture	1.96

Foreign Service Managers Top Ten HINDERING factors		
1.	V7, Tendency to secrecy	1.62
V8	V8, Problems recognised as catastrophes	1.62
3.	V9, Priority for short-term results	1.67
4.	V4, Don't rock the boat	1.68
5.	V2, Looking after No. 1	1.75
6.	V12, Authoritarian culture	1.80
	E4, Political influences - Local	1.80
8.	V5, Paternalism	1.83
9.	E5, Local culture	1.85
10.	C5, Official communication system	1.88

Table F15 : Top Ten Hindering Factors for Different C & W
Categories of Managers.

CCL Traditionalists Top ten HELPING factors			CCL Catalysts Top ten HELPING factors		
1.	J3, Contact with others	2.779	1.	R3, The attitude of my subordinates	2.824
2.	R5, My contacts in the company	2.701	2.	J3, Contact with others	2.706
3.	P2, People's motivation to work	2.636	3.	R5, My contacts in the company	2.588
4.	P1, People's keenness and enthusiasm	2.571		J12, Appropriateness of Cranfield to my job	2.588
5.	J9, Opportunities for team work	2.545		R2, The attitude of my peers	2.588
6.	R3, The attitudes of my subordinates	2.519	6.	J10, Opportunitites to initiate projects	2.529
7.	A2, My participation in decision making	2.506		P1, People's keenness and enthusiasm	2.529
	J12, Appropriateness of Cranfield to my job	2.506	8.	P2, People's motivation to work	2.471
	P8, People's ability to come up with goods	2.506		P8, People's ability to come up with goods	2.471
10.	A1, My control over my working environment	2.468	10.	J5, The trained people at my disposal	2.412
CCL Trouble-shooters Top ten HELPING factors			CCL Visionaries Top ten HELPING factors		
1.	J3, Contact with others	2.789	1.	C9, Freedom to meet during working hours	2.727
	R5, My contacts in the company	2.769	2.	J3, Contact with others	2.682
3.	E2, Customer activity	2.615		P2, People's motivation to work	2.682
4.	E7, Contact with other companies	2.538		R5, My contacts in the company	2.682
	J9, Opportunities for team work	2.538	5.	A2, My participation in decision making	2.545
6.	A1, My control over my working environment	2.462		A3, My freedom to act on my own judgements	2.545
	C10, Role of staff groups	2.462		P1, People's keenness and enthusiasm	2.545
	J12, Appropriateness of Cranfield to my job	2.462		R3, The attitude of my subordinates	2.545
	R3, The attitude of my subordinates	2.462	9.	E7, Contact with other companies	2.455
10.	A2, A3, A4, J1, J2, J6, J10, P2	2.385		J12, Appropriateness of Cranfield to my job	2.455
				R2, The attitude of my peers	2.455

Table F16 : Top Ten Helping Factors for Different CCL Types
of Managers.

CCL Traditionalist Top ten HINDERING factors			CCL Catalysts Top ten HINDERING factors		
1.	V8, Problems only recognised as catastrophes	1.649	1.	V8, Problems only recognised as catastrophes	1.412
2.	V7, Tendency to secrecy	1.675		V7, Tendency to secrecy	1.412
3.	V4, Don't rock the boat	1.727	3.	V9, Priority for short term results	1.471
4.	V9, Priority for short term results	1.740	4.	V4, Don't rock the boat	1.588
5.	V2, Looking after No. 1	1.818		C5, Official communication system	1.588
6.	V12, Authoritarian culture	1.831	6.	C4, Influence of the company on behaviour	1.647
7.	V5, Paternalism	1.909	7.	C1, The Hierarchy	1.706
	E4, Political influences - Local	1.909		P6, People's willingness to delegate	1.706
9.	E3, Political influences - UK	1.948		V2, Looking after No. 1	1.706
	C1, The Hierarchy	1.948	10.	C6, E4, J6, V5	1.765
	C7, Influence of Head Office	1.948			
CCL Trouble-shooters Top ten HINDERING factors			CCL Visionaries Top ten HINDERING factors		
1.	V2, Looking after No. 1	1.615	1.	V8, Problems only recognised as catastrophes	1.409
2.	V4, Don't rock the boat	1.692	2.	V9, Priority for short term results	1.545
3.	C5, Official communication system	1.769	3.	V4, Don't rock the boat	1.682
	E7, Contact with other companies	1.769		V7, Tendency to secrecy	1.682
	V8, Problems only recognised as catastrophes	1.769	5.	C1, The Hierarchy	1.727
	V12, Authoritarian culture	1.769		C6, Power and responsibility	1.727
7.	C3, The flexibility of the system	1.846		C5, Official communication system	1.727
	E4, Political influences - Local	1.846		V2, Looking after No. 1	1.727
	J4, The equipment at my disposal	1.846		V5, Paternalism	1.727
	V5, Paternalism	1.846		V12, Authoritarian culture	1.727
	V9, Priority for short term results	1.846			

Table F17 : Top Ten Hindering Factors for Different CCL Types
of Managers.

APPENDIX G

The Sponsored PhD : a New Model for Organisational Research

Access, credibility, relevance and commitment. These are four of the most frequent problems confronting and inhibiting organisational research. A collaborative research initiative, such as that afforded by the C & W/Cranfield joint-venture in management development, is a rare event. It was a progressive step for both industry and academia and is held up by some as the model for the future. The Social Science Research Council (SSRC) is also mounting a similar scheme (CASS). The model is as follows: any contract between a client organisation (e.g. C & W) and a consultant organisation (e.g. Cranfield) should include sufficient funding and adequate access for a research study to be conducted into the progress of the contract (e.g. management training) or some other agreed topic. Advocates of the model argue that it has three advantages:

1. The client (C & W) has a research study conducted over a longer period of time and in greater depth than would normally be feasible.
2. The consultant (Cranfield) has the opportunity to conduct applied research, relevant to the needs of the industry.
3. The researcher can submit his findings for a PhD or other research degree.

The model was developed by the Director of the Management and Organisation Development Research Centre (MODRC) at Cranfield. The Centre was new; its purpose, as its name suggests, to research into both management development and

organisational development. The Centre, although part of the School of Management, was financially self-supporting. This, together with its Director's penchant for action-oriented research and a strong conviction of the need to make a positive and practical contribution to industry, led to the development of the model. He saw it too as facilitating the progress of doctoral candidates for it provides both access to data and financial support, the two major problems facing the doctoral student, especially in management studies.

Although it has much to commend it as a means of overcoming the traditional problems of research in the management area, it does not, unfortunately, overcome them entirely. As has been related earlier, access is not always "open" and commitment, on both sides waxes and wanes. But there are opportunities to negotiate a relevant topic, to develop credibility and, given time, to overcome a variety of difficult problems.

Time is necessary because success depends upon understanding one another's priorities and values and upon sticking with the issues until trusting relationships emerge and mutual respect develops. Time, as usual, is a luxury few projects can afford and it is one of the reasons that this approach to research is not the panacea that its advocates claim.

A second reason relates to the manner in which research funds are distributed. Research is always a difficult activity to cost, especially if its precise nature has not been identified in advance. Exploratory research is as expensive as it is necessary and, being elusive to the payer, recipient and auditor alike, quickly takes on a shadowy, indefinable form. Because of the long-term nature of the work, it is often difficult for the client to see how his money is being spent.

A third caveat concerns the multiplicity of demands made on the researcher. Because the research is orientated towards the interests of the sponsoring company, it is almost bound to be what Kerlinger (1973) describes as a "field study". He suggests that "the field researcher needs to be a salesman, administrator and entrepreneur, as well as investigator" (p. 408). Wacker (1979) talks of "the researcher shifting from the role metaphor of laboratory experimenter to one of investigative journalist". As mentioned above, the researcher in this model is a doctoral candidate. Yet, this sort of research places far more demands than usual on the PhD supervisor - researcher contract.

From the outset the researcher has two masters. One is the company that sponsors the study. The other is the Examination Board of the Institution considering the work for an academic award. The two masters will be interested in different aspects of the same material. The former will be most interested in the findings of the research. Their emphasis will be on the practical value of the conclusions and the recommendations emanating from them. The latter will be more concerned with the academic merits of the study; the methodology used and the theoretical contribution. These differences in emphasis can be mutually beneficial. For on the one hand the company, knowing the work is being tested on academic grounds, can feel confident that the practical applications of it are soundly based. On the other hand, of course, the academic institution can feel confident that the empirical data presented by the student (and which in many research situations must be taken on trust) has been monitored for its accuracy by the Company. From the point of view of the researcher, however, the possibility of being torn apart by the two watchdogs is an everpresent threat. To keep both at bay demands a considerable additional effort.

The researcher is, of course, first and foremost a graduate student undertaking "research training" (the term used by the SSRC for its PhD programme). As the term implies, such a student is in a learning situation and much of his time must be spent in acquiring research skills rather than in achieving substantive results. That many students (and, may it be said, supervisors too) fail to realise this and judge the outcome of the research primarily in terms of 'content' (a 'content' which is disappointing unless the necessary skills have been acquired to produce it) is why the completion rate for PhDs in Social Science is low. In the Social Sciences as a whole only 5% of SSRC funded candidates complete within 3 years. Even after 6½ years only 40% have completed. It may be that in terms of the model described, one should employ a Research Fellow rather than a research student. For the former would, by definition, have acquired the skills and be of an age that would make relationships with the company potentially easier (because of his status and maturity - the student role is devoid of status and the candidates could theoretically, be as young as 21 years). Employing a research fellow does, however, have financial implications. The research student normally has a state grant or an institutional bursary of the same value (currently £50.00 a week) for a period of 2 or 3 years. Thereafter the researcher has to be self-supporting. A research fellow would obviously be unwilling to accept such terms and conditions. The scheme only works if a student with the experience and maturity needed for acceptance by the company is prepared to live at a 21 year old research student's standard of living. For a mature student who had enjoyed a salary in the working world prior to taking on the research and who has the vestiges of an acceptable standard of living to maintain, to say nothing of domestic commitments, £50.00 a week is insufficient and he must take on additional work to supplement it. Opportunities

exist, largely in the form of teaching, management consultancy and research. It can be so lucrative as to seduce the researcher completely; it certainly provides an often welcome distraction. Valuable time, however, that could have been spent on the central project is thereby lost.

The graduate student is expected, by his examination board, to take on the role of impartial observer and scientist. This conflicts strongly with the role he finds himself in vis-a-vis the company, that of OD consultant. In the C & W study, the researcher found herself working on the management training programmes, as lecturer, project tutor and counsellor to the participants. Inevitably, undertaking research that will have meaning for the company means that the researcher must take on a participant observer role. Doing so, however, brings not only benefits but, as indicated elsewhere, numerous problems.

"Who is the client?" Is it the company and, if so, who is the company - the M.D., the Steering Committee, the Head of Training, the liaison people? Is it the Board of Examiners? Is the participant managers? Is it the supervisor? Is it the researcher himself?

The truth is, they all are: there is no single client. The researcher holds a multiplicity of roles. At different times in the project, different roles will loom large. Priorities will be changes, loyalties will be torn, time will be wasted yet, if he is sufficiently versatile, not only will he survive but research undertaken will be worthwhile. For "research training" the model provides an unconventional route but one which ensures that the real problems of conducting organisational research are faced.

APPENDIX H

**Management Development in
Cable and Wireless PLC: A Research Report.**

Jacqueline Drake



Cable and Wireless Limited



Cranfield School of Management

MANAGEMENT DEVELOPMENT IN CABLE AND WIRELESS PLC :

A Research Report

Jacqueline Drake

23rd April 1982

INTRODUCTION

In 1977 the Cranfield School of Management and Cable and Wireless PLC set up a joint-venture in management development for the Company's middle and senior managers. Since that date more than 300 C & W managers have attended 20 programmes at Cranfield. From the outset, evaluation research has been undertaken. This has focussed on two phenomena: first, the development of the joint-venture itself - this is one of the few examples of such a relationship between industry and academia being critically monitored - second, and of immediate practical importance to the Company, the extent to which managers felt able to transfer what they had learnt at Cranfield back to their jobs in C & W. The ability to and the opportunity for transfer are fundamental to the success of management training.

The study has proved to be a rich source of insight, not only into managers' perceptions of their transfer performance but also into many facets of their broader activities within the Company. The most important of these issues are outlined below; not all, perhaps, are new but they all have been arrived at by a different route from any previous observation of Company life. They draw attention to, and confirm suspicion of, a number of long-standing problems which prevent C & W managers from developing their skills and doing their jobs as well as they might.

The three major areas arising from the research to be discussed in this paper are:

1. The career development of a C & W manager.
2. Opportunities for transfer
3. Broader issues -
 - a) strong informal network is supporting an inadequate formal structure;
 - b) the relationship between senior and middle managers;
 - c) the changing nature of the C & W manager.

This paper is a distillation of the findings of a four year long investigation. The complete study is considered in great depth in a 500 page doctoral thesis entitled

"Management Development : Perceptions of Change and Problems of Transfer." The assumptions made throughout this short report are, therefore, based on carefully researched data. Full evidence is available and no comments are made without foundation.

1. THE CAREER DEVELOPMENT OF A CABLE AND WIRELESS MANAGER

1.1 Background Information

1.1.1 All 181 managers attending the first 13 general management programmes run for C & W at Cranfield were included in this study. 75% of them responded to the lengthy postal questionnaire sent to them several months after their return to work. This sample was found to be fully representative of the managers as a whole.

1.1.2 The average age of the managers attending the programmes was 42 years and the average length of service with C & W was 20 years. 80% of all managers had an engineering background and 60% of them had only ever worked for C & W. Of the respondents, almost one-third had never been exposed to any formal general management training and two-thirds had never participated in any specialist management programmes.

1.1.3 Almost half of the 181 participants were Foreign Service (F1) staff, one-third were from Head Office and less than one-fifth were National staff.

1.2 Key Findings

1.2.1 The Cranfield programmes had their ups and downs but overall enjoyed considerable success. Managers, particularly senior managers, welcomed the opportunity to spend time together in an atmosphere conducive to discussion and the exchange of ideas and information. They found it refreshing to get away from their jobs and be in a position to make an objective review of their various problems and plans. Looking back, managers were equally satisfied with the extent to which the stated aims of their programmes had been met. After their return to work, 80% of them recommended attendance on a Cranfield programme to colleagues in C & W.

1.2.2 At the end of their programmes, a very positive response was forthcoming from all levels of management. All of the subjects taught had been well received although there was a marked preference for Cranfield rather than C & W lecturers.

All of the managers expressed an equally high level of satisfaction at the end of their programmes. This agreement, however, was not sustained after their return to work.

1.2.3 After their return to work, managers reported different perceptions of the value of their programme and the benefits they later felt themselves to have gained from it.

1.2.4 Value was looked at from three angles - practical, theoretical and personal. Practical value concentrated attention on the utility of the new skills and knowledge gained from the programme; theoretical interest focussed on the intellectual stimulation afforded by the programme; and personal value considered individual growth such as an increased feeling of well-being, heightened self-awareness and greater confidence.

The overall view was for the programmes to have been

first: of theoretical interest;

second: of personal value;

third: of practical value.

1.2.5 Participants of the Middle Management Programmes were the most satisfied group, those of the Management Refresher Programmes the least satisfied. Participants of the Senior Management Programmes held mixed views. The many significant differences later found between managers who attended different programmes stood in stark contrast to the perceptions held at the end-of-programme assessment.

1.2.6 Perceptions of the value of academic subjects also changed over time. For convenience, these were considered as four separate groups:

(a) finance and accounting;

(b) business environment (including marketing);

(c) operations management;

(d) interpersonal and organisational skills.

The area of interpersonal and organisational skills (IPOS) was found to be the most valuable on all three counts. Finance and accounting came next. Business environment and marketing were of disappointing value back at work and operations management was of value to some managers but not to others.

Cranfield lecturers were still regarded as superior to those from the Company - even from the "practical" point of view.

- 1.2.7 Middle managers comprised over 60% of all participants. They were more generous in their scoring and more positive in their comments of the programmes than were managers at a more senior level. Managers who had attended the Senior Management Programme, or the Management Refresher Programme, expressed mixed feelings about the value of the programmes and brought into question the timing of such training in a manager's career.
- 1.2.8 The perceived benefits of the programme for the jobs to which managers returned, varied from programme to programme. Of the comments made by middle managers, three-quarters were positive; of those made by senior managers, two-thirds were positive and of those made by management refreshers, one-half were positive. The detailed descriptions of perceived benefits made by many of the managers bear witness to the practical relevance of many aspects of the programmes.
- 1.2.9 Despite the criticism of many of the C & W speakers, a better knowledge and understanding of the Company was reported at all levels and by all types of manager. An interesting finding amongst managers who have spent an average of 20 years in the Company.
- 1.2.10 Managers also reported an increased understanding of "business" and a broader concept of management. However, in some managers, this led to an increased disillusionment with the way in which the Company handled its operations.
- 1.2.11 Drawing direct benefit from the content of the programmes, a large number of managers reported increased self-confidence; an increased understanding of themselves and others; closer working relationships with their subordinates - sharing information, thoughts and opinions with them and

delegating work more effectively to them; an increased tolerance of others - and their ideas - at all levels; greater financial awareness - the need for financial planning and a concern with "bottom line" profits rather than complacency with gross revenue - were frequent examples; and improved problem-solving ability.

1.3 Implications of the Findings

1.3.1 The engineers and administrators who have become the managers of C & W have led relatively sheltered organisational lives. They must be encouraged to assert themselves as managers.

1.3.2 Every manager would appear to benefit from attending at least one general management programme during his career. The question raised is when should this be? The findings of this study suggest that some managers have been sent too late in their careers and that others had more specific needs than could be met by a general programme. Career planning in the Company has, in the past, been conspicuous by its absence. The timing of formal management development activities cannot exist in a vacuum. Career development must be taken seriously by the Company.

1.3.3 A major general management programme, such as those held at Cranfield, must not be an isolated event in a manager's life. It should be preceded and followed by appropriate activities so that the manager is continually developing, has a strong self-image and is kept up to date in his thinking and behaviour. Other forms of training and development that might complement the Cranfield programmes must be considered.

1.4 Action Required

1.4.1 Selection

Nomination of managers for the programmes has been delegated to Departmental Training Managers (DTMs) for Head Office, F1 and most National staff. Guidelines, based on a rational concept of career development, must be drawn up to help the DTMs and to ensure a fair and sensible selection of participants for each programme. Two crucial questions are:

- (a) Why do we want to train this man?
- (b) How are we going to use him on his return?

1.4.2 Timing

A manager should attend a general management programme at that point in his career when the managerial component of his job is taking over from the technical component. There are still a backlog of managers in C & W who are overdue for this type of programme. They must be given a high priority for attendance even if it means running some extra programmes.

1.4.3 Preparation

When managers have been selected for a programme they should be informed well in advance and provided with appropriate preparatory reading material.

1.4.4 Follow-Up

General management training must be built upon with appropriate follow-up activities. Interests vary, for example, with managerial level. A distinction between the middle management, management refresher and senior management groups was noted from their comments about the programmes attended. It was later reinforced by their perceptions of the climate and their transfer performance. Essentially, it was that the senior managers were environmentally-oriented; management refresher were job-oriented and middle managers were people-oriented. This gives some interesting pointers for the content and style of further training. For senior managers a series of seminars, held regularly and lasting about two hours, should be conducted in Head Office and large branches. Outside speakers, mainly from the business world, and the senior managers themselves would lead the seminars. The management refreshers would prefer to attend short (2-5 day) courses on specific job related skills and computing. For the middle managers, a series of experiential workshops on topics such as team building and negotiation should be conducted. These could be run successfully in-house with carefully selected outside tutors brought in.

Some follow-up training needs are common to all levels - reflective listening and assertiveness skills, for example.

1.4.5 Developments arising from the experience of the general programmes

- (a) Run some Company policy and procedure sessions, led by Company speakers and held in-house: particularly useful for National staff.
- (b) Set up a consortium of companies for joint training sessions so as to broaden the outlook of C & W managers.
- (c) Train C & W managers to act as effective tutors.
- (d) Re-examine training needs especially those of managers who in the future are likely to have more varied careers in changing business structures.

2. OPPORTUNITIES FOR TRANSFER

2.1 Background information

2.1.1 "Transfer" is the essence of successful training. It is responsibility of:

- (a) the teacher;
- (b) the taught;
- (c) those to whom the taught return.

2.1.2 It is not enough for C & W simply to "buy in" some training from Cranfield: trained managers are of little value until they convert their new skills and knowledge into action.

2.1.3 Four conditions are necessary for transfer to occur. These are:

- (a) That something worth transferring must be learned.
- (b) That the manager must have the ability to effect transfer.
- (c) That the opportunity for transfer must exist.
- (d) That the relationship between the learning environment and the working environment must be collaborative.

2.2 Key Findings

Was Anything Worth Transferring Learned At Cranfield?

2.2.1 Satisfaction with the Cranfield learning experience has already been described as being high amongst the majority of C & W managers, particularly at the end of the programme.

2.2.2 On the last day of the programme, over half (55%) of those asked (n = 142) set specific resolutions to carry out on their return to work. When asked to set resolutions, some interesting differences emerged between senior and middle managers:

- (a) Senior managers were more willing to set themselves transfer objectives than were middle managers.
- (b) Senior managers tended to set more Company-specific resolutions than did the middle managers who were more concerned with personal development and, to a lesser extent, their immediate jobs.
- (c) Senior managers later reported greater "success" than other managers who often found their efforts thwarted.
- (d) Middle managers were more forthcoming and more positive than their senior colleagues (both SMS and MRs) when asked to make comments about their general progress back at work.

2.2.3 When questioned as to *the appropriateness of the Cranfield training* for their job, 56% of all managers believed that it had actively helped them in their transfer of training back to work. Some 16% disagreed, to the extent of reporting that it actively hindered them. Managers found the Middle Management Programmes significantly more appropriate to their jobs than they did the Senior or Refresher Programmes.

Had The Managers The Ability To Effect Transfer?

- 2.2.4 Managers were not tested for basic intelligence -this was assumed. Their motivation to make the connection between what they had been taught and the uses to which they could later put their new skills and knowledge was not found to be lacking. The consensus view of managers towards the Company was positive both before and after their return to work. The managers, with very few exceptions, have a long-term career investment in the Company and a strong commitment to its future.
- 2.2.5 On reporting their transfer performance on 20 different tasks, selected by the Steering Committee, (See Appendix A) managers had the greatest success with:
 - (a) Self-oriented activities such as recognising their strengths and weaknesses, taking action

on them, "selling" themselves more effectively and sorting out priorities. Thereafter, perceived success lay with:

- (b) Subordinate-oriented activities;
- (c) Superior-oriented activities;
- (d) Communications-oriented activities;
- (e) Company-oriented activities.

2.2.6 Significant differences between managers were found as to how they perceived their improved performances on the twenty different tasks. Perceptions of successful transfer occurred most frequently amongst young middle managers, particularly National staff. They were least occurring amongst F1 staff in their fifties, particularly those who had moved to permanent jobs in Head Office and had attended the Management Refresher Programme or the Senior Management Programme. This finding contrasts with the self-set transfer activities - the resolutions - where the more senior managers perceived themselves as being more successful.

Did the Opportunity for Transfer Exist?

2.2.7 Managers' perceptions of those features of the Company climate that helped or hindered their transfer efforts were not always shared. The 61 aspects of the organisational climate that were considered via a checklist (see Appendix B) were divided into four groups. These were:

- (a) the external environment;
- (b) the internal environment;
- (c) the manager's job;
- (d) other people at work.

2.2.8 (a) The Company's external environment - this comprises all the activities which affect the Company but over which it has no control (e.g. unions, other companies, national and international politics, local culture, technology etc.). Such factors were generally regarded as unimportant to the transfer of training.

- 2.2.9 (b) The Company's internal environment - this is established, controlled, maintained and modified by Cable and Wireless itself. It comprises the rules and regulations; the channels of communication; the pecking order; the priorities and the "atmosphere" within which everyone in the Company works. It is a function of everyone in C & W but a reflection of nobody. All are responsible for its creation and development yet no single individual is able to change it. Tangible aspects comprise the Company structure, intangible aspects the Company's values.
- 2.2.10 The Company structure was not seen as being very helpful to the transfer of training. Over half of all the managers expected their lack of *awareness of C & W goals and strategies* and the *official communication system* to inhibit their transfer efforts on their return to work. Later there was a general amelioration in the responses and *the hierarchy* emerged as the greatest hindrance, closely followed by the *official communication system* and the perceived mismatch between *power and responsibility*. The most frequent source of differences between managers on these and related issues was whether the manager was classified as Head Office, National or F1 staff. Essentially, Head Office staff found the Company's structure more of a hindrance than one would have expected whilst National staff found the structure in which they operated positively helpful.
- 2.2.11 Company values were generally felt to inhibit the transfer of training. The most negative value cited was that problems were not given attention until a "catastrophe" was on hand. Half of all managers identified this as a major hindrance. After returning to work, managers acknowledged the Company values as being far more important than they had previously thought.
- 2.2.12 (c) The manager's job - this is closely linked with the practical opportunities that a manager has for transferring his new skills and knowledge back at work. Because it is so individualistic, the manager's job was extremely controversial and the cause of many differences between managers.
- 2.2.13 Aspects of their jobs which managers felt would help them on their return to work were, without doubt, their perceived autonomy and the opportunities which

over half of them felt existed. Control and freedom seem to have been over-rated at the end of the programme whilst participation and authority had not been fully appreciated.

2.2.14 After their return to work there was a general shift towards seeing job characteristics as more helpful than anticipated. Only three factors lost support as helping factors. These were the opportunities inherent in the job, *opportunities to experiment* taking the brunt of the disappointment. The other nine aspects of the job all gained support as facilitators. The most dramatic development was the recognition of *contact with others* as a helping factor. An overwhelming 77% of managers declared this to be the case after their return to work, making this aspect the most important of all facilitators to the transfer of training. The drama lies in the fact that only 33% of managers had anticipated this as important.

2.2.15 Notable differences emerging from different groups of managers are that Head Office managers, managers under the age of 40, and managers with a non-engineering background all identified over half of their "top ten" helping factors as coming out of the job itself. Only those managers attending the Refresher programmes included job-related factors amongst their "top ten" hindering factors. These were the *amount of work*, its *predictability* and the *physical conditions* under which they worked.

2.2.16 (d) Other people at work - this aspect of the Company's climate is made up of the characteristics of the people with whom each manager works and the relationships that he has established with them.

These factors are the most subjective and are often irrational: they can be changed overnight by the retirement or promotion of a key person; for Foreign Service staff they vary with each posting; for Head Office and National staff they may involve long, slow and careful nurturing. They are, above all, a measure of the calibre of the employees in the Company, as seen through the eyes of the managers in this study.

2.2.17 People's characteristics, little mentioned before the return to work, were later reported as one of the

most important areas for facilitating transfer. *Other people's keenness and enthusiasm*, for example, had been dismissed as unimportant by 69% of all managers at the end of the programme. After their return to work only 30% still held this view. This characteristic had been anticipated as a helping factor by only 27% of managers but was experienced as such by 63%. *Other people's motivation to work* was expected to help 28% of managers but was later perceived as having helped 66% of them; *the ability of others to come up with the goods* was only anticipated as helpful by 33% of managers but was later reported as having helped 54% of them.

- 2.2.18 Over half of the managers found the *attitudes of their peers, subordinates and superiors* to be helpful to their transfer of training. However, a growing number of managers considered their superiors to inhibit effective transfer.
- 2.2.19 There was a high level of agreement amongst different groups of managers concerning the quality of their colleagues. Five of the final "top ten" helping factors were from this section; only one had been anticipated at the end of the programme.
- 2.2.20 Before they left Cranfield, managers frequently mentioned the opportunities open to them to effect change in the Company. They saw these, together with their autonomy as managers and the usefulness of the programme as the major helping factors for their transfer efforts. After they had returned to work and experienced those aspects of the organisational climate that actually did help or hinder the transfer process, new priorities emerged. The "top ten" helping factors confirmed five items from the anticipated list. They were to do with autonomy, subordinates and Cranfield. The five items dropped were to do with opportunities in the job and the support of superiors and other companies. They were replaced with "people" factors: contact with others in the same job and further afield in the Company; the keenness and enthusiasm with which others, particularly subordinates, approached their work. There was a shift away from what the situation offered them towards what the people within the situation offered.
- 2.2.21 After their return to work, managers were asked about the benefits of the programme for their current job.

Positive comments have already been reported (1.2.9/10/11). Half of the negative comments were qualified with the same rider - lack of opportunity -and this was especially true of participants of the Management Refresher Programme. The reasons given varied:

- assignment to a temporary post (or no job at all);
- promotion blocked by managers awaiting retirement;
- in a technical, not managerial, job;
- seconded to a foreign government (highly restricted working environment);
- no staff under me.

2.2.22 Managers were also asked to comment on their progress with the resolutions they had set themselves. Of the 63 managers who did so, very few were wholly negative in their remarks. Virtually half of them (49%) made only positive statements and 38% had mixed experiences to report. 122 managers made comments on their "progress in general". Of these, almost half (44%) made wholly negative comments, a further quarter (27%) made partly negative comments leaving less than one-third to make purely positive comments.

Negative comments fell into five main categories:

1. responsibility without authority;
2. problems of communication;
3. feelings of hopelessness;
4. a diminishing regard for the Company;
5. lack of opportunity.

Did A Collaborative Relationship Exist Between The Learning Environment And The Working Environment?

2.2.23 Cranfield and Cable and Wireless PLC have collaborated closely with regard to the identification of training needs and the design of suitable curricula.

They have also worked together very successfully in monitoring and modifying the programmes as they have been held. Speakers from the Company have been integrated into the lecturing schedule and a number of joint-sessions with Cranfield tutors have been developed.

2.3 Implications

- 2.3.1 The various findings (2.2.1/2/3) suggest that the first criterion for successful transfer - that of something worthwhile having been learned - has, for the most part, been met by the joint-venture. "The teacher" is, therefore, carrying his responsibility for transfer.
- 2.3.2 The second criteria for successful transfer - that managers have the ability to effect transfer - was also examined (2.2.4/5/6). This was not proven either way, but as intelligence and motivation are two of the critical factors, and these are not brought into doubt, it can be assumed that "the taught" are carrying their share of the responsibility for transfer.
- 2.3.3 Perceptions of the Company "climate" are clearly important to the transfer of training for they provide the third criterion for successful transfer - the opportunities for transfer perceived to be available.

Despite the many differences of opinion concerning the internal environment, this aspect was perceived, on balance, as a hindrance to managers. The managers job, although more controversial, was perceived as helpful by the majority of managers. Managers were in strong agreement as to the very helpful influence of the other people in the Company for their transfer of training. They were equally unanimous, although in a different way, in their views regarding the external environment; by which they found themselves unaffected.

- 2.3.4 The Company's internal environment presents rather a gloomy context for the successful transfer of training. It's influence is sometimes positive but more often negative. For one-third of the aspects considered, significant differences existed between National staff and those in Head Office: the National staff always came smiling through whilst those in Head Office were invariably the worst off. This may reflect two distinctly different cultural poses but

it may also highlight a very real difference in situation and morale.

- 2.3.5 In general, job characteristics and autonomy in C & W are seen by the managers as facilitative rather than inhibitive to the transfer of training. The most important factors, combined together, describe a process of working that has proved itself facilitative to the transfer of training. This is a collaborative style in which managers can work with one another, their subordinates and superiors to share the decisions and responsibilities connected with the managerial tasks yet still maintain the authority to put the agreed proposals into action.
- 2.3.6 Great importance lies in how the qualities in others helped managers in their own efforts to apply what they had learned at Cranfield. The only negative aspect of people's characteristics was an increase in the feeling that people were not sufficiently willing to delegate. Managers had clearly not given much consideration to the impact of others on their own level of achievement beforehand.
- 2.3.7 The aspects of the climate requiring attention by the Company are, fortunately, completely within its grasp. These include the jobs of specific individuals, the structure of the Company and the values that are maintained. None are easy to change but all are possible. If a single theme is forthcoming, it is the need for more open, more regular and more relevant discussion on the Company's current and future operations. Managers are demanding the right to manage. If they are not felt worthy of that right then the Company must stop pretending that they are managers and acknowledge them as administrators and engineers once more.
- 2.3.8 The lack of managerial opportunities for at least 15% of the respondents is an indictment of the Company. It suggests poor planning and a waste of the resources invested into training. The time, energy and efforts of everyone are discarded; the participants are disillusioned; and commitment, central to the success of the venture, is jeopardized.
- 2.3.9 The managers like working for C & W. They are proud of their Company. They find the people they work with supportive. They want to make a meaningful

contribution and are frustrated when not given the opportunity. Too many are not given the opportunity and too many are resigned to the inevitability of that.

- 2.3.10 The lack of opportunity to transfer their training was a recurrent theme of the field study findings. It does not simply reflect not being in the "right" job, although some people patently are not. It is also about having the authority to take decisions and the confidence to act as a change agent. Getting the formal and informal support of the Company to be allowed to try out new behaviour should not be a struggle. Strangely enough, in C & W, the informal support is generally acknowledged as stronger than the formal. The Company must not let the two get too far apart. Managers are making great efforts to transfer their training. If the formal structure of the Company: the constraints of his job, the "system" and the prevailing values prevent him from growing, one of three outcomes will result. He will either escape to the apparent freedom of another job or he will put up resistance or he will withdraw. None of these are to the benefit of the Company. Only the bold and energetic look outside, only the best are offered other jobs. Resistance may be active or passive but either way, traditional values are rejected and concern is increasingly for the "self" rather than for the Company. Withdrawal is the route of the timid, the very people who need encouragement to reach their full potential and save them from becoming uninspired and submissive.

At the same time, those managers who do have the opportunity to effect transfer are busy reaping the benefits and growing as managers. A critical mass of trained managers is being built up in the Company as more and more attend the programmes. Eighty percent of those who have been to Cranfield recommend attendance to someone else; managers who have not been selected wait their turn or request it - it will gradually be seen as an entitlement rather than a privilege.

- 2.3.11 The preceding eight paragraphs (2.3.3 - 2.3.10) draw attention to the many areas requiring attention within the Company if the opportunity for transfer is to be made available to all newly-trained managers. The third criterion for successful transfer has not

been met sufficiently. "Those to whom the taught return" are not pulling their full weight.

- 2.3.12 The fourth criteria for successful transfer rests on the relationship between the two environments of working and of learning. There would appear to be three stages of management development. The first stage comprises all those preliminary and preparatory activities so vital to the creation of a meaningful learning experience. The second stage is made up of the learning environment itself and the third stage is the return to the working environment. There is much evidence of collaboration between Cranfield and Cable and Wireless at the first two of these stages but little of collaboration at the third stage (2.2.23). The limitations of collaboration are also indicated. Cranfield has always pressed for closer involvement in organisational development issues; C & W has always kept them at arms length, limiting Cranfield's activity to external management development. The fourth criterion for successful transfer has only been partially met, although what has been done has been done well.

2.4 Action Required

2.4.1 The Role of the DTM

The role of the Departmental Training Manager (DTM) must be enlarged to encompass the third stage of management development. The DTM is only really active in the first stage - identifying training needs and selecting participants for the programmes. In this the DTM liaises with the Personnel Department and though them with Cranfield. The second stage is handled by the Personnel Department and Cranfield but the third stage, after the manager has returned to work, is abandoned by all, save the individual concerned. Luck plays an important part in the ultimate success of the transfer process. Ways in which DTMs can ensure that the efforts of returning managers are made effective include:

- (a) Alerting superiors to the need to be supportive. Managers are strongly influenced by the attitudes and encouragement of their immediate boss. He has a vital role as a developer of his subordinates and in determining their tasks

and work environment, the appropriateness of which are his responsibility.

- (b) Giving managers feedback on their attempts at transfer through, for example, workshops based on the managers' resolutions.
- (c) Making sure that managers are given opportunities to apply their training. For managers who are moving to another department after training, they should liaise with the DTM at the manager's destination. There should also be liaison with those responsible for postings.

2.4.2 Research in the Workplace

Further research is required to complement the work already done on the Cable and Wireless/Cranfield joint venture. So far this has stopped at the "factory gate". It should now be carried into the "factory" with a view to providing recommendations:

- (a) On how best to make transfer effective.
- (b) On what may be done to the existing training programmes to further facilitate transfer.
- (c) On how to improve those aspects of the organisational climate needing attention - broadly speaking, the Company's tangible structure; its intangible values; and attitudes to the external environment.

These issues could be attended to through an exploration of the experiences of the managers involved and through controlled experimentation with follow-up workshops and other possible solutions to the transfer problem.

3. BROADER ISSUES

3.1 Background Information

The issues discussed here arose from three sources. First, and perhaps carrying the greatest weight, were semi-structured interviews held with managers in HO who had been associated with the management development programmes at Cranfield as either a visiting speaker or as a member of the Steering Committee. Second, unstructured interviews were held with participants of the early Middle Management Programmes followed by numerous discussions with later participants whilst they were at Cranfield. Third, open-ended questions in the postal questionnaire provoked wide-ranging comment of Company activity and future strategy.

As a result, strong and coherent views, beyond the main management development thrust of the research, pushed their way through and cannot (must not) be ignored. Three major themes are highlighted below.

3.2 A Strong Informal Network Is Supporting An Inadequate Formal Structure

3.2.1 Key Findings

There is an over-reliance on the high calibre and good nature of a large number of personnel throughout the Company. This is a precarious situation, easily abused and unlikely to outlive the Company's historically benevolent attitude of a "job for life".

3.2.2 Implications

Given today's reality of early retirement and voluntary redundancy schemes and the lurking possibility of compulsory redundancy, the basis for this high level of trust in the Company is being eroded. Without the support of the informal network, the formal structure will collapse.

3.2.3 Action Required

To build up a strong and reliable formal structure is a major task. Two areas requiring immediate attention are the communication system and the level of staffing.

(a) Communication

- (i) Corporate goals and broad strategies must be publicised within the Company to give managers a sense of unity, of direction and of being trusted.
- (ii) There must be more open discussion, debate and exchange of views on Company issues.
- (iii) The confidentiality "rules" must be overhauled. They create elites, confuse priorities, encourage secrecy, discourage debate and fan gossip.

(b) Overmanning

This is now being recognised and action is being taken but it must be faced up to, especially in H.O. and some of the larger branches. "Reorganisation" has a habit of clouding the issues. New job titles are created and a place is found for everybody. The "non-jobs", the duplication and the tucking away of "dead wood" often persist.

3.3 The Relationship Between Senior Managers and Middle Managers is Unsatisfactory.3.3.1 Key Findings

- (a) Few Senior Managers communicate freely with Middle Managers.
- (b) Many Senior Managers do not fulfill their responsibilities for developing their successors through personal coaching and delegation.

3.3.2 Implications

Middle managers are neither being encouraged to take responsibility for the present nor are they being adequately prepared for the senior roles of the future. This is overburdening the existing senior managers, many of whom were themselves ill-prepared for a leadership role.

A defensive pose is not unusual amongst senior managers many whom quickly withdraw behind their status,

high levels of confidentiality, and platitudes of paternalistic well-being. The poor communication between managerial levels will continue as long as the fear of "losing face" haunts the senior managers. Much of the synergy to be gained from the various groups of managers throughout the Company is lost. So too is the spirit of growth and collaboration.

3.3.3 Action Required

- (a) Managers, at all levels, need to be properly informed and should be expected to take responsibility for their own decisions.
- (b) All managers should be expected to make a contribution to the future of the Company by actively considering strategic issues and developing the people around them at every opportunity.
- (c) Communication between managers should be improved through "team-building" workshops.
- (d) Responsibility should be shared through increased delegation.

3.4 The Changing Nature of the Cable and Wireless Manager

3.4.1 Key Findings

Three major changes are occurring:

- (a) The gradual building up of a "critical mass" of trained managers as a result of the Cranfield and similar programmes.
- (b) The remarkable shift - noticeable amongst managers with less than 15 years service with C & W - away from the "traditionalist" management style which still dominates the Company (63% currently espouse this style) towards a style displaying more creativity and a greater concern with ideas and ideals. A more radical management is on its way (see Appendix C).
- (c) As a result of a rapidly developing technology there are more and more opportunities outside C & W for its managers. A radically different environment is emerging.

3.4.2 Implications

Together these changes increase the likelihood that the status quo will be rejected if change is not initiated from within.

A radical situation is far more difficult to manage than a conservative one. The success of the Company in the past has been on doing the same thing well; on behaving in a conservative manner. To succeed in the future, Cable and Wireless must change.

3.4.3 Action Required

- (a) Recognise and build on the new skills, knowledge and interest of the managers returning from Cranfield.
- (b) Encourage greater participation in the management development process, particularly by the DTMs and senior management. The Personnel Department should become facilitators, the Operational units the initiators, the activators and the evaluators.
- (c) Explain the Company's goals to a much wider audience than has traditionally been the case.
- (d) Constantly monitor shifting needs and expectations within the Company and the changing demands outside it. Either bring in professionals (from Cranfield, for example) to do this or set up an Internal Research Unit. The fate of the Business Review Group and the Corporate Development Unit suggest the former or greater determination to allow the latter sufficient freedom and authority to function effectively.

3.4.4 In Conclusion

It would be apparent from the foregoing that Cable and Wireless has a different type of manager operating in a different world with a future that is not going to be a repeat of the past. In this situation it is crucial that the Company plays a much more active role than it has in the past in ensuring not only that its managers are trained appropriately but that the benefits of that training are seen to

accrue both to the individual manager in particular and to the Company in general.

SUMMARY OF ACTION REQUIRED

Part 1 : Career Development of a Cable and Wireless Manager

- * Create guidelines for selection of managers for appropriate training and development throughout their career.
- * Give priority to the backlog of managers still awaiting a general management programme.
- * Prepare managers for their programmes and follow them up on their return.
- * Build on management training with further activities - these may be common to all levels of management or vary between levels.
- * Run in-Company policy and procedure sessions.
- * Set up a consortium of companies for joint training.
- * Train Cable and Wireless managers to act as effective tutors.
- * Re-examine training needs regularly.

Part 2 : Opportunities for the Transfer of Training in Cable and Wireless

- * Enlarge the role of the DTM so that he might take responsibility for the trained manager after his return to work.
- * Authorise research on how best to make transfer effective and whether this requires changes to be made on the programme or to the organisational climate.

Part 3 : Broader Issues

- * Improve internal communication by publicising the Company's goals and strategies, debating issues more openly and relaxing confidentiality.
- * Face up to overmanning.

- * Keep all managers properly informed, expect them to make their own decisions and to take responsibility for them.
- * Expect and encourage all managers to think about the future, contribute to it and develop those around them for it.
- * Run team-building workshops to improve relationships between different levels of management.
- * Share responsibility through increased delegation.
- * Recognise and build on new skills, knowledge, interest and enthusiasm as managers return from Cranfield.
- * Research and evaluate change within the Company and outside.
- * Encourage greater participation in management development - don't leave it all to the Personnel Department.