

**COVER PAGE**

CRANFIELD UNIVERSITY

ASHLEY STOCKER

THE ARMED FORCES OF AUSTRALIA, BRITAIN AND CANADA AND THE  
IMPACT OF CULTURE ON JOINT, COMBINED AND MULTINATIONAL  
OPERATIONS: A METHODOLOGY FOR PROFILING NATIONAL AND  
ORGANISATIONAL CULTURAL VALUES AND ASSESSING THEIR  
INFLUENCE IN THE INTERNATIONAL WORKPLACE.

COLLEGE OF DEFENCE TECHNOLOGY

PhD THESIS

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The armed forces of Australia, Britain and Canada and the impact of culture on Joint, Combined and Multinational operations: A methodology for profiling national and organisational cultural values and assessing their influence in the international workplace.

Supervisor

Professor T Taylor

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## **ABSTRACT**

This study identifies the influence of national and military organisational values on the cultures of the armed forces of Australia, Britain and Canada, in order to assess the impact of culture on Joint, Combined and Multinational operations. This is achieved by:

- Defining culture, values and related concepts.
- Outlining a viable methodology to examine and profile cultural values.
- Demonstrating why values form the basis of this study.
- Reviewing the body of cross-cultural academic literature on cultural values and the military.
- Executing a measurement of values in a consistent and academically sound manner.
- Examining national influences on the culture of the armed forces of Australia, Britain and Canada.
- Examining intra-national organisational influences on the culture of the services of the armed forces of Australia, Britain and Canada.
- Examining international organisational influences on the culture of the services of the armed forces of Australia, Britain and Canada.
- Focusing on the values of the armed forces examined in this study in order to compare the findings with the results obtained from the Values Survey Module.
- Discussing the implications of the findings of this study and demonstrate how the values of the nations and organisations that have been examined can be expected to affect future operations.

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## GLOSSARY

ACSC	Advanced Command and Staff Course
ADF	Australian Defence Force
BC	Before Christ
CC	Culture's Consequences
CDF	Chief of the Defence Force
CDS	Chief of the Defence Staff
CF	Canadian Forces
CLS	Chief of Land Staff
CVS	Chinese Value Survey
DfID	Department for International Development
DND	Department of National Defence
DS	Directing Staff
EEZ	Economic Exclusion Zones
ICRC	International Committee of the Red Cross
IDV	Individualism Index
INTERFET	International Force in East Timor
IRIC	Institute for Research on Intercultural Cooperation
IUS	Inter-University Seminar on Armed Forces and Society
JSCSC	Joint Service Command and Staff College
LTO	Long – Versus Short-Term Orientation
MARCOM	Canadian Forces Maritime Command
MAS	Masculinity Index
MBA	Master of Business Administration
MDA	Master of Defence Administration
MOD	Ministry of Defence
NATO	North Atlantic Treaty Organisation
NBC	Nuclear Biological and Chemical
NCO	Non-Commissioned Officer
NDHQ	National Defence Headquarters
NORAD	North American Aerospace Defence
PDI	Power Distance Index
PJHQ(UK)	Permanent Joint Headquarters (United Kingdom)
PLA	People's Liberation Army
PSO	Peace Support Operations
RAAF	Royal Australian Air Force
RAF	Royal Air Force
RAN	Royal Australian Navy
RFA	Royal Fleet Auxiliary
RM	Royal Marine
RMCS	Royal Military College of Science
RN	Royal Navy
SNCO	Senior Non-Commissioned Officer
UAI	Uncertainty Avoidance Index
UN	United Nations
US	United States
USA	United States Army
USAF	United States Air Force
USMC	United States Marine Corps
USN	United States Navy
VSM	Values Survey Module
WVS	World Values Survey
WWI	World War One
WWII	World War Two



“Chieftains must develop empathy - an appreciation for and an understanding of the values of others, a sensitivity for other cultures, beliefs and traditions. However, empathy must not be confused with sympathy, which may result in unwise consolidation in times when, above all other things, the good of the tribe or nation must be pursued with adroit diplomacy or battlefield action.”

Attributed to Attila the Hun.  
(Roberts 1989, page xx)

## **BACKGROUND TO THE STUDY**

### **Operations**

In *Multinational Military Forces: Problems and Prospects*, Sir Roger Palin argues that it was only with the end of the Cold War that multinational operations came to the fore. Before 1989, “The difficulties in such multinational operations were largely ignored over time, principally because the conflicts involved were of marginal strategic significance given the predominance of the East-West confrontation.” (Palin 1995, p1) He states that prior to 1989 multinational forces never had to be tested in Western<sup>1</sup> Europe and that under United Nations auspices there were only thirteen multinational operations in the forty years up to this date. The end of the Cold War changed the missions of Western armed forces and resulted in a marked increase in multinational war-fighting and peace support operations<sup>2</sup> (PSO) across the world. Roger Palin identifies central issues concerning the successful implementation of multinational operations, “The problems of bringing together military forces from disparate nations range from the practical to the political and cultural.” (Palin 1995, p1) Also, commanders of armed forces involved with current deployments cannot concentrate solely on their own military considerations since achievement of the military end-state will not signal the end of the overarching mission. Consequently, military commanders need to understand the civilian and political end-states and will often be called upon to help facilitate their implementation. The required shift in focus by the military is demonstrated in the extract below:

“In the past a (military) mission was considered to be complete when peace broke out and the impact of civil and political dimensions were limited, as shown in Exhibit (1-1a). The shift of emphasis away from military to political and civilian considerations since the end of the Cold War is demonstrated in Exhibit (1-1b). This shift in mission focus requires military commanders and staff to understand political and civil factors that could largely be ignored when planning operations during the Cold War era.” (Stocker 2001, p88)

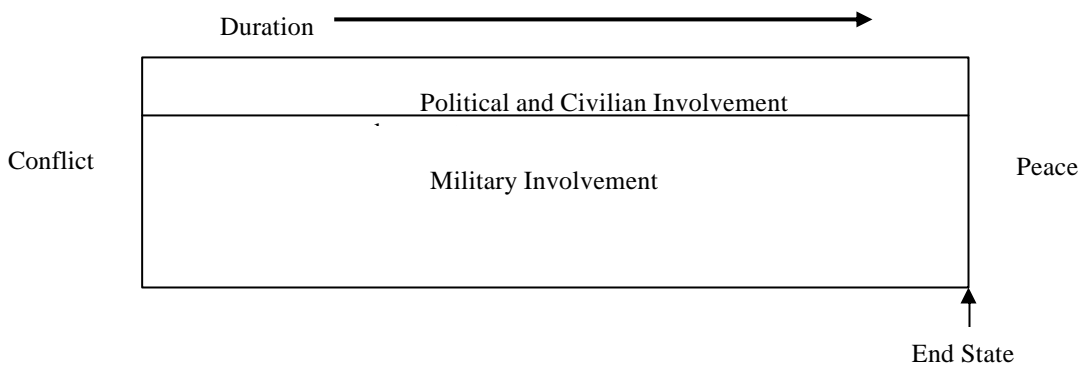


Exhibit 1-1a. The Cold War Political /Military Mission Interface.

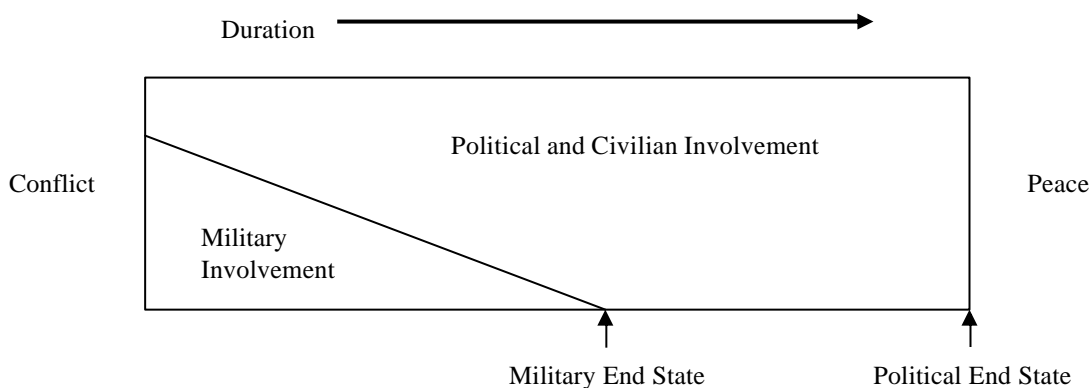


Exhibit 1-1b. The Current Political /Military Mission Interface.  
(Stocker 2001, p89)

In *Waging Modern War* General Wesley Clark comments on the requirement to maintain NATO’s cohesion in the campaign against Serbia in Kosovo. “I was motivated by a larger political-military rationale: if we wanted to keep this campaign going indefinitely, we had to protect our air fleet.” (Clark 2001, p188) This understanding of the larger political end state ties in with Exhibit 1-1b. One significant element of the current political military mission interface is that military commanders must understand the culture of their military partners and how they are likely to operate and react to political imperative in any given operational theatre.

The need for this study is highlighted in the following excerpt from *British Defence Doctrine*, “The increased interdependence of the individual Services, and their increasing mutual dependence on the armed forces of allies and potential coalition

partners, has made co-operation between them of vital importance in modern warfare. It is frequently also necessary to co-operate closely with other non-governmental agencies, many of which will have aims and objectives seemingly at variance with those promulgated in the military plan.” (MOD 2002, p3-3) It is the requirement to understand coalition military partners that this study aims to address.

### **Focus on culture**

This study focuses on practical cross-cultural issues as British armed forces continue to operate in Joint, Combined and Multinational environments<sup>3</sup>. Many considerations arise from these deployments, one of which is the need to understand that the cultural values of people from organisations and nationalities will directly affect their understanding in any given situation. The following extract from *Military Professionalization and Political Power* provides an academic perspective of why the study of cultural values is relevant to both military and civilian organisations:

“Controversy over the existence of what might be referred to as the military mind has been a persistent feature in debates, public and scholarly, on the military establishment. Some have outrightly denied that military men are characterized by values and outlooks that differ from those of ‘civilians’; as often as not, one has tended to forget that ‘civilians’ cannot be treated as one homogenous group.” (Abrahamsson 1972, p71)

Many military people view culture “... as ‘soft and spongy’ and would prefer that it be discussed away from the ‘real world of soldiering’.” (Capstick 2001, p23) However, cultural issues affect all military activities in the ‘real world’ and the sheer number of diverse interests represented on operational deployments complicates the challenge to understand other cultures. The following example from *The Military and Conflict between Cultures* (Bradford 1997, P12) identifies the need for military commanders to understand ‘culture’:

“Although many United Nations interventions, including the Korean and Gulf Wars, involved cross-cultural contingents, many Western military

professionals remained insensitive to the cross-cultural aspects of military dynamics, and some were openly hostile when faced with extra-national dimensions.” (Beaumont 1997, p12)

Military commanders often recognise that the various armed forces and civilian agencies<sup>4</sup> they find in an operational theatre have their own interpretation of missions or different missions altogether, which are influenced by their cultures. The problem is that, even with the best of intentions, communication with other cultures is difficult. In ‘Negotiating Successfully in Cross-Cultural Situations’ Peter Gulbro and Paul Herbig observe that, “Often barriers to successful agreement are cultural rather than economic or legal.” (Gulbro and Herbig 1996, p236) This comment is amplified in a report published in *The Economist*, which states, “The question of ‘values’ is one of the more contentious and frustrating parts of the foreign-policy debate. Obviously, values matter in themselves and in their influence on the conduct of a nation’s affairs.” (The\_Economist 2003, p20)

## **AIM AND OBJECTIVES OF THIS STUDY**

In a lecture entitled *Resolving international conflict: culture and business strategy* Fons Trompenaars stated, “To minimise conflict between cultures, you must first analyse – measure even – the differences between them.” (Trompenaars 1996, p1) The definition and scope of culture is examined in detail later in this Chapter but here it is sufficient to observe that culture determines human behaviour in a sub-conscious way. Culture is a major determinant of ‘how we do things around here’. Culture in turn is shaped by and reflected by the values held by individuals.

### **Aim**

The aim of this study is identify whether national and organisational values have a significant influence on the cultures of armed forces in order to assess the impact of culture on Joint, Combined and Multinational operations.

### **Objectives**

The objectives of this study are to:

- Define culture, values and related concepts.
- Outline a viable methodology to examine and profile cultural values.
- Demonstrate why values form the basis of this study.
- Review the body of cross-cultural academic literature on cultural values and the military.
- Execute a measurement of values in a consistent and academically sound manner.
- Examine national influences on the culture of the armed forces of Australia, Britain<sup>5</sup> and Canada.
- Examine intra-national organisational influences on the culture of the services of the armed forces of Australia, Britain and Canada.
- Examine international organisational influences on the culture of the services of the armed forces of Australia, Britain and Canada.

- Focus on the values of the armed forces examined in this study in order to compare the findings with the results obtained from the Values Survey Module.
- Discuss the implications of the findings of this study and demonstrate how the values of the nations and organisations that have been examined can be expected to affect future operations.

The remainder of this Chapter defines culture and how it relates to connected ideas and concepts such as values, ideology and nationality.

## **CULTURE DEFINED**

'Culture' has several different meanings in the English language. The *Shorter Oxford Dictionary on Historical Principles*, for example, defines culture variously as, "worship", "the artificial development of microscopic organisms", "improvement or refinement by education and training" and "the training and refinement of mind, tastes, and manners: the condition of being thus trained and refined." (Little, Fowler et al. 1983, p471) Defining culture becomes even more complex when other languages are considered. "Une culture classique", for example, can be translated into English as "a classical education." (Girard 1978, p216) Examples of how 'culture' has been used differently from the context of this paper are provided below (Haralambos and Holborn 2000, p884-885):

- 'High culture' refers to cultural creations that have a particularly high status. They are regarded by arbiters of cultural taste as the epitome of the highest levels of human creativity. They include opera, art and literature.
- 'Folk culture' refers to the culture of ordinary people, particularly those living in pre-industrial societies.
- 'Mass culture' is essentially a product of the mass media.
- 'Popular culture' includes any cultural products appreciated by large numbers of ordinary people.

None of these definitions effectively describe what is being discussed in this paper. In the context used of this study culture is viewed as the manner in which individuals understand their environment. "Culture is much like the air people breathe: it is taken for granted until there is an external stimulation that forces people to think about it." (Brislin, Cushner et al. 1986, p22) It is only when assumptions about this understanding are questioned that the existence of culture starts to become apparent to the individual. The manner in which people eat, dress and talk are outward manifestations of any culture of which most people will be readily aware when travelling abroad (Hoecklin 1995, p21). In order to study cultural differences effectively, a deeper understanding is needed to see beyond such superficial differences between nations and organisations.



Geert Hofstede defines culture as “collective programming of the mind” (Hofstede 1980, p16). This collective programming lies between the universal nature of the human animal and an individual’s unique personality. This is depicted in Exhibit 1-2.

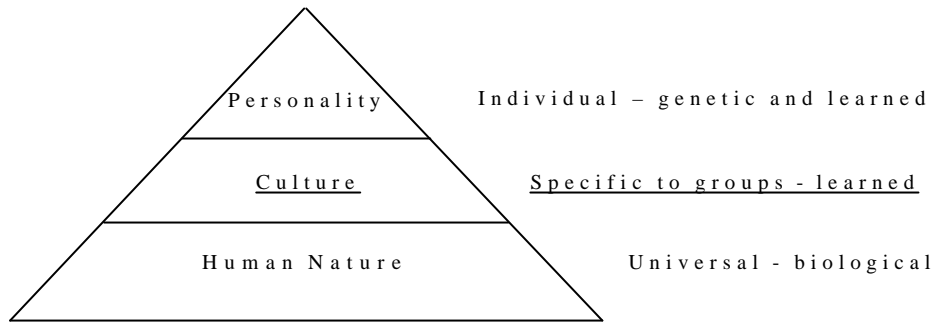


Exhibit 1-2. Three levels of mental programming.  
Adapted from Hofstede 1980, p16

Hofstede states that the mind has three elements that make up the human mental programme<sup>6</sup>:

- Biological: All humans have a universal reaction to biological stimuli, such as fatigue and hunger.
- Personality: Personality is what makes each human an individual. Although cultural socialisation will teach individuals that certain modes of behaviour are or are not generally acceptable, individual responses will vary. In any given example, it is not possible to judge precisely how an unknown individual from another culture will react to a set of circumstances. Individual experiences are unique and learned reactions therefore differ across a spectrum of responses.
- Culture: Some behaviour is common across groups. For instance, eye contact is not a universal sign of respect. Most Anglo-Saxon children in UK are taught to look their parents in the eye when they are being chastised and as a sign of respect. In many parts of Africa it is considered extremely rude to look someone in the eye and in the same circumstances children will be encouraged to cast their eyes to the ground as a sign of respect. Culture, therefore, indicates what is considered desirable.

These three elements combine to provide the mental programming that together define the human animal. It is debatable whether the boundaries are as distinct as shown in Exhibit 1-2. However, Exhibit 1-2 provides an academically accepted concept upon which to base analysis of the cultures examined in this study. Hofstede states that, “Culture is to human collectivity what personality is to an individual.” (Hofstede 1980, p25) Personality makes a human being truly unique through individual learning and inherited values, whereas culture determines the characteristics of a social grouping.

It is not possible to provide a definition of culture that is completely acceptable to the many branches of the social sciences that lay claim to the subject. Paul Bohannan states in *How Culture Works*, “Defining culture has proved all but impossible. Yet we know what culture is, just as we know what life and matter are. All three are what we might call rock-bottom perceptions – they cannot be definitionally simplified.” (Bohannan 1995, p5) Given that a single universally accepted definition does not exist, Steven Ott’s synthesis of three approaches to analysing culture provides a sound conceptualisation upon which to base this research<sup>7</sup> (Ott 1989, p181). Culture is:

- A holistic set of patterned physical, psychological, and social products.
- Anchored in a shared body of meanings (or an ideology), views about world realities, perceptions and values.
- Created by a group’s members in the course of their social interactions.
- A determinant of specific patterns of behaviour and feelings.
- Transmitted to new generations through traditions.

### Identity

The concept of culture is closely related to that of identity. Trying to define identity is as difficult as finding an accepted definition for culture. Jonathan Dancy and Ernest Sosa state in *A Companion to Epistemology* “It does seem that, outside of mathematics, we do not have any successful, logically impeccable, principles of identity.” (Dancy and Sosa 1992, p368) In *Sociology: Themes and Perspectives* Michael Haralambos and Martin Holborn provide a link between identity and culture,

“Identities can be formed through the cultures and subcultures to which people belong or in which people participate.” (Haralambos and Holborn 2000, p886) Haralambos and Holborn also identify that various theories understand this relationship between culture and identity in different ways. In *Culture’s Consequences*, Geert Hofstede provides the following differentiation:

“Culture is not the same as *identity*. Identities consist of people’s answers to the question: Where do I belong? They are based on mutual images and stereotypes and on emotions linked to the outer layers of the onion ... - symbols, heroes and rituals – but not to values<sup>8</sup>. Populations that fight each other on the basis of their different ‘felt’ identities may very well share the same values. Examples are the linguistic regions in Belgium, the religions in Northern Ireland, and tribal groups in Africa.” (Hofstede 2001, p10)

In *Communicating With Strangers* William Gudykunst and Young Yun Kim identify three broad categories of identity which relate to the personality, culture and universal behaviour parts of mental programming identified earlier in this Chapter (Gudykunst and Kim 1997, p29-30):

- Human identity involves those views of ourselves that we believe we share with all other humans.
- Social identity involves those views of ourselves that we assume we share with other members of our ‘ingroups’<sup>9</sup>.
- Personal identity involves those views of ourselves that differentiate us from other members of our ‘ingroups’ – those characteristics that define us as unique individuals.

What separates these definitions of identity from Ott’s synthesis of culture is that each revolves from the individual’s view of their place within society, whereas culture is largely involuntary (during childhood at least). In ‘Is Britain European?’ published in *International Affairs* Timothy Garton Ash states, “It seems to me that the central point about identities – regional, cultural or national – is that they are voluntary but not

arbitrary.” (Ash 2001, p1) The three categories identified by Gudykunst loosely equate with the three levels of human programming identified in Exhibit 1-2 whereas the three mentioned by Ash equate to the levels of culture described later in this Chapter. What both quotes have in common is that they demonstrate that it is possible to separate the concept of cultural values from identity.

## **PHILOSOPHY OF CULTURE**

Item 2 in Ott's list, in the previous section, identifies a number of concepts which are closely interrelated. It is important to distinguish the aspect of culture that this study examines since, "Shared beliefs, values, moral and ethical codes, and ideologies are central to organisational culture." (Ott 1989, p41) Hofstede provides a different focus for the relationship between values and ideology that implies that the two can be separated from each other. "First, we have to distinguish between a phenomenological study of values (which is the area of social science) and a deontological approach (which belongs to ethics, ideology, or theology)." (Hofstede 2001, p15)

### **Ideology**

Destutt de Tracy originally described the concept of 'ideology' in 1796 to refer to the science of ideas. In *A Companion to Epistemology*, ideology is defined as follows:

"In twentieth-century discussions of ideology, the term has often been employed in a purely descriptive and non-pejorative sense, being used simply to refer to the set of beliefs, attitudes, standards of rationality, etc. that embody the basic values of some social group and that group's conception of the political order appropriate to those values." (Dancy and Sosa 1992, p192)

This definition of ideology is mirrored by Giddens in *Sociology*:

"Shared ideas or beliefs which serve to justify the interests of the dominant groups. Ideologies are found in all societies in which there are systematic and ingrained inequalities between groups. The concept of ideology has a close connection with that of power, since ideological systems serve to legitimise the differential power held by groups." (Giddens 2001, p691)

In the first definition, ideology could be considered for the central focus for this study and this would seem to be supported from an organisational culture perspective. “*Ideologies* usually are defined as pervasive and dominant sets of interrelated systems of thoughts, beliefs, and/or values.” (Ott 1989, p40) However, while it is true that ideology and values are fundamentally linked the second definition of ideology implies that this is not the appropriate focus for this study. Paul Bohannan identifies two issues that preclude ideology from usefully forming the principal basis for this study.

“An ideology is a set of doctrines, assertions, and intentions that undergird a social, religious, or political position. Ideologies provide answers to eternal questions that allow the questions themselves to remain unasked.”

“Ideologies differ from science (including social science) in that their propositions are not presented as theory to be criticized, tested, and improved, but rather as premises to be accepted on faith.” (Bohannan 1995, p182 and p185)

The references in this section demonstrate two specific reasons why ideology is unsuitable to support the methodology of this study. First, ideology is a less ‘pure’ element of culture than values as, for example, it is described as variously incorporating beliefs, attitudes and interests. Second, unlike values, there is an element of moral obligation and duty implied in ideology through the supporting of social, religious, or political positions and the legitimisation of power.

## **Reality**

Reality and ideology are so firmly inter-related that it is practically impossible to separate them from each other. In *Sociology: Themes and Perspectives* Haralambos and Holborn present the following sociological perspective of ideology and reality:

“The term ideology refers to a set of ideas which present only a partial view of reality. An ideological viewpoint also includes values. It

involves not only a judgement about the way things are, but also the way things ought to be. Thus ideology is a set of beliefs and values that provides a way of seeing and interpreting the world which results in a partial view of reality. The term ideology is often used to suggest a distortion, a false picture of reality. However, there is considerable doubt about whether reality and ideology can be separated.” (Haralambos and Holborn 2000, p19)

There can be more than one view of reality in any given situation and, in accordance with Hofstede’s work cited in Exhibit 1-2, human minds perceive the world according to the programming they receive from the cultures in which they were raised. In *The Hidden Dimension* Edward Hall states, “Like the computer, man’s mind will register and structure external reality only in accordance with the program.” (Hall 1959, p2) Jean-Claude Usunier supports this proposition in ‘Atomistic versus Organic approaches’ and cites the following example of Asia compared to the ‘West’, “...in Japan and more generally in Asia, different information is sought and it is used in a different decision-making process...” (Usunier 1997, p1) At the organisational level reality can exist solely because its members believe it to exist:

“From the organizational culture perspective, meaning, reality and truth are social constructions – they exist as meanings, realities, and truths only because members of the organization collectively have defined them as such. If truth, meaning, and reality were absolutes, there would be no organizational culture perspective.” (Ott 1989, p25)

Organisational realities are not examined in detail, as these are often unique to the respective organisations and therefore do not serve the purposes of this study. It is not possible to know every aspect of reality therefore people select those that their theories, concepts and interests tell them are significant. Perception of ‘reality’ determines behaviour. The impact of reality and perception of reality on this study is demonstrated in the various sections dealing with ethnocentrism.

## Perception

“Perceptual knowledge is knowledge acquired by or through the senses. This includes most of what we know. Some would say it includes *everything* we know.” (Dancy and Sosa 1992, p333) One of the problems when dealing with other cultures is that most people automatically tend to assume that others perceive the same reality. “Although perceptions are based on interactions with others, we tend mistakenly to assume that our perceptions are ‘real’ and external to ourselves.” (Gudykunst and Kim 1997, p169) Perception can be demonstrated through the psychologically based example in Exhibit 1-3 below where it is possible to see both a young and an old woman. The image demonstrates that it is possible for two people to look at the same item or issue, see something different and neither be ‘wrong’.



Exhibit 1-3. My wife and mother-in-law.  
(Hill 1915)

Perception is a mental process that is deeply affected by cultural values and can be highly subjective and selective. “There is ample evidence... that we tend to see what we expect to see.” (Klineberg 1980, p45) Glen Fisher, who spent twenty-two years in the US Foreign Service, states that, “Those who work internationally or cross-culturally commonly find that all people are not necessarily led by the same evidence to the same conclusions”, supports this view. (Fisher 1997, p1) The following example highlights how the communication process can have different perspectives and the dangers of misunderstanding:



“On January 9, 1991, the foreign minister of Iraq, Tariq Aziz, and the secretary of state of the United States, James Baker, met in Geneva to attempt a last-minute compromise that would avoid a war.... Baker used the verbal channel of communication almost exclusively, and said *very* clearly that the United States would attack if Iraq did not move out of Kuwait. The Iraqis, however, paid less attention to *what* Baker said and most attention to *how* he said it. Hussein’s half-brother reported to Baghdad that “the Americans will not attack. They are weak. They are calm. They are not angry. They are only talking.” Six days later the United States unleashed Operation Desert Storm.” (Triandis 1994, p29)

In the example above the representatives of the United States and Iraq were discussing the same issue but both seemingly failed to understand the other’s perspective. The Iraqi representative might have expected someone to reinforce such a serious message by demonstrating significant emotion, such as anger, and failed to understand the importance of the content. The US representative relied on content to convey the serious intent behind the message and failed to understand that their outward calmness was misunderstood. It is therefore important to understand that culture shapes perspective in practical situations and will have a fundamental effect on the communication process.

## **Values**

The common thread through these brief discussions on ideology, reality and perspective has been that all are inter-related and are linked to cultural values. Hofstede states, that “Values are held by individuals as well as by collectivities” and “Nearly all our other mental programs (such as attitudes and beliefs) carry a value component.” (Hofstede 2001, p5-6) Shared values enable each individual to gain an understanding of their world, create allegiances with others from the group and communicate effectively through mutual comprehension.

Gudykunst and Kim provide the following definition “*Values* are shared conceptions of the desired ends of social life and the means to reach those goals.” (Gudykunst and Kim 1997, p47) Although the following statement by Brislin and Yoshida is not inevitable it further highlights the importance of values, “What is perceived as good or correct in one culture is seen as bad or incorrect in another.” (Brislin and Yoshida 1994, p54) From the organisational culture perspective, values are so important that they can be considered fundamental to the fabric of an organisation. “...values are so important to organizational culture that many organizational culture-orientated authors define them – and the broader system of ethical or moral codes in which they are embedded – as *the* organizational culture.” (Ott 1989, 39)

In *The Nature of Human Values*, Milton Rokeach states that, “The value concept, more than any other, should occupy a central position across all the social sciences ... it is an intervening variable that shows promise of being able to unify the apparently diverse interests of all the sciences concerned with human behavior”. (Rokeach 1973, p3) Values also have stability, which makes them an attractive concept for research, “Cultural values differ among societies, but within a society they are remarkably stable over time.” (Hofstede 1999, p35) Chapter 2 explains in detail why values form the focus of this study and Chapters 3 and 4 shows how universally understood values can be identified and measured across cultures. However, before progressing to that point, four issues are examined in the next section, which, if not handled appropriately, can invalidate cross-cultural research.

## **VALUES AND CROSS-CULTURAL RESEARCH**

### **Ethnocentrism**

Individuals will always see the world according to their programmed perceptions and preconceptions. Stella Ting-Toomey says in a chapter of *Working at the Interface of Cultures*, "...each of us can only write and experience through our own cultural lens." (Ting-Toomey 1997, p207) Distortion in perception is caused by values and the 'cultural lens' can lead to a number of different effects. A major and usually negative consequence of the 'cultural lens' is ethnocentrism<sup>10</sup>. More specifically ethnocentrism occurs when an individual perceives the group with which they identify themselves as universally virtuous and superior to other groups. In cases of high ethnocentrism, other groups' values are rejected and are seen as contemptible and inferior (Gudykunst 1994, p77). Ethnocentrism is demonstrated by the example of the early Greeks who used the term 'barbarikos' (barbarian) to refer to people living around them who did not speak Greek. Persians and Egyptians were considered inferior simply because they did not speak the Greek language (Gudykunst and Kim 1997, p120). Ethnocentrism can lead to moral exclusion, which occurs when individuals or groups are perceived as "outside the boundary in which moral values, rules and considerations of fairness apply. Those who are morally excluded are perceived as nonentities, expendable, or undeserving; consequently, harming them appears acceptable, appropriate or just." (Gudykunst 1994, p2)

The analysis of ethnocentrism needs to take into account that it is not a stable factor across cultures and is subject to variability. Hofstede argues that ethnocentric management theories, based on the value system of a particular country, are untenable. (Hofstede 1983, p75) Ethnocentric variability occurs because cultures have different approaches to issues, such as racial and religious tolerance and social integration. (Smith and Bond 1998, p192) This variability is of particular importance to this study, as it affects the manner in which a given organisation interacts with other cultures. The particular relevance of ethnocentrism to this study is discussed throughout this study.

## Cultural relativism

Cultural relativism is the opposite of ethnocentrism and involves trying to understand the behaviour of others in the context of their group or culture. This is based upon the premise that “We cannot understand other’s behavior if we use our own cultural or ethnic frame of reference to interpret their behavior.” (Gudykunst and Kim 1997, p121) The challenge for this study is to find a tool or model that can be used accurately to decipher or predict individuals’ action in the context of their own cultural values. It should be noted that cultural relativism should not be confused with moral relativism which is the making of a moral judgement by using another’s cultural context (Gudykunst 1994, p78 and p103).

## Xenophobia and xenophilia

There can be confusion between ethnocentrism and xenophobia. These are related but distinct concepts. Xenophobia is different from ethnocentrism in that it is the fear of strangers. “One reason for xenophobia is that people who are strange are perceived as threats to the predictability and stability of our social worlds.” (Gudykunst and Kim 1997, p120) Xenophilia can also emerge when dealing with other cultures. Xenophilia occurs when an individual believes that another culture is in everyway better than their own. Hofstede states “Neither ethnocentrism nor xenophilia is a healthy basis for intercultural cooperation.” (Hofstede 1991, p211) This statement could usefully include xenophobia. These issues are acknowledged and a neutral approach to understanding other cultures should be the aim of a study such as this.

## Focus

Culture manifests itself at different levels and the focus of cross-cultural research is an important factor that should be considered in order to arrive at any meaningful understanding of values. Individuals with certain functions, such as solicitors or the military, may have their own professional culture (Trompenaars and Hampden-Turner 1998, p7-8). Hofstede also considers the levels of culture and notes six different examples (Hofstede 1991, p10-18). Briefly summarised they are:

- National level according to one's country;
- Regional, ethnic, religious or linguistic affiliation;
- Gender;
- Generation level;
- Social class;
- Organisation or corporate level.

One of the strengths of this study is also one of its potential weaknesses as the samples surveyed for this study all have very similar profiles. The objectives of this study require that both national and organisational cultures are assessed. Hofstede states, "Using the word *culture* in reference to both nations and organizations suggests that the two kinds of culture are identical phenomena. This is incorrect: A nation is not an organization, and the two types of culture are different kinds." (Hofstede 2001, p393)

Comparison of nations and organisations presupposes that they are functionally equivalent with regard to the criteria used. In the case of nations, each is assumed in this study not to be so special that any parallel with another nation is meaningless. Functional equivalence for the comparison of organisations across nations also needs to be considered. The contexts in which the concepts of nation and organisation are used within this study are defined in the following sections. The other levels of culture, identified above, are not considered further but could reasonably be examined for research with a different focus<sup>11</sup>.

## **Nation**

The use of nations for comparisons is debatable. Anthropologists, for example, shy away from using nations as units for studying culture as they can host many cultures in the anthropological sense, and cultures can bridge more than one nation. "If data are collected by field observation as anthropologists tend to do, the student of culture can choose more relevant units. If data are partly collected from secondary sources, as in most comparative research, one can hardly escape from using the nation level." (Hofstede 1998, p17) The armed forces examined in this study are established as

national institutions and this requires a definition of what is meant by this level of comparison. In *Imagined Communities* Benedict Anderson defines the nation as imagined in three ways: (Anderson 1983, p7)

- Nations are limited because even the largest has finite boundaries. No nation imagines itself as coterminous with mankind.
- Nations are sovereign because the community has independence and self-government.
- Nations are a community regardless of any inequalities that may exist as they are conceived as a “deep, horizontal comradeship.”

These definitions almost match the concept such as the Navajo and Hopi nations identified in the *Atlas of World Cultures* (Murdock 1981, p3 and 75-76) but do not encompass the level of cultural analysis required to match the cultures of Australia, Britain and Canada. In *National Identity* Anthony Smith states that, “At best the idea of the nation has appeared sketchy and elusive, at worst absurd and contradictory.” (Smith 1991, p17) Nations without states are instances in which the members of a nation lack political sovereignty over the area they claim as their own. In *Sociology: Themes and Perspectives* Haralambos and Holborn identify that a number of societies exist, such as stateless societies and feudal states, where the legitimate use of force is not concentrated centrally (Haralambos and Holborn 2000, p590-1).

If it is accepted that the ‘nation’ is not an easy or viable platform on which to base national level analysis it would seem wise to look for a more generally acceptable definition.

### The State

The previous paragraph implicitly recognises that not all nations are characterised by the existence of a state. Giddens argues that, “ A state exists where there is a political apparatus of government (institutions like a parliament or congress, plus civil servant officials) ruling over a given territory, whose authority is backed by a legal system and by the capacity to use military force to implement its policies.” (Giddens 2001,

p421) This issue is amplified in *Nations and Nationalism* by Gellner who argues that there have been and are states, which do not monopolise legitimate violence in territory they control. Gellner cites the example of the Iraqi state after the First World War when under British tutelage tribal raids were tolerated provided the raiders reported to the nearest police station before and after the expedition. (Gellner 1983, p3).

The 'state' comes close to the definition required to define the cultures of Australia, Britain and Canada but is still insufficient as in isolation the 'state' lacks certain key factors which are required for national level comparison within this study.

### Nation-State

In *National Identity* Anthony Smith argues that the state refers exclusively to public institutions, which are differentiated from, and autonomous of, other social institutions. The state exercises a monopoly of coercion and extraction within a given territory. The nation signifies a cultural and political bond uniting in a single political community that shares a culture and homeland. (Smith 1991, pp14-15) The nation-state provides a basis to join the two concepts of nation and state into a single definition.

In *Globalization and World Society* Tony Spiby defines the Western concept of the nation-state as follows: "The nation-state model consists in principle of representative government, bureaucratic administration, independent judiciary and monopoly of the legitimate means of violence." (Spiby 1996, p3) This definition is very similar to that provided by Giddens for the 'state'. Giddens definition of the nation-state describes the national level cultures of Australia, Britain and Canada more effectively, "A particular type of state, characteristic of the modern world, in which a government has sovereign power within a defined territorial area, and the mass of the population are citizens who know themselves to be part of a single nation." (Giddens 2001, p694) There is a significant danger of ethnocentrism with this definition, which must be understood in the context of the cultures examined in this study. This is highlighted by Umut Özkirimli in *Theories of Nationalism* who writes that "... most of the studies on nationalism are produced in the Anglo Saxon world." (Özkirimli 2000, p7) What

this means is that the approach used for this study is valid for Australia, Britain and Canada but will need to be reassessed if other non-Anglo Saxon national level comparisons are to be included.

When referring to national level culture within this study it is the concept of the nation-state that is used while acknowledging the possible ethnocentric nature of the definition.

### **Organisational culture**

“The first step toward understanding the essence of *organizational culture* is to appreciate that it is a concept rather than a thing.” (Ott 1989, p50) The problem of defining organisational culture is that it is not tangible but rests in the minds of humans and is related to the difficulties of defining culture itself. A single universally agreed definition of organisational culture does not exist. The following list from Ott’s *The Organizational Culture Perspective* is used for the purposes of this study as it provides a base from which to work (Ott 1989, p50):

- Organisational culture is the culture that exists in an organisation, something akin to a societal culture.
- It is made up of such things as values, beliefs, assumptions, perceptions, behavioural norms, artefacts, and patterns of behaviour.
- It is a socially constructed, unseen, and unobservable force behind organisational activities.
- It is a social energy that moves organisation members to act.
- It is a unifying theme that provides meaning, direction, and mobilisation for organisation members.
- It functions as an organisational control mechanism, informally approving or prohibiting behaviours.

Hofstede states in order to be a meaningful subject for the study of its organizational culture, a unit should be reasonably homogenous with regard to the cultural characteristics studied and sufficiently homogenous for statements about the culture



as a whole to be justified. (Hofstede 1998, p1) This issue is examined in detail in the methodology described in Chapter 3.

### Organisational climate

In an article entitled ‘The relationship between organisational culture, organisational climate and managerial values’ Wallace et al state “There is a close and sometimes ambiguous relationship between organisational culture and climate which has often been overlooked in the literature” (Wallace, Hunt et al. 1999, p551). The authors argue that organisational climate consists of attitudes and values alone whereas organisational culture exists as collection of basic assumptions, in addition to attitudes and value. In *Culture’s Consequences* Hofstede clearly defines differences between the two concepts and demonstrates why organisational culture not climate should be the focus for this study at the organisational level (Hofstede 2001, p392):

- Climate is derived from social psychology, culture from anthropology; this affects the methods by which they were and are studied.
- Climate is more closely linked with individual motivation and behaviour than culture, which resides entirely at the organisational level.
- Climate can be seen as a subset of culture – for example, the ‘communication climate’ – but not vice versa.
- Climate has an evaluative connotation - there are wholesome and unhealthy climates - and partly overlaps with satisfaction; cultures can be different without one being objectively better than another.

### Context

Contextual factors such as the levels of culture identified in this Chapter affect the meaning attributed by and to peoples’ actions and words. They also affect actions and words that people will use in a given situation. “Military culture - the prevailing values, norms, philosophies, customs, and traditions of the armed forces - has always had a significant impact on operational effectiveness. But even culture has a context.” (Collins 1998, p213) Hofstede states that, “As almost everyone belongs to a number

of different groups and categories of people at the same time, people unavoidably carry several layers of mental programming within themselves.” (Hofstede 1991, p10). The values being examined in this cross-cultural research are likely to be contextual and levels of influence must be taken into account if accurate analysis is to be undertaken. This issue is addressed in detail in Chapter 2.

### **Homogeneity**

Up to this point, the discussion has assumed that any given culture is a homogenous entity. This will almost certainly not be the case, as there are few remaining homogeneous cultures in the world, and most contain subcultures and countercultures. The landmass of North America for example has twenty-five distinct indigenous cultures that have been identified, on top of which a wide variety of European and other cultures has been superimposed (Murdock 1981, p61-78).

The problem with defining national culture has already been identified in this Chapter. In *When Cultures Collide* Richard Lewis states, “Determining national characteristics is treading a minefield of inaccurate assessment and surprising exception...There is, however, such a thing as a national norm.” (Lewis 1996, p3) All people within a culture do not have identical sets of values. These differences provide a spread within a culture that will cause a pattern around an average. Exhibits 1-4a and 1-4b show how cultures can be viewed as a normal distribution and superimposed on each other to demonstrate similarities and differences. The example in Exhibit 1-4a shows the perceived differences between French and American (USA) culture and that in the extreme, there may be no similarity at all between individuals from the two cultures. Exhibit 1-4b shows that as well as the differences there may be a very similar set of values held by individuals from two different cultures.

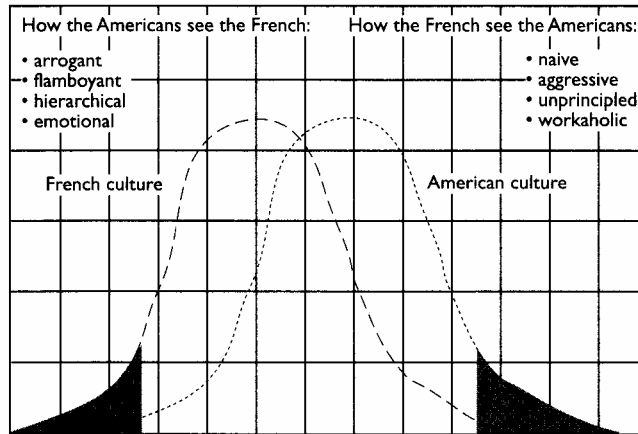


Exhibit 1-4a. Culture as a normal distribution with differences highlighted.  
(Trompenaars and Hampden-Turner 1998, p25)

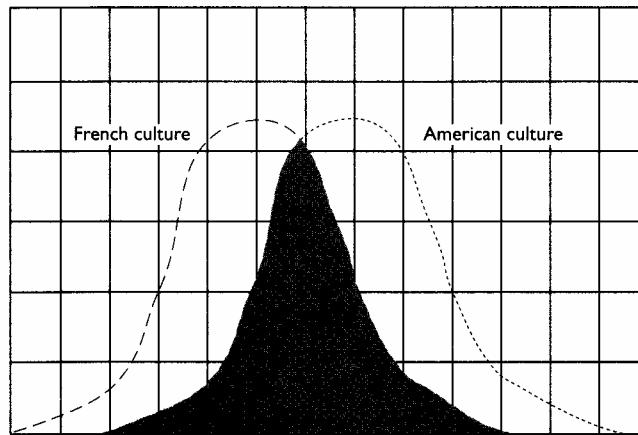


Exhibit 1-4b. Culture as a normal distribution with similarities highlighted.  
(Trompenaars and Hampden-Turner 1998, p25)

## Globalisation

Evidence such as that presented in a report entitled ‘Modernization’s challenge to traditional values’ (Inglehart and Baker 2001, abstract) suggests that the traditional Western view that all cultures will, in time, produce a uniform global culture due to increasing industrialisation and commerce is incorrect. This assertion is based on results from the World Values Survey, discussed in Chapter 4, which has examined the values, attitudes and beliefs of sixty-five societies over twenty years. In ‘The West: Unique, Not Universal,’ Samuel P Huntington supports this view: “More often, leaders of non-Western societies have pursued modernisation and rejected

Westernisation.” (Huntington 1996, p35). This position is reinforced by the following extract from the ‘World Risk Map 2002’:

“Looking past the immediate fears of terrorism to more long term global trends, the September 2001 terrorist attacks served to confirm a trend that was already discernable – the discrediting of the theory of the inexorable progress of globalization, and the theory that it could only bring benefits. Long before September 2001, the limits of globalization were becoming more obvious. For all the international anomalies it has eradicated, globalization has failed to break down national political boundaries or moderate the conduct of the regimes that exist inside them.” (Control Risks Group 2002, P16)

### Subculture and counter-culture

Subcultures are quite distinct from the different levels of culture identified previously. Gudykunst defines subcultures as “...groups within a culture whose members share many of the values of the culture, but also have some values that differ from the larger culture.” (Gudykunst 1994, p38) Working-class and middle-class are cited as examples of subcultures in Western industrial society (Haralambos and Holborn 2000, p24). When examining any given culture it is incumbent upon the researcher to recognise that subcultures may exist. Counter-cultures are cultures within a larger culture that may have once been a part of the mass but have basic assumptions which conflict with the dominant culture (Ott 1989, p46).

It is possible to view cultures of armed forces from different perspectives. One may argue that as military personnel generally originate from the society they serve they should be viewed as subcultures. In many societies it is arguable that the military has evolved into a counter-culture and hold very different values from the society they stem from. It is also possible, using the approach this study takes, to examine armed forces from an organisational culture perspective. This issue is revisited in Chapter 8 in the introduction to influences on values.

## Evolution

To ensure that values are correctly assessed there is a need to recognise that, while they are generally stable, cultures are rarely isolated or static. In 'Globalization and Postmodern Values' Ronald Inglehart presents evidence that values in advanced industrial societies are undergoing systematic changes due to economic and technological influences (Inglehart 2000, p215-228). Cultures evolve through invention and diffusion and may eventually turn into something markedly different from the predecessor in spite of strong opposition (Bohannan 1995, p105). This process is represented in Exhibit 1-5.

### *The Basics of Cultural Evolution*

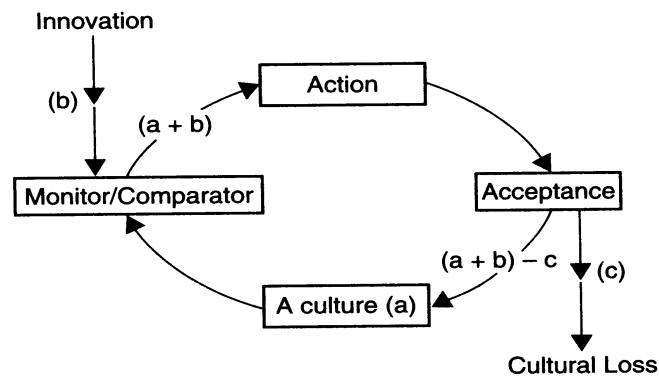


Exhibit 1-5. The Basics of Cultural Evolution.  
(Bohannan 1995, p104)

An example of how the process in Exhibit 1-5 works at the organisational level is the statement by Geoff Hoon to the House of Commons on 12<sup>th</sup> January 2000 concerning homosexuality in the British armed forces (Hoon 2000). By declaring that homosexuality was to become legal for personnel in the British armed forces, an innovation occurred (b). The armed forces were required to compare this political direction against their policy on homosexuals and action was taken to formally accept homosexuality (a+b). In turn this formal acceptance has led to real acceptance in the military, with a general loss of prejudice against homosexuals serving in the military (c). This has in turn led to a revised military culture ((a+b)-c). The following quote

by Aaron Belkin in an article published in *Parameters* examines the experiences of Australia, Britain, Canada and Israel:<sup>12</sup>

“Each of the four countries studied reversed its gay ban for different reasons. In Canada, federal courts forced the armed forces to lift the ban in October 1992, ruling that military policy violated Canada’s Charter of Rights and Freedoms. In Australia, the liberal government of Paul Keating voted to lift the ban in November 1992 as the country was integrating a number of international human rights conventions into its domestic laws and codes. In Israel, the military lifted its ban in June 1993 after dramatic Knesset hearings prompted a public outcry against the armed forces’ exclusion of gay and lesbian soldiers. And in Britain, in September 1999, the European Court of Human Rights ruled that Britain’s gay ban violated the right to privacy guaranteed in the European Convention on Human Rights, and London reacted by lifting the ban in January 2000. Despite the different routes that led to the policy change in each country, the lessons drawn from each case were the same. *No impact*. Not a single one of the 104 experts interviewed believed that the Australian, Canadian, Israeli, or British decisions to lift their gay bans undermined military performance, readiness, or cohesion, led to increased difficulties in recruiting or retention....” (Belkin 2003, p110)

The issue with evolution is that it poses two potential and opposite dangers to the cultures of armed forces. The first is that as the culture of an armed force becomes more civilianised it may lose its ability to conduct effective military operations. The second is that, “On the other hand... an isolated military fixated on its own norms and traditions could lose sight of the values of the society it is sworn to defend...” (Collins 1998, p213)

### Stability

The other side of the evolution argument is that cultures do not tend to change rapidly. “Cultures, especially national cultures, are extremely stable over time.” (Hofstede

2001, p34) Hofstede cites the example where Confucian ideas from around 500 BC survive as guidelines for modern Chinese behaviour. (Hofstede 1991, p40)

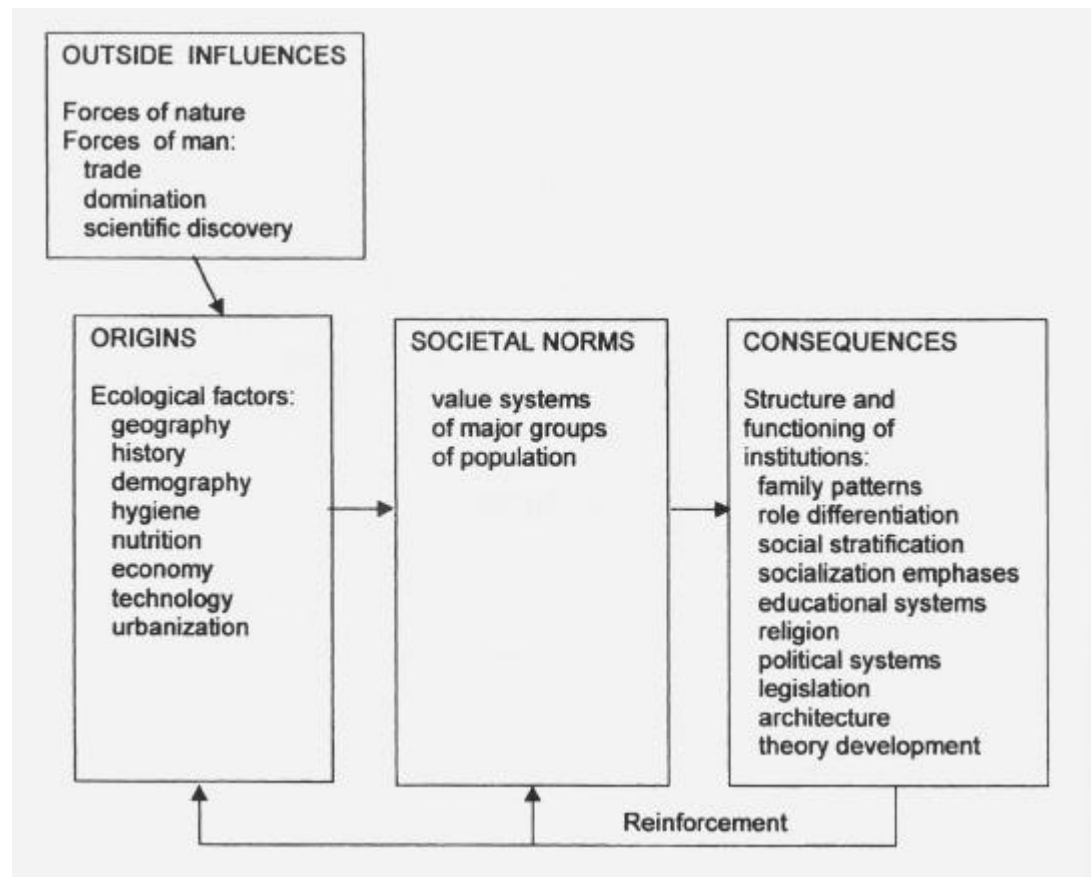


Exhibit 1-6. The Stabilizing of Culture Patterns  
(Hofstede 2001, p12)

Exhibit 1-6 shows how cultural values are self-regulated and stabilised. It is argued that technological breakthroughs and scientific discovery are the major influences that speed up the evolutionary process of culture change. The changes in western culture during the industrial revolution demonstrate how the values of a society can evolve relatively quickly due to specific influences.

### Dealing with evolution

It is possible that evolution could cause the findings of one study examining a particular aspect of culture to diverge from those of another replicating the original work at a later date. When two or more cultures, or subcultures/countercultures of the same culture, are being compared with each other, it is necessary to ensure that the

data being examined are comparable. Due to the possibility of evolution affecting the conclusions of this study, all the primary data samples were gathered at the same time. As cultures are generally stable over time it has been possible to use the information provided by Hofstede in the second edition of *Culture's Consequences* (Hofstede 2001, p34) as a valid civilian comparator for the military samples used in this study. The primary data samples are therefore compared against secondary data that was updated within a year of the primary data collection.



## **CHAPTER SUMMARY**

This Chapter identifies that the focus of this study is on practical cross-cultural issues that affect armed forces deployed on operations. The aim of this study is to identify whether national and organisational cultural values have a significant influence on the armed forces in order to assess their impact on Joint, Combined and Multinational operations. In order to support the aim, this Chapter defines culture and how it relates to the following concepts:

- Values
- Identity
- Ideology
- Reality
- Perception
- Ethnocentrism
- National and organisational focus
- Context
- Homogeneity
- Cultural evolution and stability

Having identified in this Chapter that cultural values form the central focus of this study and that they are a discrete element of culture, it is necessary to define what is meant by 'values'. Chapter 3 identifies where values sit within culture and defines what values are. Before values are examined though, Chapter 2 describes the methodology for this study in order to provide the framework for analysis and comment.

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## CHAPTER NOTES

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<sup>1</sup> “Although no consensus exists as to a definition of the West, scholars of the subject typically acknowledge its derivation from three distinct sources: the classical culture of Greece and Rome; the Christian religion, particularly Western Christianity; and the Enlightenment of the modern era.” Kurth, J. (2001). "Global Triumph or Western Twilight?" Orbis (Summer): 333-341.

<sup>2</sup> Peace Support Operations are “Multi-functional operations involving military forces and diplomatic and humanitarian agencies. They are designed to achieve humanitarian goals or a long-term political settlement and are conducted impartially in support of an appropriate mandate. These include peacekeeping, peace enforcement, conflict prevention, peacemaking, peace building and humanitarian operations.” MOD (2002). United Kingdom Glossary of Joint and Multinational Terms and Definitions, Ministry of Defence, Britain.

<sup>3</sup> Definitions for the three terms are as follows:

- Joint is “...used to describe activities, operations and organisations in which elements of at least two services participate.” Ibid.
- Combined is “...used to describe activities, operations and organisations in which elements of more than one nation participate.” MOD (2002). United Kingdom Glossary of Joint and Multinational Terms and Definitions, Ministry of Defence, Britain.
- Multinational is “...used to describe activities, operations, organisations, etc in which forces or agencies of more than one nation participate.” MOD (2002). United Kingdom Glossary of Joint and Multinational Terms and Definitions, Ministry of Defence, Britain.

<sup>4</sup> Agencies are defined as distinct non-military bodies which have objectives that are broadly consistent with those of the campaign. Agencies include: (1) Governmental organisations such as Britain’s Department for International Development (DfID). (2) Non-governmental organisations such as Medecins sans Frontieres. (3) International organisations such as United Nations (UN) agencies and the International Committee of the Red Cross (ICRC). MOD (2001). United Kingdom Doctrine for Joint and Multinational Operations, Ministry of Defence, Britain.

<sup>5</sup> The ‘United Kingdom of Great Britain and Northern Ireland’ is referred to as Britain throughout this study for simplicity.

<sup>6</sup> “The social science literature (anthropology, economics, political science, psychology, sociology) offers many words for describing mental programmes.” Hofstede, G. (1998). "Attitudes, Values and Organizational Culture: Disentangling the Concepts." Organization Studies 19(3): 477-492. Hofstede’s research yields 51 terms listed below, no two are exactly synonymous and many overlap in their meaning:

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aspirations	ideology	paradigms
attitudes	instinct	perceptions
beliefs	intentions	personality
cathexes	interests	philosophies
climate	life style	preferences
culture	models	purposes
derivations	morale	residues
desires	morals	rules
dispositions	mores	satisfaction
drives	motivation	sentiments
emotions	motives	standards
ethic	myths	stereotypes
ethos	needs	temperament
expectancies	norms	traits
goals	objectives	utilities
habits	obligations	valences
ideas	opinions	values

<sup>7</sup> The three perspectives cited are Ott, J. S. (1989). The Organizational Culture Perspective. Pacific Grove, California, Brooks/Cole Publishing Company.:

- The normative approach of archaeology defines culture as the body of meanings held by a society and transmitted by tradition.
- Psychological cultural anthropology sees culture as distinctive constellations and personality determinants consisting of patterned worldviews and values ideals. These perspectives and ideals are internalised so deeply by members of a culture that they determine behaviour and feelings.
- Sociocultural anthropology conceptualises culture as the totality of biological, psychological and social products of a people that are created, learned, and transmitted to new generations through social interaction.

<sup>8</sup> See Exhibit 2-1 and Chapter 2 in general for further detail

<sup>9</sup> “Ingroups are groups of people about whose welfare a person is concerned, with whom that person is willing to cooperate without demanding equitable returns, and separation from whom leads to anxiety.” Triandis, H. C. (1995). Individualism and Collectivism. Boulder, Westview Press.

<sup>10</sup> The word ethnocentrism is derived from two Greek words: ethnos (nation) and kentron (centre). Gudykunst, W. B. and Y. Y. Kim (1997). Communicating with Strangers: An Approach to Intercultural Communication. Boston, McGraw-Hill..

<sup>11</sup> The amended VSM 94 used for this study (shown at Annex B) provides demographic information for nationality, gender and generation level. Organisational parity for samples was achieved by surveying people of similar rank. Regional, ethnic, religious, linguistic affiliation and social class cannot be assessed using this version of the VSM. To survey the other levels accurately a much broader range of respondents than those used would be required to ensure that sufficient data could be gathered to provide meaningful information.

<sup>12</sup> The following the extracts amplify this issue:

“It has also become apparent that not every adjustment – some would say dilution – of military culture necessarily leads to a diminution of operational effectiveness; much depends on upon the case at hand. For example, it would appear that many of the fears about social cohesion in military units being undermined by the presence of homosexual personnel were exaggerated. So far, gay military personnel for the most part respect the wishes of the majority and remain discreet about their orientation.” Dandeker, C. and L. Freedman (2002). "The British Armed Services." Political Quarterly 73(4): 465-475.

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The Israel Defence Force has found that “In our comprehensive search... we were not able to find any data suggesting that Israel’s decision to lift its gay ban undermined operational effectiveness, combat readiness, unit cohesion, or morale.” Belkin, A. and M. Levitt (2001). "Homosexuality and the Israel Defence Forces: Did Lifting the Gay Ban Undermine Military Performance`." Armed Forces and Society **27**(4): 541-565.

A slightly different perspective is provided by the French armed forces where due to a wide acceptance of homosexuality within their ranks, “Military gays and lesbians have yet to create the kind of *cause célèbre* seen in America and Britain.” Boëne, B. (1999). Diversity and the French Armed Forces: Trends and Prospects. Toulouse, University of Toulouse and the Military Academy of Saint-Cyr.



## **INTRODUCTION TO CHAPTER 2 - METHODOLOGY**

Having discussed the notion of culture, the importance of values, its relationship to other concepts, and its variations at the nation-state, organisational, occupational and other levels, we are in a position to evaluate its significance for military operations. This will require efforts to map or measure culture and it is to the challenge of achieving this that this Chapter turns.

Although the English in the following quote from *How Culture Works* is questionable, it supports the importance of a sound methodology for research. “To this day, far too many social scientists – even some anthropologists – draw impeccable samples of respondents, and then ask unconsidered questions of the people who fall into their samples, a process that can yield only satisfiable answers to silly questions.” (Bohannan 1995, p147-8) The aim of this Chapter is to articulate and explain the methodological approach to the research undertaken for this study, which avoids the errors stressed by Mintzberg and Bohannan.

### **Policy orientated**

In the *The Rise and Fall of Strategic Planning* Henry Mintzberg observes that when attempting policy-orientated research into culture, great care is required (Mintzberg 1994, p144-145). This research can be broadly categorised as applied social science, which means it is intended to have a practical foundation and application. Thereafter it is almost impossible to identify neatly a single branch of the social sciences to which this study belongs. During the course of this research, it has been necessary to examine issues taken from, for example, sociology, cross-cultural psychology, social psychology, anthropology and philosophy. To constrain this cross-cultural study to one discipline would considerably weaken its validity by artificially restricting the body of knowledge available for use. This study aims to provide an academically sound base for anyone wishing to make policy decisions to deal with the situations that differing cultural values can cause.

## **Underlying approach**

This section discusses the underlying approach that forms the basis of the methodology used for this study. In sociological terms, there are three fundamental approaches, which can be applied to a social science research methodology. These approaches are Phenomenology, Social Action Perspective and Positivism.

Phenomenologists believe that it is not possible to produce factual data and that all findings from research are subjective and dependent upon the perspective of the individuals who produce them. Their aim is to try to understand the meanings that people attach to particular phenomena. “The end product of phenomenological research is an understanding of the meanings employed by members of society in their everyday life.” (Haralambos and Holborn 2000, p19)

Those who favour the Social Action Perspective are similar in some regards to phenomenologists. “Advocates of the social action perspectives argue that the subject matter of the social and natural sciences is fundamentally different.” (Haralambos and Holborn 2000, p18) Humans, unlike inanimate objects, have awareness and values and their actions are meaningful. They do not simply exist as they respond to their environment and learn from it. The similarity between the phenomenologist and social action perspective is that both believe it is not possible to undertake objective measurement in the social sciences.

Positivists believe that logical science is the only possible form of true understanding. “The exclusiveness of a scientific world-view was to be secured by showing that everything beyond the reach of science is strictly or ‘cognitively’ meaningless...” (Dancy and Sosa 1992, p262) In practical terms, the positivist approach assumes that it is possible to objectively measure the behaviour of humans. “The positivist approach assumes that a science of society is possible. It therefore follows that objective observation and analysis of social life are possible.” (Haralambos and Holborn 2000, p19)

In reality each of the divisions described are artificial. Many social scientists use insights from both the positivist and social actions perspectives when undertaking

research and analysing results. While accepting that it is not possible for social science research to be completely objective and totally accurate, this study is based on the positivist assumption that it is possible to measure and analyse cultural values. This approach is supported by Karl Popper who believed that, although all knowledge is provisional, conjectural and hypothetical and that scientific theories can never finally be proven, they can be provisionally confirmed or conclusively refuted (Thornton 1997, p7).

## MAPPING CULTURAL VALUES

This section discusses the precise methodology used to map cultural values. It identifies the area of enquiry, strategy, ecological context, approach and the application of the methodology for data collection. It is important to note that the methodology described for this study is specifically for this type of cross-cultural research. A research paper published by Nancy Adler and John Graham entitled 'Cross-cultural Interaction: The International Fallacy?' indicates that this methodology cannot be expected to be valid for other types of research into culture (Adler and Graham 1989).

### Area of enquiry

Exhibit 2-1, from *Culture and Interpersonal Communication*, shows possible approaches to mapping culture. The quadrants are defined as follows (Gudykunst, Toomey et al. 1988, p31):

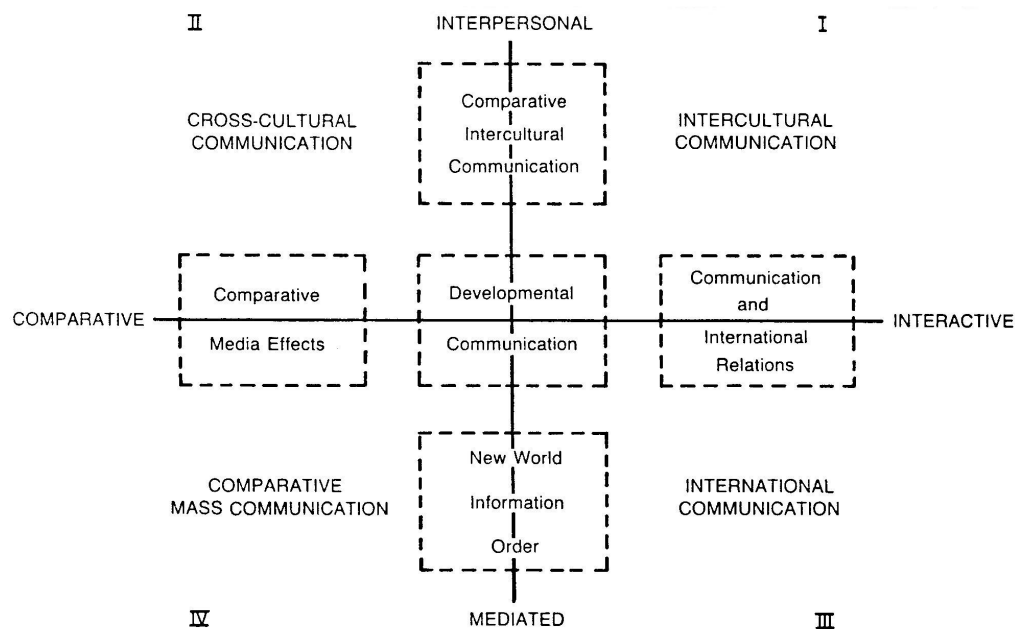


Exhibit 2-1. Areas of Enquiry.  
(Gudykunst, Toomey et al. 1988, 32)

- Quadrant I represents research conducted on intercultural communication. This area focuses on interpersonal communication between people from different socio-cultural systems and/or communication between members of different subsystems (i.e. ethnic or racial groups) *within the same socio-cultural system*.
- Quadrant II represents cross-cultural research in communication with the focus also on interpersonal communication, as in Quadrant I. The difference is that research is comparative *across socio-cultural systems*.
- Research in Quadrant III focuses on mediated communication from one socio-cultural system to another and is often called international communication.
- Quadrant IV involves comparisons of media systems across socio-cultural systems and is often called comparative mass communication.

In *Communicating with Strangers: An Approach to Intercultural Communication* Gudykunst and Kim provide the following distinctions for various forms of communication across cultures: (Gudykunst and Kim 1997, p19)

- Intercultural communication is a transactional process involving the attribution of meaning between people from different cultures, for example between a Japanese and a German.
- Intracultural communication refers to communication between people from the same culture, for example between two Japanese or two Germans.
- Cross-cultural communication traditionally implies a comparison of some phenomenon across cultures.
- Interracial communication refers to communication between people from different races.
- Interethnic communication refers to communication between people from different ethnic groups.

The differentiation between these last two definitions is not simple as one culture may include several races and/or ethnic groups and one race or ethnic group may exist in different cultures. This issue is not examined further in this study. As this paper aims to compare the same values in different cultures, Exhibit 2-1 shows that research should focus on Quadrant II cross-cultural communication.

## Strategy

	Focus on Similarities Between Societies	Focus on Differences Between Societies
Concerned With Micro-Level Variables Within Societies— Culture as Black Box	1 Prove universality of micro-level laws	2 Illustrate uniqueness of each society
Concerned With Ecological Variables Between Societies— Culture Specific	3 Determine types or subsets of societies	4 Determine dimensions of societies and macro-level laws

Exhibit 2-2. Four available research strategies for comparative multi-society studies.  
(Hofstede 2001, p27)

Hofstede states that when undertaking cross-cultural research, comparing the similarities and differences between cultures are two sides of the same coin. The focus on similarities or differences and the type of analysis to be undertaken can be combined to create at least four research strategies, as shown in Exhibit 2-2. Examining the detail the cells of Exhibit 2-2 shows the strategy chosen to map cultural values for this study.

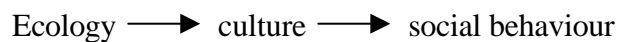
The simplified meanings of the cells are:

- Cell 1. Focus on the similarities of culture among societies but concerned with variables within societies. A study will expect to show the universal applicability of micro-level laws.
- Cell 2. Focus on the differences of a culture among societies. A study will expect to show the uniqueness of each society by highlighting differences.
- Cell 3. Focus on the similarities of cultures among societies on the basis of ecological variables. A study will expect to determine types or subsets of culture that are similar among themselves but differ from other types or subsets.
- Cell 4. Focus on the differences of cultures among societies on the basis of ecological variables. A study will expect to identify dimensions that can be assessed *across* societies.

Hofstede maintains, “Cell 1 studies are most vulnerable to ethnocentricity. This is less the case for other cells; cells 2 and 3 are by their nature ‘polycentric,’ and cell 4 studies are ‘geocentric’.” (Hofstede 2001, p28) Ethnocentrism is covered elsewhere in this study. Polycentric means that different approaches are used for the mapping of cultural values. The geocentric approach means that a single method is used to map cultural values from different nations and organisations. Hofstede used the geocentric, single methodology from cell 4 of Exhibit 2-2, approach for his work. The ‘application’ section, which follows, explains why the geocentric approach is replicated in this study and how it fits the approach described in this section.

Ecological context

The ecological context requires clarification from Exhibit 2-2. “The ecological context is the setting in which human organisms and the physical environment interact; it is best understood as a set of *relationships* that provide a range of life possibilities for a population.” (Berry, Poortinga et al. 1992, p11) Ecology is an important factor in this research as it directly affects culture, which is in turn an influence on social behaviour. (Triandis 1994, p15)



The emic and etic approach

Emic Approach	Etic Approach
Studies behaviour from within the system. Examines only one culture. Structure discovered by the analyst. Criteria are relative to internal characteristics.	Studies behaviour from a position outside the system. Examines many cultures. Structure created by the analyst. Criteria are considered absolute or universal.

Exhibit 2-3. The emic approach versus the etic approach.  
(Berry, Poortinga et al. 1992, p232)

One of the issues implicit in Exhibit 2-3 is the emic-etic discussion. In *Culture and Social Behavior*, Harry Triandis provides a simple definition of their meaning. “Emics, roughly speaking are ideas, behaviours, items, and concepts that are culture specific. Etics, roughly speaking, are ideas, behaviors, items and concepts that are

culture general –i.e., universal.” (Triandis 1994, p67) The ‘etic’ approach has been used for this study. A more detailed explanation, which supports this assertion, is provided above in Exhibit 2-3.

**Application**

This section shows how national and organisational levels of culture have been separated from each other and how each has been examined.

Nation →	Australia	Britain	Canada	Brazil	Japan
Culture ↓					
Civilian	←				→

Exhibit 2-4a. Comparison of civilian cultures at the national level.

Exhibit 2-4a shows that five nation states could be examined using previously published data. This demonstrates that the national cultures of Australia, Britain and Canada have similar cultural values that differ from those of other countries and they can be measured consistently and accurately.<sup>1</sup>

Nation →	Australia	Britain	Canada
Culture ↓			
Civilian	↑	↑	↑
Military	↓	↓	↓

Exhibit 2-4b. Comparison of civilian and armed forces culture at the national level.

Exhibit 2-4b shows that three national level comparisons could be examined to demonstrate the relationship between national culture and the values of the armed forces as follows:

- Australian civilian culture is compared with that of the Australian Defence Force.
- British civilian culture is compared with that of the British armed forces.
- Canadian civilian culture is compared with that of the Canadian Forces.



Nation →	Australia	Britain	Canada
Culture ↓			
Army	↑	↑	↑
Navy	↓	↓	↓
Air Force	↓	↓	↓

Exhibit 2-4c. Comparison of cultures at the intra-national organisational level.

Exhibit 2-4c shows that three intra-national comparisons are examined to demonstrate the organisational relationships between the values of the armed forces as follows:

- Royal Australian Navy, Australian Army and Royal Australian Air Force.
- Royal Navy, British Army, Royal Air Force.
- Canadian Forces Services: Navy, Army and Air Force.

Nation →	Australia	Britain	Canada
Culture ↓			
Army	←	→	→
Navy	←	→	→
Air Force	←	→	→

Exhibit 2-4d. Comparison of cultures at the organisational level.

Exhibit 2-4d shows that three international comparisons are examined to demonstrate the organisational relationships between the values of the armed forces as follows:

- Australian, British and Canadian Navies.
- Australian, British and Canadian Armies.
- Australian, British and Canadian Air Forces.

The comparisons conform to the following requirements identified in the previous discussion on mapping cultural values:

- All compare values across socio-cultural systems (Quadrant II from Exhibit 2-1).

- A single instrument is used to assess the differences on the basis of ecological variables (Cell 4 from Exhibit 2-2).
- A number of samples have been collected from their respective cultures using the methodology described in this study. Identical variables have been examined in each instance (Etic approach from Exhibit 2-3).

The armed forces of New Zealand and the United States were considered for inclusion in this study, as the national profiles of these countries are very similar to those of Australia, Britain and Canada. For various reasons it was not possible to include these samples due to the resource limitations imposed on a PhD research project. The detail of why New Zealand and United States staff college students are not included in this research is provided in Chapter 7 for reference.

## **BACKGROUND TO VALUE PROFILING**

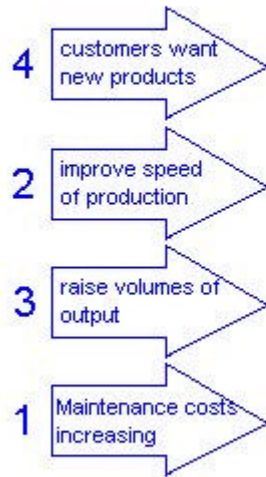
Value profiling was designed to support this study due to the absence of a suitable tool to meaningfully and consistently compare documented influences on cultural values from secondary sources with the results of data gathered from primary sources through the use of surveys. The value profiling process, described in this section, is based on the Force Field Analysis and Product Profiling analytical tools.

### **Force Field Analysis**

Force Field Analysis was developed by Kurt Lewin to analyse opposing forces involved in change. “In a steady-state environment, the driving and restraining forces are in balance. However, if the driving forces increase or the restraining forces decrease, whether they act independently or together, change is likely to take place.” (Kerzner 1995, P499) Exhibit 2-5 shows how Force Field Analysis can identify driving and restraining forces and demonstrate where forces are balanced or unbalanced. This can be amended to identify if influences act independently or in concert to exert pressure to stabilise, destabilise or push a cultural value in either a positive or negative direction away from a relative base position. This issue is expanded in subsequent sections.

### Force Field Analysis Example

#### Forces For Change



Total: 10



#### Forces Against Change



Total: 11

Exhibit 2-5. Force Field Analysis for a factory upgrade.

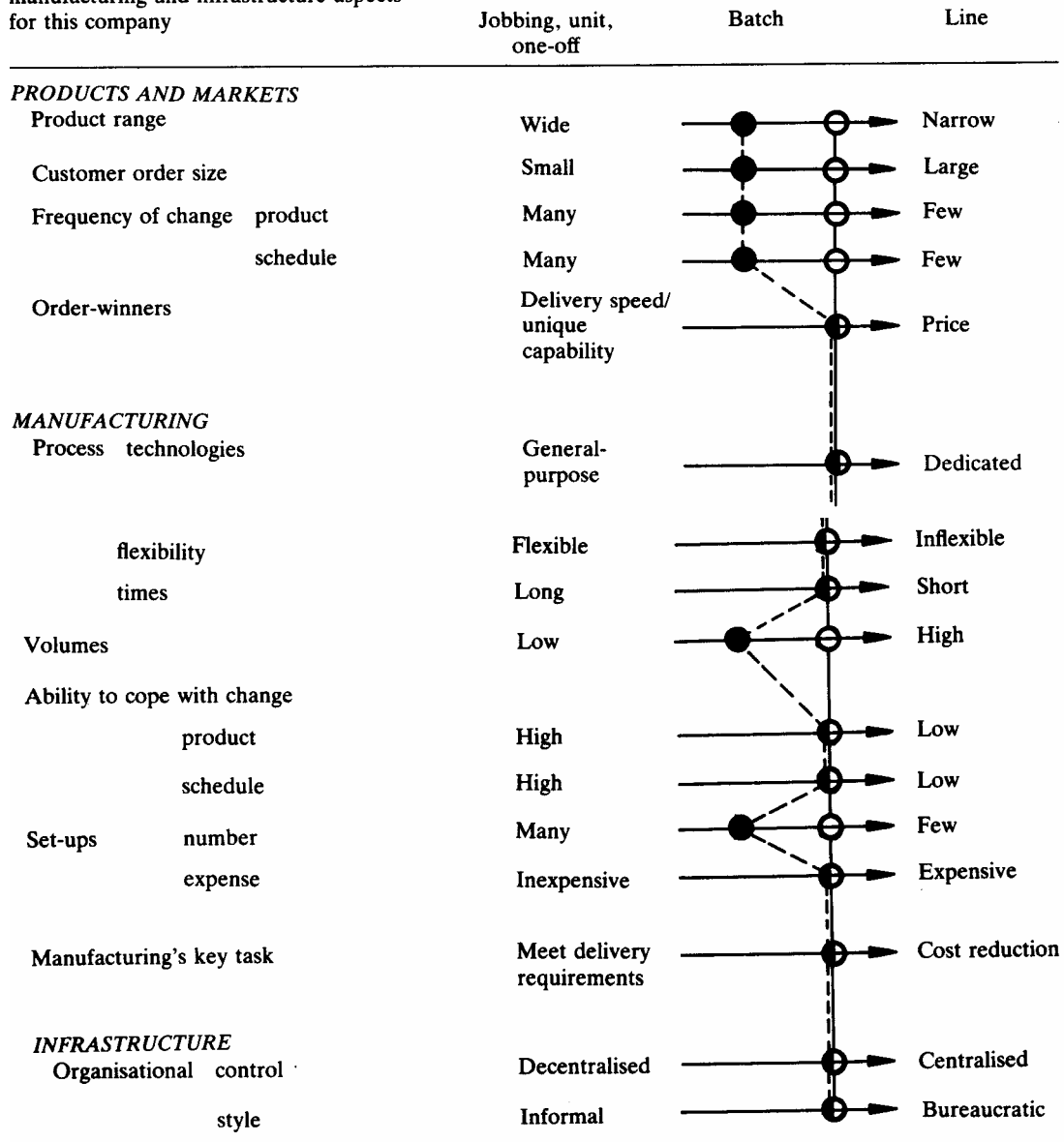
(Mind\_Tools 1995, p2)

### Product Profiling

Product profiling is a method of checking the alignment between manufacturing processes and infrastructure. In *Manufacturing Strategy*, Terry Hill states “The straighter the line, the higher the level of alignment.” (Hill 1993, p148) This is demonstrated by the example shown in Exhibit 2-6 where the level of inconsistency between the actual position, and where it should have been, results in a profile mismatch. As with Force Field Analysis the principles of Product Profiling can be applied to the requirements of this study. This means that as the cultural distance between two or more comparisons increases the profile will become increasingly out of alignment.

Typical characteristics of process choice<sup>1</sup> and the company's 1986 and 1990 product profile

Some relevant product/market, manufacturing and infrastructure aspects for this company



<sup>1</sup>The process choices open to the company whose profile is represented here did not include project or continuous processing.  
 ○ 1986 company position on each of the chosen dimensions and the resulting profile —.  
 ● 1990 company position on each of the chosen dimensions and the resulting profile - - - -.

Exhibit 2-6. A product profile for a company's mainstream products.  
 (Hill 1993, p150-1)

**Value profiling**

Value profiling is based on Hofstede's assertion that the VSM scores are not absolutes but should be considered in relation to each other. This means that cultural distance is assessed and discussion is not based on an absolute score. Value profiling is used to meld the influences identified in Chapter 6 with those from Chapter 8. The

differences between the expectations from Chapter 6 and the survey results from Chapter 8 are demonstrated in Chapter 9 and discussed in Chapter 10. This section demonstrates how the profiling works in each Chapter and reduces the process into straightforward steps.

### Chapters 5 and 6

Chapter 5 examines a variety of works relevant to cultural values including academic literature, official documents and authoritative articles from journals and other publications. Much of the evidence produced by this literature review is based on different approaches and research methodologies that are less formal than the one outlined here. Chapter 5 addresses complex issues that are seldom clear or precise and it is important to note that it is not a literature review in the academic accepted sense but is targeted at finding specific value influences to support the Values Survey Module research.

In social science, propositions can be purely statistical (x correlates with y) or reasoned (on the assumption that b is present, x causes y to occur because...). Chapter 5 examines the available and relevant academic literature on military culture to derive a series of reasoned expectations and propositions about values. These propositions are categorised into national, intra-national organisational and international organisational influences to support the framework of subsequent discussion. In order to provide meaningful discussion, these influences are identified and translated into graphical representation in Chapter 6. The influences translate in four forms, shown in Exhibit 2-7, and are described as follows<sup>2</sup>:

- Stabilising influences are shown in the form of the arrows under 'a' in Exhibit 2-7. These influences are often generic across all the values, although they can be specific, and serve to reinforce the similarity between profiles. They are represented as two arrows pushing inwards towards the VSM scores in the value profiles.
- Destabilising influences are shown in the form of the arrows under 'b' in Exhibit 2-7. These influences are often generic across all the values, although they can be specific, and serve to reinforce the differences between profiles. They are

represented as two arrows pulling away outwards from the VSM scores in the value profiles.

- Negative influences are shown in the form of the arrows under 'c' in Exhibit 2-7. These influences are often specific to a given value, although they can be generic, and are represented as an arrow pointing to lower VSM scores in the value profiles.
- Positive influences are shown in the form of the arrows under 'd' in Exhibit 2-7. These influences are often specific to a given value, although they can be generic, and serve to reinforce the higher score differences between profiles. They are represented as an arrow pointing to higher VSM scores in the value profiles.

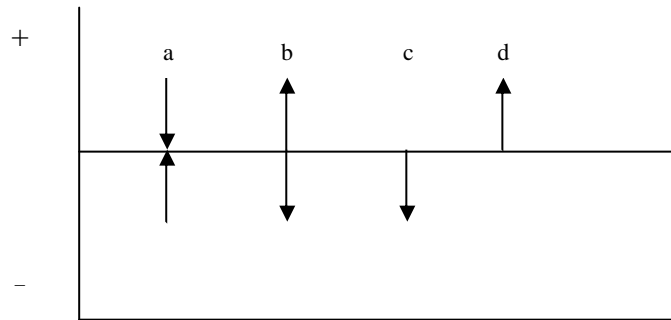


Exhibit 2-7. Types of influence for value profiling.  
Developed from Exhibits 2-5 and 2-6

As these influences are subjective and relational, rather than positional, no absolute score can or should be given. The resulting influences appear fairly complex and difficult to decipher and will look like Exhibit 2-8. This does not translate well for the remainder of the value profiling process in subsequent chapters and is therefore reduced to look like the example in Exhibit 2-9. Although the example Exhibit 2-9 loses a lot of the granularity of Exhibit 2-9, it facilitates discussion of the key influences. Where granularity is required for closer analysis the information can be extracted from the more detailed charts such as example Exhibit 2-8.

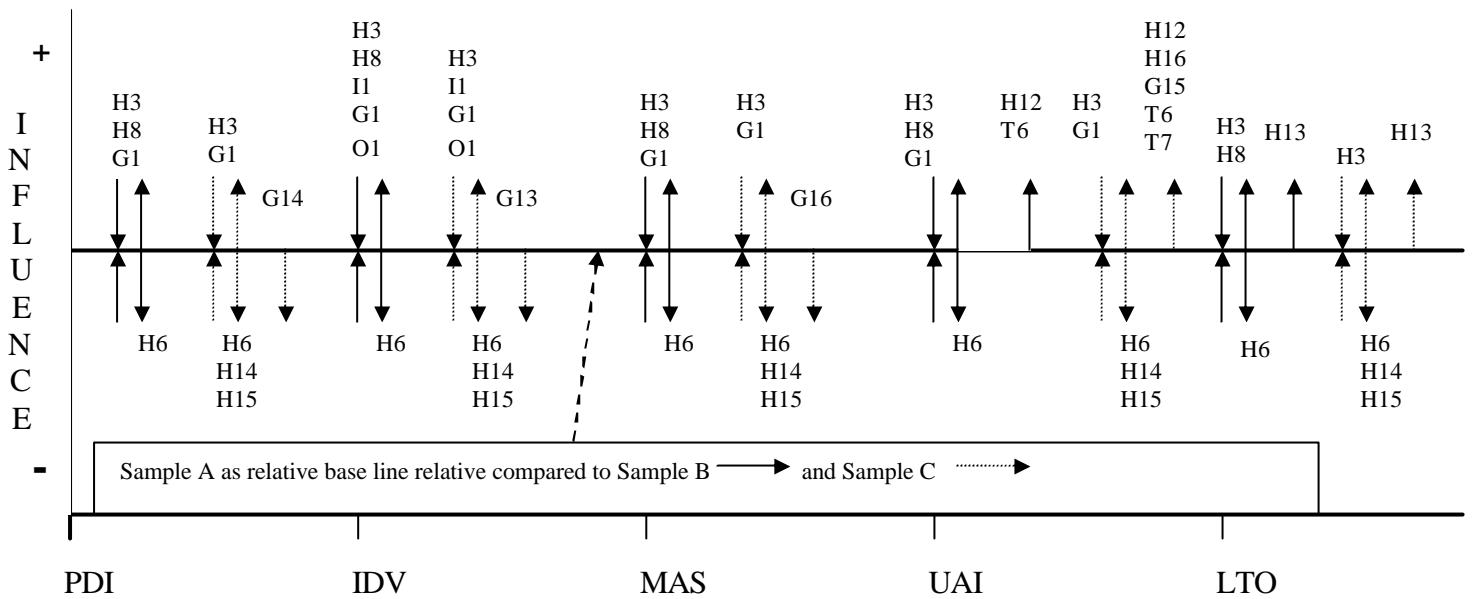


Exhibit 2-8. Value profiling.  
Example from Chapter 6

An example from Exhibit 2-8 is Power Distance Index (PDI) (PDI, IDV etc are defined in Chapter 4) where there are three stabilising influences to one destabilising influence for Sample B (solid arrows) and two stabilising to three destabilising influences with one negative influence for Sample C (dotted arrows). These translate to an overall stabilising influence for Sample B and a negative influence for Sample C as shown in Exhibit 2-9.

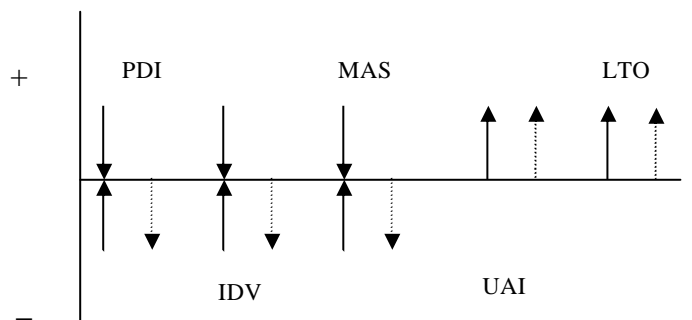


Exhibit 2-9. Reduced value profiling.  
Example from Chapter 6

Chapters 7 and 8

Chapters 7 and 8 present the results of the data collected using the amended VSM 94 (described in detail in Chapters 2 and 4). Analysis of the process is contained in



Chapter 7, with the results presented in Chapter 8 in the format shown in the example below in Exhibit 2-10.

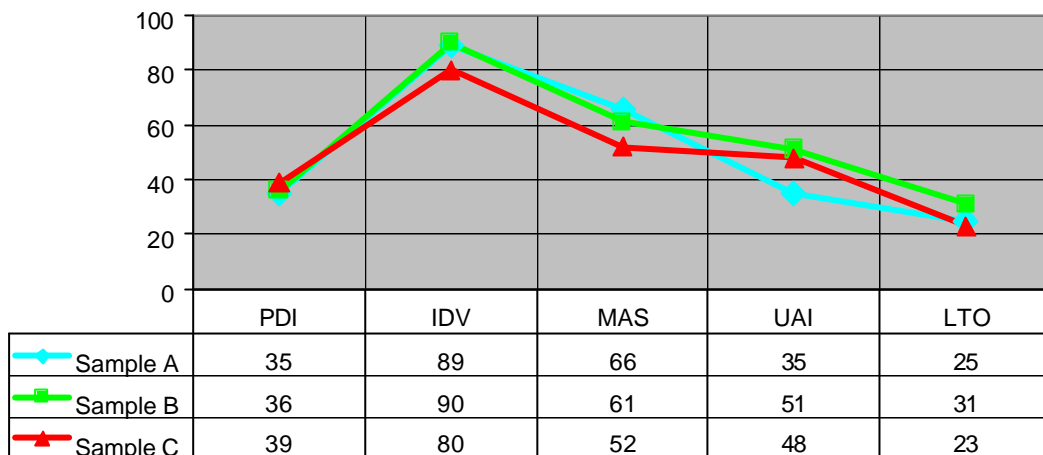


Exhibit 2-10. Example initial VSM results.  
Example from Chapter 8.

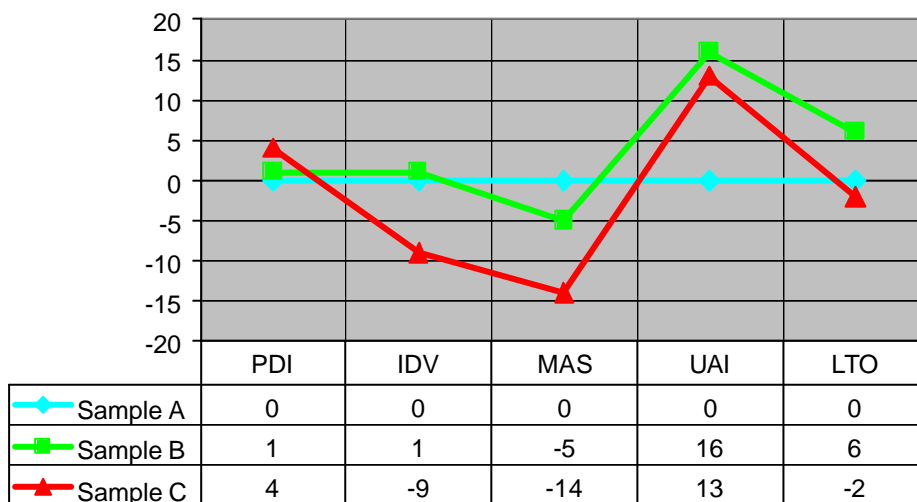


Exhibit 2-11. Example relative VSM results.  
Example from Chapter 8.

Exhibit 2-10 demonstrates the similarities and differences of the relative profiles obtained using the VSM on the various samples. This is a useful tool for discussion but does not easily facilitate merging the expected influences from Chapter 6 with the results of the VSM from Chapter 8. Exhibit 2-11 shows how a baseline with relative positions is obtained for the value profiling process in Chapter 9.

The differences between the scores from the example in Exhibit 2-10 are compared against the baseline, which in Exhibit 2-11 is Sample A. An example of how scores are calculated is shown below for PDI from Exhibit 2-10 to Exhibit 2-11:

- A from A. This will always be zero and provides the stable baseline.
- A from B. In this example 1.
- A from C. In this example 4.

This smoothes out the baseline profile and demonstrates more clearly the differences between the various samples. This has the potential fault of being ethnocentric as the focus is on the differences of Samples B and C from Sample A. Depending upon the perspective required Samples B or C could equally legitimately be used to provide the baseline.

## Chapter 9

The results of the value profiling process in Chapters 6 and 8 are brought together in Chapter 9 in order to produce the information required to discuss and summarise the findings of the study in Chapter 10.

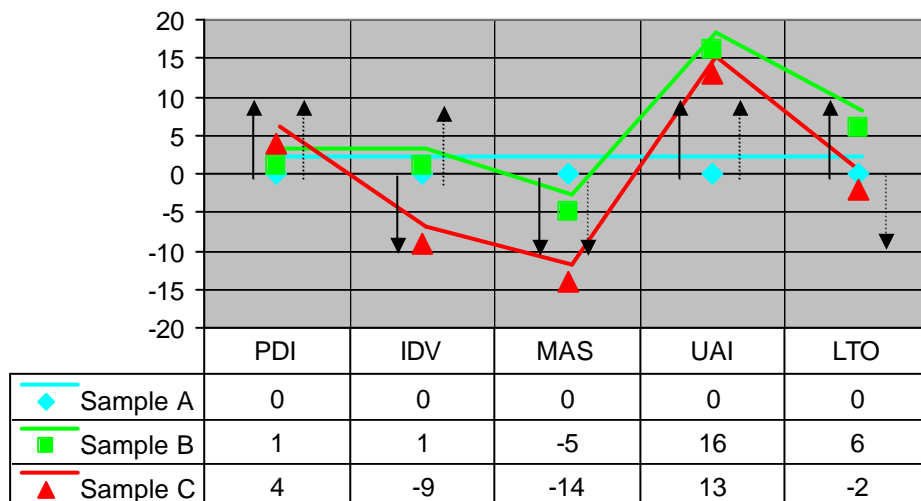


Exhibit 2-12. Example fusion of value profiling and relative VSM results.  
Example from Chapter 9.

Exhibit 2-12 shows how the influences expected from Chapter 6 are translated onto the results of Chapter 8 and become a useful tool for discussion and recommendations in Chapter 10.

The essential challenge in this study was to map important group values in a qualitative form so that comparisons can be drawn across countries and between armed forces. This was achieved by a combination of tools that integrated data into forms that can be diagrammatically as well as numerically presented.

This section has explained how qualitative data were created for three countries using Hofstede's approach. The aim was to compare the results of that research with the expectations derived from the extant literature.

The comparison was facilitated by processing the data using a value profiling process tool based on:

- Force Field Analysis.
- Product Profiling.

## **GATHERING INFORMATION**

This section examines in detail how data and information was gathered for this research. Key terms are defined to ensure that data and information are labelled correctly.

### **Secondary information**

Secondary information sources form a significant part of the information used for this study. Harris Cooper states, “The channels of information called secondary sources should form the backbone of any systematic, comprehensive literature search.” (Cooper 1989, p45) Secondary sources have the advantage that they can reduce the time and costs expended on research compared to using primary sources. They also provide a starting point from which to work and can be used to compare new data against previous findings. Secondary information has the disadvantage that it is “old news” (Stewart and Kamins 1993, p5-6). When age is coupled to the possibility of an ethnocentric perspective by the original compiler, secondary sources need to be carefully assessed for their validity and objectivity.

### **Primary information**

Secondary sources of information are used to support primary information generated by this study. The distinction between the two types of information is that, “In primary research, the analyst is responsible for the design of the research, the collection of the data, and the analysis and summary of the information.” (Stewart and Kamins 1993, p3) In *Culture and Social Behaviour* Harry Triandis identifies several methods available for the collection of data and creation of primary information for cross-cultural research (Triandis 1994, p78-80):

Interview and survey options range from structured surveys with predetermined questions to open ended and unstructured interviews (Yin 1994, p84-85).

Tests such as:

- Attitude scales,

- Personality scales,
- Projective tests “...a projective technique is an instrument that is considered especially sensitive to covert or unconscious aspects of behaviour...” (Brislin, Lonner et al. 1973, p132),
- Psychophysical tests “...allow some physical variable (e.g. distance) to be linked to a psychological variable.” (Triandis 1994, p66)

Experiments can be undertaken in more than one culture but it can be difficult to ensure variables are consistent across cultures.

Content Analysis of documents, film and TV produced in different cultures can be used to measure identified variables of culture.

Human Relations Area Files contain potentially very useful data sets. This source of data can be used to provide such fascinating information as whether the age of child weaning is linked to adult anxiety.

## Surveys

The various methods of generating primary information are described as either ‘operant’ or ‘respondent’. The operant methods rely on the respondents to “*operate* on the stimulus as they see fit when responding.” (Triandis 1994, p80) Operant methods include sentence completion, projection techniques, ethnographies and Human Relations Area Files. Although these methods require a minimal stimulus on the part of the researcher and are relatively unobtrusive, they are less reliable than the respondent approach. Operant approaches tend to generate many irrelevant responses and it is difficult to decide what information is important and to avoid an ethnocentric perspective on the part of the observer. They are also difficult to check for reliability and validity.

Respondent methods of generating information include experiments, surveys and interviews. In these “the subject is *responding* to stimuli presented by the researcher.” (Triandis 1994, p80) The disadvantage of these approaches is that

respondents are more likely to distort their answers in order to appear socially acceptable. “In short, respondent methods are more likely to result in cultural differences due to the *method*.” (Triandis 1994, p80) They have the specific advantage that they are easily replicated under various conditions. Interviews, structured or unstructured, were discarded as an option, due to the resources required to generate a sufficient database from which the primary information could be generated. Experiments were not seen as a viable option as they would be almost impossible to replicate accurately across the chosen respondent samples.

The use of a survey was chosen as the preferred method to generate primary information, as a relatively large number of responses could be obtained to provide a consistent and valid database for analysis. In *Cross-Cultural Research Methods* Brislin et al identify a potential weakness of surveys that required consideration, “Of course, no good research is accomplished through a haphazard set of questions put to a convenient and available group of respondents.” (Brislin, Lonner et al. 1973, p59). To ensure the research stood up to this potential criticism a number of academically respected models were examined and compared. These models are discussed in detail in Chapter 4.

### **Conflicting findings**

Findings in cross-cultural research often produce apparently conflicting results. The initial reaction may be to discard such findings from the research as invalid or not correctly focused. However, in *Summing up: The Science of Reviewing Research* Richard Light and David Pillemer state that such discrepancies provide an opportunity to learn, rather than posing a threat to a project. They argue that, “Conflicting outcomes...can suggest where and with whom particular program types are likely to fail or flourish. Society cannot afford to ignore these substantive insights.” (Light and Pillemer 1984, p53) Where conflicts in findings occur, they have been highlighted and discussed in Chapter 10. From these conflicting findings, recommendations for further research or suggestions for the cause are put forward.

## **GATHERING DATA**

Data are the facts and figures that are interpreted to provide information. Very few cross-cultural publications differentiate between information and data, possibly on the assumption that anyone reading their work will know the difference. However, examples such as the following do little to ensure that there is a fundamental understanding of the difference between data and information:

“By classifying data according to this system as the daily writing is done and by then filing copies under each of the index headings, ethnographers will be able quickly to retrieve information accumulated about any particular topic.”  
(Goodenough 1980, p44)

If primary information within a cross-cultural research project is to be academically sound, the data upon which it is based must be of a suitable quality. “If researchers have examined all alternative explanations for their data, they will be in a better position to answer the questions that are raised about their study.” (Brislin, Lonner et al. 1973, p19) This section highlights some of the fundamental concerns that were addressed when gathering and generating data.

### **Primary and Secondary Data**

As with information, data can be split into primary and secondary sources (BPP 1995, p23-7):

Primary Data. Primary data is collected specifically for the purpose of a particular research project. This form of data has the advantage that the researcher knows exactly where it came from, the circumstances under which it was collected and any limitations or inadequacies there may be. Primary data has the disadvantage that it has to be collected by the researcher or their team, and is resource intensive. Hofstede’s Value Survey Module 94 was used to collect primary data for the Armies, Navies and Air Forces of Australia, Canada and Great Britain. This is detailed in Chapters 2 and 4.

Secondary Data. Secondary data is collected elsewhere for some other purpose but can be adapted for use of the research project. This form of data has the advantage that it may be readily available and therefore less resource intensive. The disadvantages are that the investigator may not know data limitations and they may not be entirely suitable for the purpose of the research being undertaken. Secondary data was used to provide the civilian samples to compare the armed force samples against the societies from which they stem. Secondary data was taken from Hofstede's previously published data for civilian samples in 1980 (Hofstede 1980) and 2001 (Hofstede 2001). Comparing the results demonstrated that the data was still valid and that the surveyed cultures had remained stable over the 21 years between the two publications.

## **Types of data**

### **Basic data**

Basic data can be subdivided into two different types of data, each of which can be discrete (can only have specific values) or continuous (can have any value within a given range):

Attribute. An attribute is something that an object has or has not or is or is not, for example an individual either is or is not an army officer. Questions 21–27 of the VSM, shown at Annex A, use discrete attributes.

Variable. A variable is something that can be measured on a scale such as a value survey. Questions 1-20 of the VSM, shown at Annex A, use discrete variables.

### **Comparative data**

When undertaking comparative research into cultures Gudykunst and Kim identify three sub-divisions of data that should be considered:



Cultural Data. “People in any culture generally behave in a regular fashion because of their postulates, norms and values. It is this regularity that allows us to make predictions on the basis of cultural data.” (Gudykunst and Kim 1997, p28) Questions 1-20 of the VSM, shown at Annex A, provide cultural data. Question 17 from Annex A provides an example of cultural data generation: in asking a respondent to provide a response on the statement “An organization structure in which certain subordinates have two bosses should be avoided at all costs,” cultural data can be generated.

Sociological Data. “Sociological predictions are based on strangers’ membership in or aspirations to particular social groups.” (Gudykunst and Kim 1997, p28) Questions 21 – 27 of the VSM, shown at Annex A, provide sociological data. Question 24 from Annex A provides an example of sociological data generation, “Are you: a civilian, a navy officer, an army officer, an air force officer or a marine officer.”

Psychological Data. “Psychological predictions are based on the specific people with whom we are communicating. When using this type of data, we are concerned with how these people are different from and similar to other members of their culture and the groups to which they belong.” (Gudykunst and Kim 1997, p29) Psychological data is not provided by the VSM.

### **Ethnocentrism revisited**

Ethnocentrism has already been defined in this Chapter and frequently intrudes into social science research, “Ethnocentrism is found not only in research design, data collection, and data analysis; it is also present in the divulging of research results. Articles published in foreign languages are completely out of most researchers’ conceptual worlds.” (Hofstede 1980, p33) A study of this nature will be guilty of ethnocentrism. From the methodological perspective three levels of risk have been identified that are particularly relevant to both the primary and secondary sources of information used in this research (Berry, Poortinga et al. 1992, p9):

- Culturally specific meaning can be attached to instruments of measurement, such as the VSM used in this study.
- The choice of this research topic may not be universally of value, as other cultures will have different requirements that need to be examined.
- The formulation and examination of theories in this study are based upon the researchers' specific cultural antecedents.

Chapter 4 identifies that the primary research tool for this project was a slightly amended version of Hofstede's VSM 94. While no product is completely free from these three ethnocentric risks, the VSM 94 is one of the most researched and tested surveys of its kind. One of the many reasons the VSM 94 was chosen for this research was that as far as is possible all culturally specific meaning has been removed. This is demonstrated in the presentation of the survey results in Chapter 8.

The specific choice of research topic is almost certainly not of universal relevance, as many researchers are not interested in military culture. However, the generic issues of understanding the cultural values of others are relevant to most people. Similar projects to this have been conducted in the past, such as those by Professor Soeters who has used the VSM with officer cadets at military academies. Soeters has published results from this work in the *Value Orientations in Military Academies: A Thirteen Country Study* (Soeters 1997) and *Culture and Discipline in Military Academies: An International Comparison* (Soeters and Recht 1998) and with students from the NATO staff college in *Convergence or divergence in the multinational classroom? The NATO Defence College experience.* (Soeters and Recht 1998). The research in this study extends Soeters efforts by focussing on acknowledged leaders of specific armed forces, through the use of staff college students of three countries examined.

The third risk was mitigated by thorough research of available academic literature and documents in Chapters 3 and 5 to ensure a sound basis for this research. However, this literature search was itself subject to ethnocentric restrictions. As an example, Exhibits 2-13a and 2-13b are taken from a recent survey of articles published in Volumes 1-25 of *Armed Forces and Society* which is the official journal of the Inter-

University Seminar on Armed Forces and Society (IUS). The dominance of the United States both in authorship and organisational allegiance is quite clear and will skew literature searches. Although International English is widely used for publication, it is not the sole language used for social science research. By definition, this study was restricted to publications published in or translated to English, which further reduces universal applicability.

<b>Organization</b>	<b>n</b>	<b>%</b>
Public University – U.S.	251	37.5
Private University – U.S.	125	18.7
Government Organization – U.S.	120	17.9
Foreign University	102	15.2
Government Organization – Foreign	25	3.7
For-Profit Organization – U.S. and Foreign	23	3.4
Unknown	14	2.1
Nonprofit Organization – U.S.	5	.7
Other	4	.6
<b>Total</b>	<b>669</b>	<b>100.0*</b>

\*Total may not equal 100 percent due to rounding.

Exhibit 2-13a. Organisation Type of First Author of Articles in Armed Forces and Society, Volumes 1-25.  
(Ender 2001, p632)

<b>Country</b>	<b>n</b>	<b>%</b>
USA	528	79.2
Israel	22	3.3
England	21	3.1
Canada	18	2.7
Germany	14	2.1
France	13	1.9
Australia	7	1.0
Netherlands	6	.9
Belgium	4	.6
Italy	4	.6
Nigeria	4	.6
Sweden	3	.4
Switzerland	3	.4
India	2	.3
Scotland	2	.3
Singapore	2	.3
Yugoslavia	2	.3
Sole Country Affiliation	12	1.8
<b>Total</b>	<b>667*</b>	<b>100.0**</b>

\*Two countries of first authors not identifiable.  
\*\*Total may not equal 100 percent due to rounding.

Exhibit 2-13b. Country Affiliation of First Author of Articles in Armed Forces and Society, Volumes 1-25.  
(Ender 2001, p630)

These risks are acknowledged and must be considered as inherent in the discussion in this research. The presentation of the findings is ethnocentric for example in that the results in Chapters 9 and 10 place Britain as the central culture rather than Australia or Canada and place the Armies as the central cultures rather than the Navies or Air Forces.

### **Translation**

Although the VSM 94 has been produced in many languages, it would be possible to assume that the issue of translation was not relevant to this study, as English was the only language required for the surveys. This would ignore the fact that Canada has two official languages and Australian English is evolving into something different from British English. There are other issues at play, as the various military organisations speak their own sub-cultural version of English and attribute different meanings to language. There is a standing joke in the British armed forces over the meaning of 'secure a building' which follows something like this:

- Royal Marines will assume this means they need to storm the building with overwhelming firepower, shoot anything that moves and start to improve the defensive position immediately on entering the building.
- British Army will assume they need to attack the building from the most concealed approach, use suppressive fire from a safe distance and assault the building only when any overt resistance has ceased before moving onto the next target.
- Royal Navy will assume the building should be checked to ensure it has been locked when everyone has left at the end of the working day.
- Royal Air Force will assume they should undertake a full structural survey of the building and take out a contract to rent for five years, with an option for a further five years occupancy if required.

Although this is only a story, it is based on the fundamentally different approaches that organisations can take to a given situation. *In Cross-Cultural Research Methods*

Brislin et al identify a list of rules that should be followed to ensure that questionnaires are translatable (Brislin, Lonner et al. 1973, p33-4):

1. Use short simple sentences of less than sixteen words.
2. Employ the active rather than the passive voice.
3. Repeat nouns instead of using pronouns.
4. Avoid metaphors and colloquialisms.
5. Avoid the subjunctive mode for example 'could' or 'would'.
6. Avoid adverbs and prepositions telling 'where' and 'when' such as frequent, beyond and upper.
7. Avoid possessive forms where possible.
8. Use specific rather than general terms.
9. Avoid words that indicate vagueness such as 'probably' or 'frequently'.
10. Avoid sentences with two different verbs if they indicate a different action.
11. Include redundancy in the questions, such as two phrases referring to the same concept.
12. Add context for any difficult phrases.

The amended VSM 94 follows these rules closely. Although English was the only language used for this study, it is worth examining the translations of the VSM, for anyone who may wish to expand this research in different languages. Master versions of the VSM were always written in English and then translated into other languages. Translators were used who translated into their native language and only exceptionally was back-translation used. Bi-lingual managers checked translations. Back-translations were performed at later stages where unexpected results appeared and in only two cases were definite errors found. As with Hofstede's original research the most suitable way of administering the survey was negotiated with those helping this research at each of the staff colleges and the *Survey Administration Manual* was used to provide guidelines for administration (Hofstede 1980, p34-7).

## Consent

The *Guide to Field Research* (Bailey 1996) provides a suggested list that researchers should give to individuals providing information. Although there is some debate over the requirement for informed consent in applied social research, individuals asked to provide information for this study were provided with a covering letter, shown at Annex B, that covered the following ethical considerations (Bailey 1996, p11):

- Indication that they are participating in research.
- The purpose of the research.
- The procedures of the research.
- The risks and benefits of the research.
- The voluntary nature of research participation.
- The participants' right to stop the research at any time.
- The procedures used to protect confidentiality.

## Organisations

The samples targeted for this research project belong to specific organisations that were approached for permission to approach individuals and request information from them before conducting the surveys. From a purely practical stance, survey samples were also far more likely to be forthcoming if a request for information was sanctioned by the parent organisation. In the case of the chosen military samples for this study, it was essential to obtain formal organisational support for the surveys before students would be allowed to respond to them. Although not solely an ethical issue, it was important to carefully select and nurture sponsors before the project commenced. For this study, the tutor was the professor in charge of the department and the formal sponsor, the Royal Military College of Science. When approaching other national military forces, this level of backing provided the academic and organisational credibility that was required to prove academic and ethical acceptability.

## Resources

Very few people have the resources to conduct cross-cultural research unaided. Anyone reckoning to achieve this alone should note the amount of effort, time and resources Hofstede needed to complete the work required for the first Value Survey Module (Hofstede 1980 p54-7). For most people "...easier and faster approaches are needed sometimes. Investigators do not always have the time and/or resources needed to conduct such a comprehensible study, even if it is the *right* way. Shortcuts can be essential for some purposes." (Ott 1989, p123)

The academic literature reviews in Chapters 2 and 3 cover a number of perspectives of culture and values. Many books and journal articles examine issues related to this paper and authors vary considerably in the quality of their thoughts and the research undertaken. To ensure the most relevant quality sources were considered from the outset, several appropriately focussed academics from prominent universities were approached before embarking on this study. With only one exception, they all responded promptly and positively and their responses were encouraging, as was the consistency of the recommendations they provided.

When cross-cultural research is undertaken the samples used must be very carefully identified and specific to the needs of the investigation. By ensuring that only the required samples were used and by using existing proven methods the resources required for the project were reduced to a manageable level. However, it should be noted that even this limited set of samples took over a year to obtain. The issue of resources is applicable to almost every aspect of this paper and a researcher must be realistic when producing a plan of action. Examples of where resources were supplemented are:

## Internet

The Internet is a rich resource that a researcher can turn to for support. It provides rapid access to vast amounts of information and data on almost every topic. The Internet is a double-edged weapon however. E-mail is a superb tool for rapid correspondence around the world and was a significant blessing for this research

project. The Internet is also very useful for accessing library databases, searching for references and articles, and tracking down books that normally would have been very difficult to acquire. Negative aspects include the threat of computer viruses, a large amount of poor quality material and the need to carefully scrutinise sources of apparently useful information and data for accuracy and legitimacy.

### Books and Journals

This is perhaps an obvious statement but careful use of appropriate books and journals saved a large amount of time. Apart from reading applicable publications, scrutiny of references and bibliographies provided a very useful audit trail to find useful references.

### Other Media

One of the fundamental assumptions of this paper was that all information should be communicated in a traditional linear printed format. In this age of multi-media technology, it would frequently have been easier and more effective to present concepts, information and data in other formats such as linked web pages and audio and video clips.

### People

As a part-time researcher, with a demanding fulltime job and family, it is very easy to feel isolated from the rest of the world. Fulltime academics tend to create their own alliances; work colleagues lean to the consensus that you have gone quietly insane; while the family feels that a cerebral remoteness descends at regular and inappropriate moments. While this may at times be true, there are others 'out there' who are able and willing to help. This project could not have been completed without the help of people that were encountered at conferences, in the course of work and some who were never met face to face. Many people had similar interests and were willing to go to significant lengths, on the strength of a single e-mail or letter, if approached in an open and honest manner.



## **CHAPTER SUMMARY**

This chapter has detailed the methodology used to ensure an academically sound logical process has been applied. It has identified that the research can be broadly categorised as applied social science, which means it is intended to have a practical foundation and application. While accepting that it is not possible for social science research to be completely objective and accurate, the methodology is based on the assumption that it is possible to measure and analyse the cultural values

The area of enquiry, strategy, ecological context, approach and the application of the methodology for data collection have been examined in detail as it is important to note that the methodology described for this study is specifically for cross-cultural research of this type. The essential challenge in this study was to map important group values in a qualitative form so that comparisons can be drawn across countries and between armed forces. The methodology achieves this by a combination of tools that integrate data into forms that can be diagrammatically as well as numerically presented. Key terms are defined to ensure that data and information are labelled correctly throughout the study.

Having identified and described the application of the methodology in this Chapter, Chapter 3 moves on to define the place of values in culture.

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## **CHAPTER NOTES**

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<sup>1</sup> The assumption that it is possible to map national and organisational values is examined in Chapters 3 and 4.

<sup>2</sup> Note that there is no connotation to negative or positive influences other than they increase or decrease the expected scoring direction for a given value being examined on the VSM.

### **INTRODUCTION TO CHAPTER 3 – LAYERS OF CULTURE**

Chapter 1 introduced the background, aim and objectives of this study and defined culture in general terms. The methodology, described in Chapter 2, identified that national and organisational levels of culture need to be examined and that values will be the central focus within culture. Values form a *layer* of culture. Layers of culture are a distinct concept from the *levels* identified in Chapter 1. Nations and organisations (defined in Chapter 1) are levels of culture (also defined in Chapter 1), while the concepts considered in this Chapter are layers. Defining and understanding the two concepts provides consistency and clarity when examining culture. The conceptual models for analysing culture discussed in this Chapter differ in the levels and layers of culture they are designed to examine and not all are applicable to both national and organisational culture. The aim of this Chapter is to examine different definitions of cultural layers in order to identify common threads of understanding and to demonstrate the validity of using cultural values for both national and organisational culture as the basis for this study.

The following statement by Donna Winslow demonstrates the importance of defining the layers of culture. Winslow describes two layers of culture (defined in this Chapter as artefacts and rituals) for the Canadian Army and identifies that there are a number elements to each. The significance of producing definitions for the layers of culture used for this study is emphasised here, as with almost every other definition of culture, there is little agreement over the specific terms used. For example, this quote identifies ‘celebrations’ and ‘ceremonies’ with rituals whereas other authors identify them as artefacts.

“Each Regiment in the Canadian Army has its own cultural phenomena which have depth, duration and collective meaning... We will see that Regiments have physical artefacts in addition to collective mental frameworks and manifestations (legends, myths and stories) and collective

actions patterns (rites, ritual, celebrations and ceremonies)... ” (Winslow 1998, p354)

Part 1 of this Chapter examines different approaches to analysing culture. These approaches to analysing culture are compared and contrasted to demonstrate that values are relevant at both the national and organisational levels and that a variety of analytical approaches provide broadly similar definitions. Part 2 defines values and distinguishes them from related but distinct concepts. Appendix 1 illustrates the other layers of culture identified in this Chapter for reference.

## APPROACHES TO ANALYSING CULTURE

### The onion - Hofstede

In *Cultures and Organizations*, Hofstede examines culture from a national and organisational perspective and describes the layers of culture in the form of an onion. This is shown in Exhibit 3-1 and described below.

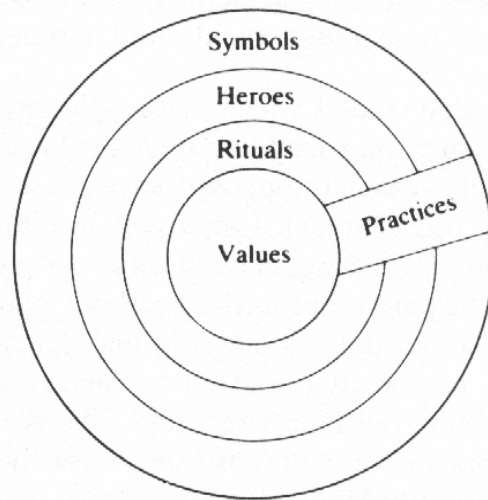


Exhibit 3-1. Hofstede's 'onion diagram'.  
(Hofstede 1991, p9)

“*Symbols* are words, gestures, pictures or objects that carry a particular meaning which is only recognized by those who share the culture.” (Hofstede 1991, p7) These are the most superficial layer and may take the form of status symbols, dress standards or verbal speech patterns, for example. They may be copied by other cultures and can develop or disappear from a culture over time.

“*Heroes* are persons alive or dead, real or imaginary, who possess characteristics which are highly prized in a culture, and who thus serve as models for behavior.” (Hofstede 1991, p8) Heroes only need to exhibit specific desirable characteristics and may have other flaws which are overlooked.

“*Rituals* are collective activities, technically superfluous in reaching desired ends, but which, within a culture, are considered as socially essential; they are carried out for their own sake.” (Hofstede 1991, p8) Ways of greeting and paying respect to others are examples.

Hofstede subsumes symbols, heroes, and rituals under the term *practices*, “As such, they are visible to an outside observer; their cultural meaning, however, is invisible and lies precisely and only in the way these practices are interpreted by the insiders.” (Hofstede 1991, p8)

Hofstede states “The core of a culture... is formed by *values*. Values are broad tendencies to prefer certain states of affairs over others.” (Hofstede 1991, p8) His definition of values is that they have a plus and a minus feeling attached to them such as evil versus good and ugly versus beautiful and are first learned unconsciously by children by the age of ten. Hofstede argues that after this age, an individual’s basic value system is difficult to change.

### **Layers of culture - Trompenaars and Hampden-Turner**

In the second edition of *Riding the Waves of Culture*, Trompenaars and Hampden-Turner define the layers of culture in a generic model that is applicable to all levels of culture. Trompenaars and Hampden-Turner identify three levels of culture, national, corporate and professional, but most of the examples they cite to support their work are at the national level (Trompenaars and Hampden-Turner 1998, p7). Their model is shown in Exhibit 3-2.

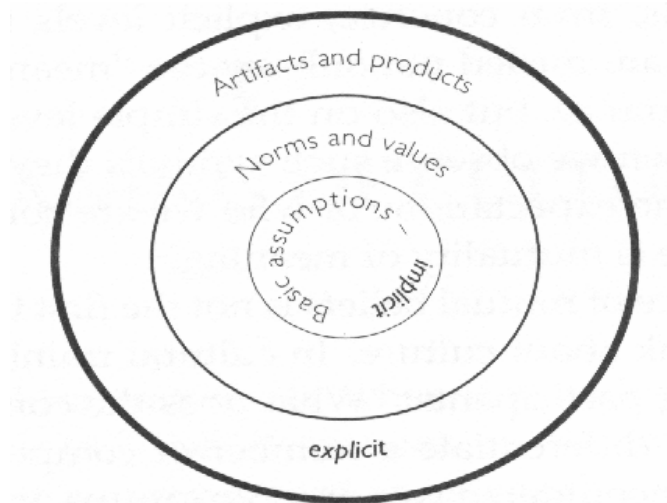


Exhibit 3-2. Trompenaars' and Hampden-Turner's model of culture.  
(Trompenaars and Hampden-Turner 1998, p22)

The outer layer of culture is of *explicit products*. “An individual’s first experience of a new culture is the less esoteric, more concrete factors.” (Trompenaars and Hampden-Turner 1998, p21) These factors are described as the observable reality, which are symbols of a deeper level of culture. Explicit culture is the discernible existence of aspects such as language, food, buildings and commerce. Prejudices usually start at this observable and symbolic level. Each opinion an individual expresses regarding explicit culture tends to say more about the culture of that person than about the community they are judging.

The middle layer of Trompenaars' and Hampden-Turner's model covers *norms and values*. “Explicit culture reflects deeper layers of culture, the norms and values of an individual group.” (Trompenaars and Hampden-Turner 1998, p21) Norms are described as a sense of what is right and wrong, whereas values determine the definition of what is good and bad. Trompenaars defines the differences as “While the norms, consciously or unconsciously, give us a feeling of ‘this is how I normally should behave,’ values give us a feeling of ‘this is how I aspire or desire to behave.’” (Trompenaars and Hampden-Turner 1998, p22) Values and norms may differ from each other. Norms give an individual the feeling of how they should behave and values of how they desire to behave. For norms and values to be developed, they need to be shared and pertinent to the cultural tradition.



Trompenaars and Hampden-Turner state that survival is the most fundamental *value* that people strive for. The survival challenges faced and methods that civilisations choose to overcome them affect their culture. Problems in daily life eventually become routine and subconscious and become part of the system of *absolute assumptions*. The culture of civilisations evolves in such a way that effectiveness is increased through a common set of logical assumptions which relate to their immediate environment. “This deepest meaning has escaped from conscious questioning and has become self-evident, because it is a result of routine responses to the environment.” (Trompenaars and Hampden-Turner 1998, p24) The easiest way to test if something is a basic assumption is to observe if confusion or irritation is provoked when it is questioned.

This model also portrays culture in the form of layers of an onion that need to be peeled, in order to be understood. The outer layers are the products, which are expressions of deeper values and norms of a society that are buried and more difficult to discern. The question that arises from this is why are values and norms semi-unconscious and so different around the world. Trompenaars and Hampden-Turner state that issues that are dealt with on a regular basis disappear from conscious view and become fundamental beliefs. The core of the onion is therefore that which is taken for granted.

### **Organisational culture - Schein**

Schein’s approach to identifying the layers of culture specifically relates to leadership at the organisational level of culture but is very similar to the model of Trompenaars and Hampden-Turner in its definitions. Schein does not feel the need for an onion to represent his concepts, preferring to use a linear representation, shown in Exhibit 3-3, to identify three layers of organisational culture.

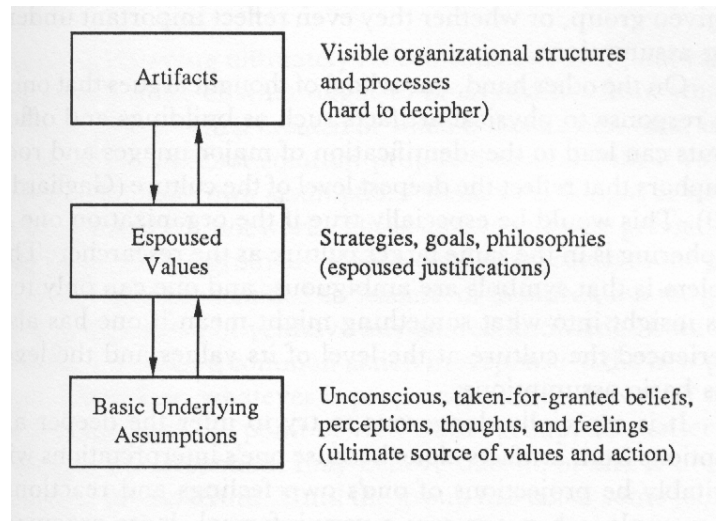


Exhibit 3-3. Schein's model of organisational culture.  
(Schein 1997, p17)

In Schein's model of organisational culture, artefacts, while the most visible organisational structures and processes, are the hardest to understand. "The most important point... is that it is easy to observe and very difficult to decipher." (Schein 1997, p17) The observer cannot define what the observed artefacts mean or if they reflect the intrinsic underlying assumptions of the organisation. There is also a danger that if observed in isolation the artefacts will be subjected to the observer's own set of values and assumptions which could lead to an incorrect inference.

Schein states "A set of values that becomes embodied in an ideology or organizational philosophy thus can serve as a guide and as a way of dealing with uncertainty of intrinsically uncontrollable or difficult events." (Schein 1997, p18) Social validation causes certain values to become confirmed through shared experiences. Such values are initially espoused by key individuals and, once they are shown to work, become embodied in the organisational ideology or philosophy. These conscious values will predict much of the artefacts that might be observed. If these espoused values are accepted by the corporate body most of the artefact level observations should reflect these values in some form. These espoused values will also need to be congruent with Schein's

deepest layer of culture, basic assumptions, for the corporate whole to be coherent. If these espoused values are only aspirations for the future, they may not reflect the artefact layer accurately.

“To get at that deeper level of understanding, to decipher the pattern, and to predict future behavior correctly, we have to understand more fully the category of basic assumptions.... Basic assumptions, in the sense in which I want to define the concept, have become so taken for granted that one finds little variation within a cultural unit.” (Schein 1997, p21-22) Basic assumptions tend not to be questioned and members of a group will find behaviour based upon any other premise hard to understand or even inexplicable.

### **Essence and Functions of Organisational Culture - Ott**

Ott develops his approach to defining the layers of culture from Schein’s work and the flow diagram discussed previously at Exhibit 3-3. In spite of the close relationship to Schein’s work, Ott provides a cross-cultural model in preference to Schein’s intercultural approach to understanding the layers of culture at the organisational level. He provides the following distinctions which marks his work apart from the other models examined in this section (Ott 1989, p1-2):

- ‘Organisational culture’ means the culture of an organisation.
- ‘Organisational culture perspective’ means the use of organisational culture as a frame of reference for the way one looks at, attempts to understand, and works with organisations.

The organisational culture perspective provides a cross-cultural approach to understanding organisations. Exhibits 2-8 and 2-9, later in this Chapter, identify that Ott’s approach to understanding organisational culture is similar to Hofstede’s, Trompenaars’ and Hampden-Turner’s.

Ott maintains that symbols are the most superficial layers of a culture. The most concrete layers are basic assumptions, which are at the deepest level and are the most abstract of any given culture. Ott states that to appreciate the significance of any organisational culture elements and layers it is necessary to have an understanding of symbols and symbolism. “*Symbols* are signs that connote meanings greater than themselves and express much more than their intrinsic content.” (Ott 1989, p21) The true meaning and significance of a symbol is rarely readily apparent to an outsider.

“*Artefacts* are material and nonmaterial objects and patterns that intentionally or unintentionally communicate information about the organization’s technology, beliefs, values, assumptions, and ways of doing things.” (Ott 1989, p35) Physical artefacts can provide useful information about an organisation’s culture but not all artefacts are readily tangible. Every culture, for example, has its own language with which to communicate concepts, components and elements. This language both defines the culture and is defined by the culture, and serves as an artefact.

The third layer in Ott’s essence of culture is defined as patterns of behaviour. “Every organization has patterns of routinized activities, such as rites and rituals which through repetition communicate information about the organization’s technology, beliefs, values, assumptions, and ways of doing things.” (Ott 1989, p36) *Rites and rituals* are habits whose roots lie in the deeper cultural values and basic assumptions. They are mundane, systematic, stylised and routine and tell the aware observer much about an organisational culture. It is possible for the purpose and meaning of these patterns of behaviour to be forgotten over time and to take on lives of their own.

Ott believes that values are central to culture. “*Shared beliefs and values* provide the reasons why people behave as they do.” (Ott 1989, p39, italics added) Although values are conscious, they are emotionally based and the processes through which they are formed are not clear. Values form the ‘should’ and ‘should not’ for what is important to people. Beliefs are consciously held and are mental views of the truth and can, for example, be arrived at through faith, research or because others hold them. Both values

and beliefs can concern almost any issue but culture forms both of them. Ott classifies norms under patterns of behaviour in the third layer of culture. Norms are such an important aspect of culture they could merit their own discussion. "...norms are more important (than rites and rituals). They are so pivotal to organizational culture that a few authors have defined norms as culture." (Ott 1989, p37).

The deepest layer of a culture is the *basic assumptions*. "... basic assumptions can be thought of as a comprehensive, potent, but out-of-conscious system of beliefs, perceptions, and values." (Ott 1989, 42) These assumptions move out of the conscious awareness of a culture due to previous repeated successes. Ott's definition of basic assumptions matches those of Schein and Trompenaars and Hampden-Turner. It is notable that Ott includes values for a second time in his model. These values equate to the definition of values provided by Hofstede. Indoctrinating new members into this layer of culture will, by definition, usually be an unconscious effort. Indoctrination is achieved through a newcomer observing differences between the espoused values of a culture and the real values in use. As with values and beliefs, basic assumptions can cover almost any aspect of a culture.

### **7-S Framework - Peters and Waterman**

The 7-S framework is often referred to as the McKinsey 7-S as Peters and Waterman were working for McKinsey and Co at the time they developed the model. The 7-S framework is shown in Exhibit 3-4. Peters and Waterman take a different approach to examining an organisation from the previous models by considering the seven S's, which are split into hard and soft elements as follows (Recklies 2001, p1-2):

The hard S's

- Strategy is planned by a company in response to anticipated changes in the external environment.
- Structure is the basis for specialization and coordination influenced primarily by strategy.

Systems are the formal and informal procedures that support the strategy and structure.

The soft S's

- Style is split into:
  - The dominant values, beliefs and norms which form the organisational culture.
  - How managers behave.
- Staff relates to how current and future managers are developed.

Skills are the dominant attributes or capabilities that exist in the organisation.

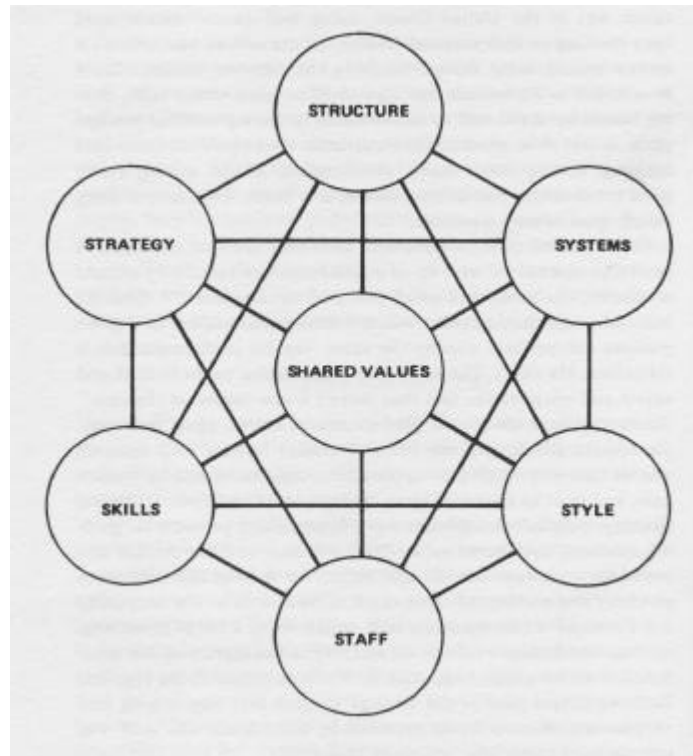


Exhibit 3-4. The 7-S Framework.  
(Peters and Waterman 1982, p10)

In Peters' and Waterman's model shared values are the guiding concepts and fundamental ideas around which the organisation is built. They have great meaning, may be stated at abstract level to organisational insiders but may not be understood or perceived by those from outside.

The 7-S framework is directed more at the engineering process of organisational change than national or organisational culture perspective but is of interest as shared values form the central focus of the model and are fundamental to the success of the organisation. The most useful aspect of this model is stated best in the words of the creators of the 7-S framework. “In retrospect, what our framework has really done is to remind the world of professional managers that ‘soft is hard’. It has enabled us to say in effect, ‘All that stuff you have been dismissing for so long as the intractable, irrational, intuitive, informal organization *can* be managed.” (Peters and Waterman 1982, p11)

### **Cultural Web – Johnson and Scholes**

The cultural web presented by Johnson and Scholes in *Exploring Corporate Strategy* aims to explain various factors that preserve and maintain the core beliefs and assumptions of an organisation (Johnson and Scholes 1993, p162-170). The cultural web is shown at Exhibit 3-5.

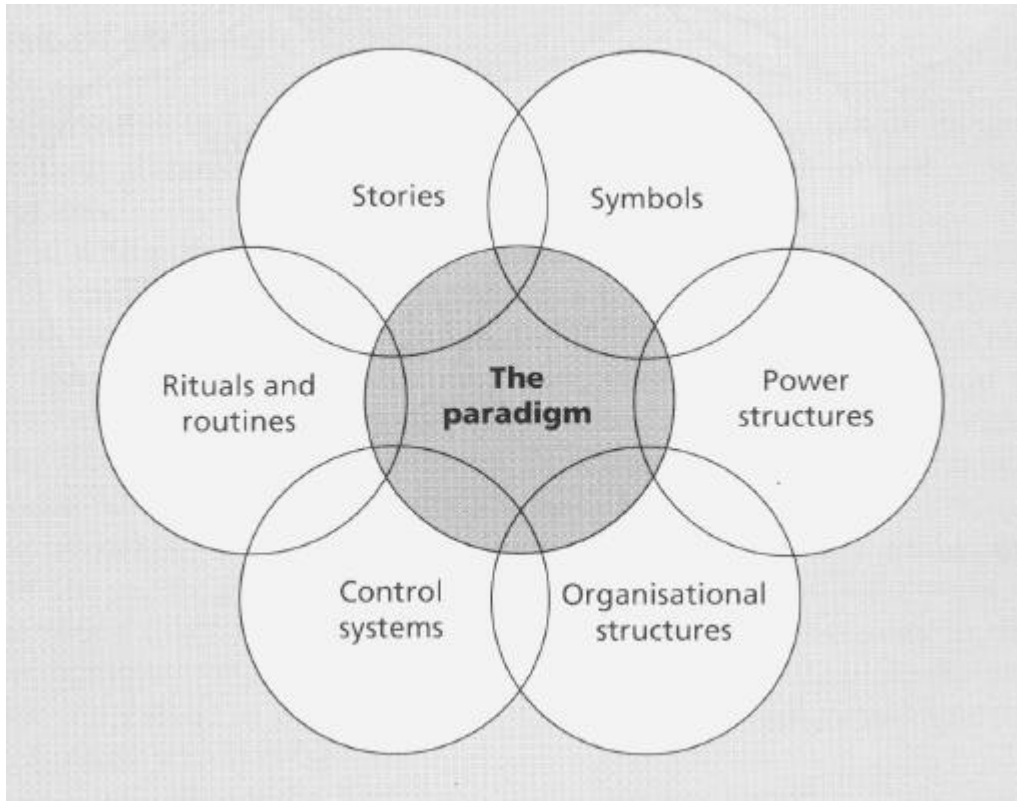


Exhibit 3-5. The cultural web of an organisation.  
(Johnson and Scholes 1993, p61)

The cultural web consists of six peripheral factors that influence the central ‘paradigm’ of an organisation (Johnson and Scholes 1993,p60-61 and p162):

- Control systems emphasise what is important in an organisation through measurements and reward systems.
- Power structures are likely to be associated with the key constructs of the paradigm. The most powerful managers in an organisation are likely to be the ones most associated with core assumptions and beliefs.
- Organisational structures, both formal and informal, reflect the power structure and what is important to the organisation.
- Symbols, such as logos, offices and titles, become short hand representations of the nature of the organisation.
- Stories told by members of the organisation to themselves, outsiders and new recruits embed the present in its organisational history.



- Routines and rituals reinforce what is important to the organisation through ‘this is the way things are done around here’.
- The paradigm is central to the cultural web and consists of three layers:
  - Values may be easy to identify and are often written down as statements about the organisation’s mission, objective or strategy.
  - Beliefs are more specific and are issues that people can articulate.
  - Assumptions are the real core of an organisation’s culture and are the aspects that are taken for granted and which people find difficult to identify and explain.

There are elements of this model that distinguish it from the others that are examined in this Chapter. First, the cultural web and the 7S models are the only ones discussed in this study that identify structure as a separate element of culture. Second, the cultural web is the only model to address control systems. Structure is an explicit and observable part of a culture and is regarded as a cultural symbol. The concept of ‘systems’ are more difficult to align with layers of the other models but are similar to the more generic title of practices shown previously in Hofstede’s model on at Exhibit 3-1. Of most interest is the central paradigm. When the paradigm is broken down into its three elements it appears remarkably similar to many of the other models, as values, beliefs, and assumptions form the deepest level of a culture.

### **The circuit of culture – Open University**

The Open University course *Culture, Media and Identities* describes a circuit of culture, shown at Exhibit 3-6. The circuit of culture consists of 5 interlinked elements, described briefly below:

- Representation is about cultural representation and signifying practices and is based on the use of language and imagery to construct meaning.

- Identity considers how a complex sense of identity is constructed by and for individuals, marking both their difference from others and their connection with groups through shared histories, beliefs and values.
- Production relates to how cultural products are produced, marketed, sold and inscribed with particular meanings.
- Consumption is about the ways in which culture is used, interpreted and invested with meaning at the level of the locality, the group and the individual.
- Regulation examines the pace of social change and whether it is possible to regulate of changing cultures.

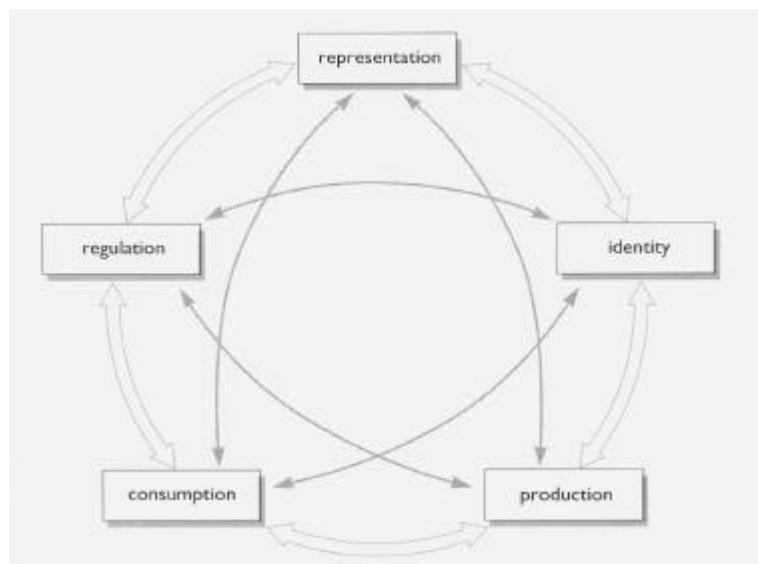


Exhibit 3-6. The circuit of culture.  
(Gay, Hall et al. 1997, p3)

The introductory text to *Culture, Media and Identities*, makes the following statement: “We have chosen the Walkman because it is a typical cultural artefact and medium of modern culture, and through studying its ‘story’ or ‘biography’ one can learn a great deal about the ways in which culture works in late-modern societies such as our own.” (Gay, Hall et al. 1997, p2). This method of analysing culture is based upon the assumption that this can be achieved by examining artefacts within a single culture. This methodology does not attempt to identify the assumptions and values that lead to the creation of the artefact and cannot be used for cross-cultural analysis.

**Comparison and analysis**

Author/ Layer	Hofstede	Trompenaars and Hampden- Turner	Schein	Ott	Peters and Waterman	Johnson and Scholes	Du Gay et al
Explicit	Symbols			Symbols	Strategy, Structure and Skills <sup>1</sup>	Systems, Structures and Symbols Stories <sup>3</sup>	
	Heroes <sup>3</sup>	Artefacts and Products	Artefacts	Artefacts	Staff <sup>2</sup>		Artefacts and Products
Implicit	Rituals			Behaviour Patterns	Procedures	Routines and Rituals	
		Norms and Values	Espoused Values	Beliefs and Values	Style <sup>5</sup>	The Paradigm <sup>6</sup> (Values, Beliefs and Assumptions)	
	Values	Basic Assumptions	Basic Underlying Assumptions <sup>4</sup>	Basic Underlying Assumptions	Shared Values		

1. Placed at the symbol level as valued strategies, structures and skills will be symbols of a culture.
2. Staff are placed at the artefact level as they will communicate the elements of artefacts, as defined by Ott in Exhibit 3-11, to new members and shape the values of the management cadre.
3. Stories and Heroes are defined as artefacts by Ott, see Exhibit 3-11.
4. Basic assumptions are made up of an out of conscious system of beliefs, perceptions and values (Ott 1989, p42).
5. Style is split into management style i.e. what managers do (practices) and organisational culture (dominant values, beliefs and norms).
6. Values, Beliefs and Assumptions comprise three descending layers of the central paradigm (Johnson and Scholes 1993, p162).

**Exhibit 3-7. Layers of culture summary.**  
Summarised from discussion on previous pages

Exhibit 3-7 summarises the various approaches and shows that when the models are compared a consensus emerges on the position of values within culture. Although the exact positioning of some of the layers is open to interpretation, Exhibit 3-7 is a useful tool for comparison and demonstrates the following points:

- There is a relatively consistent approach to defining the various layers of culture.
- Values are considered by all but one of the approaches to examining culture in Exhibit 3-7 (Du Gay et al).
- In spite of the varied approaches to examining culture, there is consensus that the values layer forms a part of all cultures.

- Values are relevant at both the national (Hofstede and Trompenaar’s and Hampden-Turner) and organisational (Schein, Ott, Peters and Waterman and Johnson and Scholes) levels.
- Precise definitions of each layer vary and clarification is required to ensure that there is clear understanding of what each is considered to be within this study. This is particularly important for values.

<b>Methodology/ Author</b>	<b>Quadrant<sup>1</sup></b>	<b>Strategy<sup>2</sup></b>	<b>Emic/Etic<sup>3</sup></b>	<b>Level<sup>4</sup></b>
<i>Methodology Requirement<sup>5</sup></i>	<i>II</i>	<i>Cell 4</i>	<i>Etic</i>	<i>Nation and Organisation</i>
Hofstede	II	Cell 4	Etic	Nation and Organisation
Trompenaars and Hampden-Turner	II	Cell 4	Etic	All
Schein	I	Cell 3	Emic	Organisation
Ott	II	Cell 4	Etic	Organisational culture perspective
Peters and Waterman	I	Cell 3	Emic	Organisation
Johnson and Scholes	I	Cell 3	Emic	Organisation
Du Gay et al	I	Cell 2	Emic	All

1. Refer to Exhibit 2-1.

2. Refer to Exhibit 2-2.

3. Refer to Exhibit 2-3.

4. Refer to ‘Focus’ in Chapter 1.

5. Refer to ‘Mapping Cultural Values’ in Chapter 2.

#### Exhibit 3-8. Approaches to analysing culture summary.

Summarised from discussion on previous pages

Exhibit 3-8 identifies the area of enquiry, strategy, ecological context and level assessed for each model and compares them against the methodological requirement identified in Chapter 1. Examination of the models also shows that some approaches are more suited to understanding the organisational level of culture, while others are more suited to examining the national level. Exhibit 3-8 shows the following:

- As well as the differing definitions for the various layers of culture summarised in Exhibit 3-7, there are differing approaches possible for studying culture.
- Three of the seven models examined in this Chapter match the methodological requirement. (Hofstede, Trompenaars and Hampden Turner and Ott).

- Three of the seven models examined match the requirement to examine both National and Organisational culture. (Hofstede, Trompenaars and Hampden-Turner and Du-Gay et al).
- Only two of the models exactly match the methodological requirement (Hofstede and Trompenaars and Hampden-Turner).

## VALUES AND ASSUMPTIONS

Values and assumptions are considered together as the definitions of the various models are closely matched. Exhibit 3-9 provides a summary of the definitions and demonstrates where the similarities and differences lie. According to the summaries in Exhibit 3-9, values range from the conscious to the unconscious, can be espoused formally or are fundamental guiding concepts and can be considered alongside other concepts such as attitudes, beliefs and norms. It is arguable that what many consider values to be are in fact norms and that the concept of underlying assumptions is often closer to the definitions of values already provided as the basis for this research in Chapter 1.

Author/ Definition	Hofstede	Trompenaars and Hampden- Turner	Schein	Ott	Peters and Waterman	Johnson and Scholes
Explicit  ↑  ↓  Implicit	Values are unconscious.	Norms and Values are conscious or unconscious.  <b>Basic assumptions</b> have escaped consciousness	Espoused values of the organisation are conscious.  <b>Basic underlying assumptions</b> taken for granted.	Beliefs and values are conscious.  <b>Basic underlying assumptions</b> out of conscious <b>system of values</b>	Components of 'Style' are the dominant values, beliefs and norms  <b>Shared values</b> are the fundamental guiding concepts	Values may be easy to identify  Beliefs are specific  <b>Assumptions</b> are the real core of an organisation's culture

Exhibit 3-9. Values and assumptions summary.  
Summarised from discussion on previous pages

### Distinguishing values from other concepts

It is important to distinguish values from other related but distinct concepts. The following quote from the *World Values Survey* (WVS) codebook demonstrates why understanding the different concepts is essential and leads the discussion into the next Chapter.

“This data collection is designed to enable cross-national comparison of values and norms in a wide variety of areas and to monitor changes in values and attitudes of mass publics in 45 societies around the world.... A wide range of items was included on the meaning and purpose of life, such as respondents' views on the value of scientific advances, the demarcation of good and evil, and religious behaviour and beliefs.”

(World Values Study Group 1994, p5)

In the *Nature of Human Values*, Milton Rokeach identifies and separates six such concepts which are defined below for the purposes of this research (Rokeach 1973, p17-22):

- Attitudes An attitude differs from a value in several respects:
  - An attitude refers to an organisation of several beliefs around a specific object or situation. A value refers to a single belief of a very specific kind.
  - A value transcends objects and situations. An attitude is focussed on some specified object or situation.
  - A value is a standard. An attitude is not a standard.
  - A person has as many values as they have learned beliefs concerning desirable modes of conduct and end-states of existence and as many attitudes as direct or indirect encounters they have had with specific objects and situations. It is estimated that values number only in the dozens whereas attitudes number in the thousands.
  - Values occupy a more central position than attitudes within an individual's personality makeup and cognitive system, and they are therefore determinants of attitudes as well as of behaviour.
  - Values are a more dynamic concept than attitude having a more immediate link to motivation.
- Norms Social norms and values differ from each other in three ways:
  - A value refers to a mode of behaviour or specific end-state of existence whereas a social norm only refers to a mode of behaviour.

- A value transcends specific situations whereas a social norm is a prescription or proscription to behave in a specific way in a specific situation.
- A value is more personal and internal, whereas as a norm is consensual and external to the person. An example of a norm is the practise of junior personnel saluting officers more senior to them when in uniform. This practise is not extended when wearing civilian clothing but the deference to senior rank generally remains.
- Needs Values are the cognitive representations and transformations of individual needs and societal and institutional demands. The human need for sex may be cognitively transformed into values concerning love and intimacy. The presence of values and systems of values is a major characteristic that distinguishes humans from other animals.
- Traits Traits have the connotation of being human characteristics that are highly fixed and not amenable to modification. Values are subject to change in the social environment. This issue can be defined as an issue of focus or perspective. An individual who is perceived as aggressive could be seen in value terms as selfishly ambitious, one who cares about providing the best for their family or someone who wishes to provide something worthwhile to society.
- Interests An interest is one of many manifestations of a value, and therefore shares some of the attributes of a value. Interests resemble attitudes more than values, representing a favourable or unfavourable attitude towards certain objects or activities. Interests are often viewed as the cognitive representation of needs.
- Value Systems and Value Orientations Value systems and value orientations are very similar. Value orientation refers to a pattern of dimensions with respect to one another. The notion of a value system implies a rank ordering of values along a single continuum.



## **CHAPTER SUMMARY**

This Chapter has identified and defined the layers of culture in order to demonstrate that values are a valid focus for examining culture. The place of values within the layers of culture is identified and specific definitions with examples of the layers of culture are provided in the main text and the Appendix. Chapter 3 demonstrates that various different approaches to analysing culture show that values have a central position in each. These approaches to analysing culture explain that values are relevant at both the national and organisational levels and that it is possible to use a variety of approaches to understand culture.

Chapter 4 moves on to examine models for surveying national and organisational cultures, in order to demonstrate that a consistent approach to analysing values is achievable. The Values Survey Module (VSM) is identified as an effective model for use by this study. The VSM is verified for validity and reliability by matching previous replications against defined tests. Triangulation is also used to compare the expectations of the VSM from this Chapter to those in subsequent chapters.

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**APPENDIX 1 TO CHAPTER 3**  
**ILLUSTRATING THE OTHER LAYERS OF CULTURE**

This appendix provides illustrations of the layers of culture not described in the main text based on the analysis in Exhibits 3-7 and 3-8. The following layers are provided for reference but are not central to the central discussion on values:

Symbols

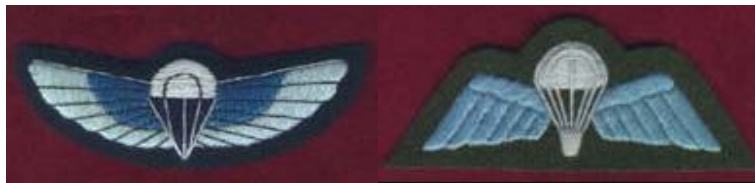


Exhibit 3-10. British Army Special Air Service and Parachute ‘Wings’.

Exhibit 3-10 shows the insignia for Special Air Service and Airborne trained soldiers in the British Army. They are readily observable but to the uninformed observer they will have little meaning and it will be impossible to fully determine what each represents. On a military uniform that is worn by everyone, culturally specific insignia will often be the only visible symbols that define the relative achievement of individuals within the organisation. Insignia such as the ‘wings’ have little extrinsic value, yet they provide a readily ascribed status for those who understand how the ‘system’ works. Given time an outside observer will be able to identify the various insignia but significantly more information will be required to understand their role and importance within the culture being observed.

## Artefacts



Exhibit 3-11. The Sony Walkman.  
(Gay, Hall et al. 1997, p35)

The study of artefacts is a widely used method of analysing cultures. Artefacts can be material or nonmaterial but both forms are only a visible reflection of the deeper layers of culture. They are almost impossible to understand without detailed knowledge of the specific culture they relate to. The material example of the advertisement for a Sony Walkman in Exhibit 3-11 demonstrates this clearly. Exhibit 3-11 was one of a series of advertisements designed to evoke specific images and connotations such as the outdoor sporting lifestyle. A problem with using this method to analyse culture is that it is quite possible that an artefact will not be universally recognised or will have different meanings across cultures. Any culture that does not understand the purpose of a Walkman or a swimming flipper would be at a loss to decipher the message in this image.

<b>Artefact</b>	<b>Description</b>	<b>Remark</b>
Jargon	Jargon concentrates meaning into a few words that do not mean the same thing in the language of the organisation as they do in everyday usage.	
Metaphors	Metaphors are powerful forms of organisational language that communicate symbolic meaning beyond the obvious content.	
Myths	These are extended metaphors about events which are alleged to have occurred in the history of the organisation and serve to link past present and future.	
Stories	Stories communicate core messages and morals that reflect beliefs, values and assumptions of the organisation.	
Heroes	Heroes are individuals who personify the values and epitomise the strengths of an organisation and its culture.	Identified as a distinct layer of culture by Hofstede
Organisational Scripts	A script is the stripped-down skeleton of a story. They are predictive, self-fulfilling prophecies.	
Sagas and Legends	Sagas and Legends are stories about organisations histories that provide information about the culture.	
Ceremonies and Celebrations	Ceremonies are celebrations of an organisational culture's values and basic assumptions.	

Exhibit 3-12. Nonmaterial artefacts.  
Summarised from (Ott 1989, p29-35)

Examples of nonmaterial artefacts are provided in Exhibit 3-12. Heroes, for example, can be fictional characters such as Captain Kirk from Star Trek and Sherlock Holmes who epitomise prized characteristics which may rarely be found in real people. Heroes can also be respected by other cultures and they are still relatively superficial in their representation of a given culture.

If Exhibits 2-1, 2-2 and 2-3 are re-examined, it is possible to identify that using symbols or artefacts to examine a culture will result in focusing on the unique aspects of a culture and will require an 'emic' approach to study a culture from within. There is nothing fundamentally wrong with such an approach but the difficulty is that this does not match the focus of this study which is based on an 'etic' approach.

## Rituals

In *Coordination, Culture and Identity in Complex Humanitarian Operations* Robert Rubinstein writes “All cultural groups have rituals... Ritual action has a formal quality. It follows highly structured, standardized sequences and often occurs at certain places and times that have special symbolic meaning. Symbols provide the content of Ritual.” (Rubinstein 1999, p9) Rituals have their roots in values and basic assumptions and are considered socially essential. For example, in almost every military organisation, the junior individual salutes or acknowledges the senior first, before the senior formally acknowledges their presence. The degree to which this is enforced varies considerably but all forms of salute are rituals that serve to reinforce the subordinate and superior positions of the respective individuals.

Rituals can reflect deep significance and be readily observable but can still tell you little about the values that they are based on. This is demonstrated in the film *Gladiator* where before each battle the fallen Roman General, the Spaniard Maximus, touches and smells the earth beneath his feet, as seen in Exhibits 3-13a-e (Franzoni 2000). This ritual has significant meaning for Maximus, and perhaps the soldiers he serves with, but it is only through the knowledge that he has a farming background that one can start to guess, and only guess, the significance of his actions. Without more information it is not possible to state with certainty what his pre-battle ritual really means.

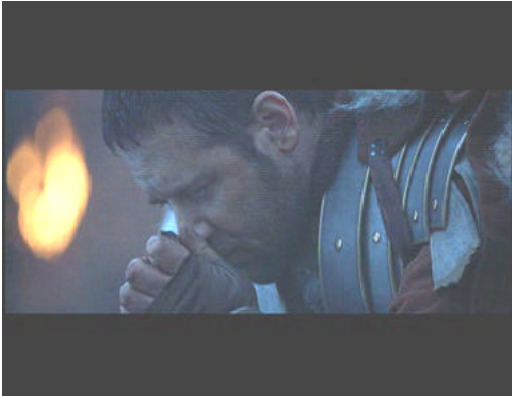


Exhibit 3-13a. Before the battle in Germania.



Exhibit 3-13b. First gladiator fight.

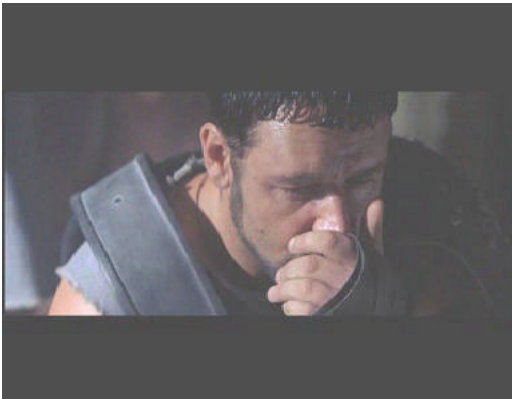


Exhibit 3-13c. First fight in Rome.

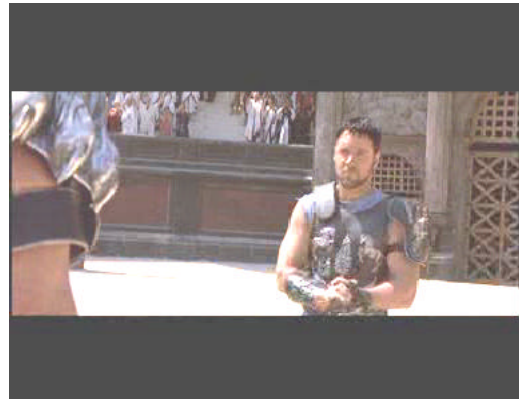


Exhibit 3-13d. Second fight in Rome.



Exhibit 3-13e. Before the fight with Caesar.

End of Appendix 1 to Chapter 3

## **INTRODUCTION TO CHAPTER 4 – SURVEYING VALUES**

The previous Chapter identified and defined the layers of culture in order to demonstrate that values are a valid focus for examining culture. The place of values within the layers of culture was identified and specific definitions with examples of the layers of culture provided. This Chapter moves on to examine models for surveying national and organisational cultures, in order to demonstrate that a consistent approach to analysing values is achievable and to choose one to use for this study.

In *Riding the Waves of Culture* Trompenaars and Hampden-Turner assert that ‘one best way’ of organising does not exist and that instead of looking for laws and common properties among ‘things’ observed, consistent ways in which cultures structure the perceptions of what they experience should be examined (Trompenaars and Hampden-Turner 1998, p13).

In the same vein, the ‘one best way’ of surveying values does not exist. Hofstede states, “... that measures of values depend strongly on the instrument used ...” (Hofstede 2001, p7). In an article entitled ‘Universals in the content and structure of values’ Shalom Schwartz identifies basic issues, which must be addressed in order to undertake effective research using values (Schwartz 1992, p2-3):

- Value content: “It is necessary to identify first the substantive content of human values. What types of values are likely to be recognised and used to form priorities within and across all cultures? What might determine the nature of the content of values? Do values form some universal set of types?”
- Comprehensiveness: “Have we identified a comprehensive set of values types? That is, does the set include all the types of values to which individuals are likely to attribute at least moderate importance as criteria of evaluation? If the value set is not comprehensive, studies of the correlates of value priorities will be compromised: influential values that might counterbalance or outweigh the values that were measured would necessarily be overlooked, so the assessed priorities would be distorted.”



- Equivalence of meaning: “Do the values have the same or similar meanings among the differing groups of persons under study? Minimal equivalence of meaning is a sine qua non for effective cross-cultural comparison. Even within societies, equivalence of meaning cannot be taken for granted in comparisons of groups differentiated by age, gender, education etc.”
- Value structure: “Consistent conflicts and compatibilities among values (e.g., conflict between independence and conformity; compatibility between equality and helpfulness) may point to a meaningful structure that underlies relations among single values. Does such a value structure exist? Is it universal?”

Not all surveys of values deal effectively with these issues and it follows from discussion in the previous Chapters that not all are suitable for this study. Annex C presents models that deal with Schwartz’s issues through rigorous academic research. Annex C is summarised in Exhibit 4-1. Exhibit 4-1 shows that there are conceptual similarities among many of the models that have been developed to survey cultural values. In the following sections, models in Exhibit 4-1 are discussed in detail in order to compare and contrast possible approaches to surveying values and to demonstrate why the focus of the VSM was identified as the most suitable for this study.

<b>Learning Framework (1996)</b>	<b>Hofstede (1980, 1991)</b>	<b>Hofstede &amp; Bond (1988)</b>	<b>Trompenaars (1993)</b>	<b>Hampden Turner &amp; Trompenaars (1993)</b>	<b>Hampden Turner &amp; Trompenaars<sup>1</sup> (1998)</b>	<b>Hofstede<sup>2</sup> (2001)</b>
Individual – Collective	Individualism –Collectivism	Collectivism: integration moral discipline	Individualist-Collectivist  Universalist – Particularist  Specific - Diffuse	Individualism-Communitarism  Universalism – Particularism	<i>Individualism-Communitarism</i>  <i>Universalism – Particularism</i>  <i>Specific-Diffuse</i>	<i>Individualism –Collectivism</i>
Tough – Tender		Human-heartedness:  kindness patience courtesy				
Equal – Unequal	Power distance		Achievement – Ascription oriented	Achieved-Ascribed  Equality-Hierarchy	<i>Achievement – Ascription oriented</i>	<i>Power distance</i>
Dynamic – Stable	Uncertainty avoidance		Neutral – Affective		<i>Neutral-emotional</i>	<i>Uncertainty avoidance</i>
Active – Reflective:  pace intuition pragmatism				Analyzing-Integrating  Inner-Outer directed		
Scarce – plentiful:  punctuality polychronicity time horizon Doing-Being:  control human focus	Masculine – Feminine	Confucian dynamism	Future-Present-Past oriented  Internal – External oriented	Sequence-Synchronisation		<i>Long-term – Short term orientation</i>  <i>Masculinity – Femininity</i>

Exhibit 4-1. Conceptual similarities between the models of cultural difference.  
Amended from (Wilson, Hoppe et al. 1996, P36-37) with subsequent iterations, in italics, from “1” (Trompenaars and Hampden-Turner 1998, P29) and “2” (Hofstede 2001, P29)  
(The full version is at Annex C for ease of reference in subsequent chapters)

### **Cultural dimensions on a circular continuum**

During a keynote speech at a conference organised by the Institute for Research on Intercultural Cooperation, Shalom Schwartz stated that it is possible to envisage dimensions of cultural values using a circular continuum (Schwartz 2001). He argued that there are not 2, 4 or 7 possible value dimensions but an infinite number of options. The value dimensions that are chosen for assessment are a matter of convenience to suit the needs of the researcher. A demonstration of this continuum, which shows conservatism versus openness to change and self-enhancement versus self-transcendence, is shown at Exhibit 4-2. Exhibit 4-2 is useful as it provides a conceptual platform upon which to visualise the following features that are common to all of the survey models identified in Exhibit 4-1:

- All of the values identified in Exhibit 4-1 are polar, for example tough-tender and masculinity-femininity. This polarity makes it relatively straightforward to survey values using measurement scales.
- Values have global reach and are relevant across cultures.
- When comparing results for dimensions from different sources (such as the models in Exhibit 4-1) there is a need to understand where, when, why and how the data were collected and who was surveyed, in order to ensure that valid conclusions are drawn.

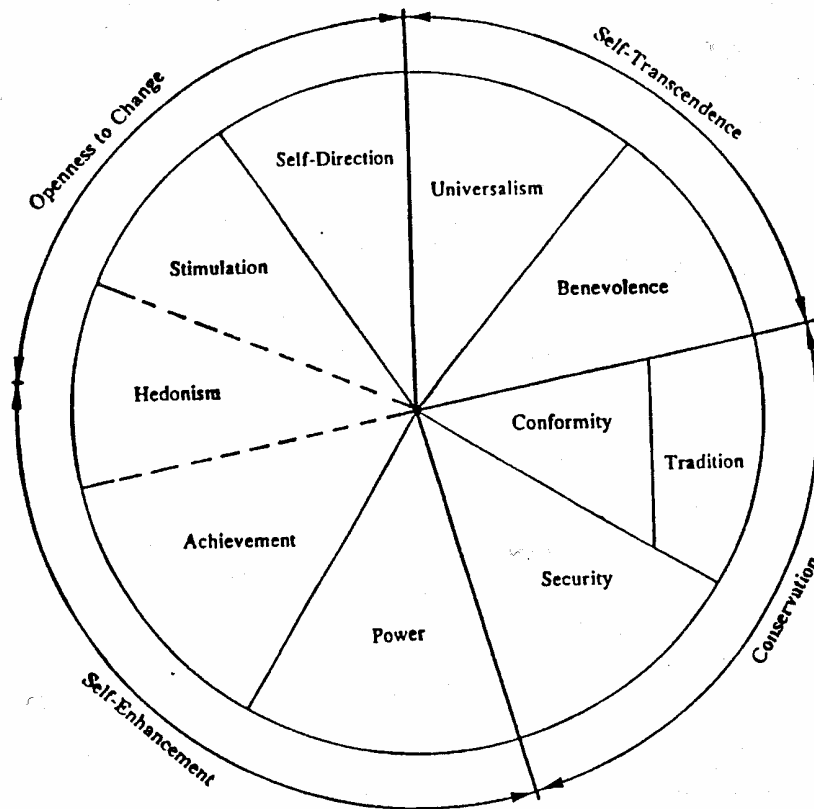


Exhibit 4-2. Cultural dimensions on a circular continuum.  
(Schwartz 1994, p24)

**World Values Survey<sup>1</sup>**

Although not included in the list produced by Wilson, Hoppe and Sayles in *Managing Across Cultures* (shown in Exhibit 4-1), the World Value Survey (WVS) is included in the discussion for two reasons. The first reason is that the WVS demonstrates important issues surrounding the use of values surveys. The second is that the WVS has been used extensively for cultural research and the data sample lists 89,908 cases, which have “measured the values and beliefs of the publics on all six inhabited continents in 1981, 1990, and 1995.” (Inglehart 2000, p215) These facts mark the WVS as one of the largest and most comprehensive values surveys conducted to date. In spite of the size of the database, Annex D shows that only 532 responses were recorded for the military, of which 14 were from Britain and none from Australia or Canada. This is symptomatic of

nearly all of the published value survey research and demonstrates the need to generate primary data specifically for this study.

Analysis of the results of the WVS demonstrates, and to some extent predicts, cultural change within societies. The quote from the codebook at the end of the previous Chapter 3 and the associated concepts highlighted by Milton Rokeach shows that, in spite of its title, the WVS does not survey cultural values exclusively: norms, attitudes, views, behaviour and beliefs are also included. This lack of focus on values does not lend itself to supporting the aims and objectives articulated in Chapter 1. Annex D demonstrates that the data from the WVS could be analysed to provide samples of the appropriate occupation levels for comparison, if a researcher wished to broaden the scope of this study and gather military samples using this model.

Due to the wide base of cultural considerations covered, the WVS consists of 379 questions and a codebook of 179 pages. The methodology of the survey requires that the surveyor reads the questions from a card and marks down the responses from each of the respondents at the time the responses are provided. The concentration and size of the samples surveyed for this study precluded this particular approach for this study. It was also impractical to create a paper-based survey based on such a large number of questions and to expect respondents to complete and return them in their own time. The WVS demonstrated the need for a more concise and precise model to measure values.

### **The Learning Framework**

The Learning Framework aims to link the cultural values of relating to others, accomplishing work and responding to change. The model was developed by Wilson, Hoppe<sup>2</sup> and Sayles, from the Center for Creative Leadership and is compiled from the other models identified at Exhibit 4-1. It integrates this work into a single model and provides useful and precise working definitions that summarise seven of the polar values that reoccur across the various survey models in Exhibit 4-1 (Wilson, Hoppe et al. 1996, p4):

- Individual-Collective: To what degree should people pursue their own individual activities, achievements, and educational and business successes rather than contribute to the activities, achievements, and successes of their extended family, clan or ethnic group, or even company or division?
- Tough-Tender: How is success defined? Do the people in the culture strive for the tangible rewards of a high income and material satisfactions or the intangible rewards of good working relationships, time with family and friends, and satisfaction from spiritual development and volunteer work?
- Equal-Unequal: How should people with different levels of authority, status and power behave toward each other – as equals or unequals?
- Dynamic Stable: How acceptable is uncertainty? Is loose or tight structure preferred for running the business organization?
- Active-Reflective: Which is valued more as a means of acquiring information and knowledge – action or reflection?
- Scarce Plentiful: Is the orientation to the use of time urgent or relaxed?
- Doing-Being: Is mastery over nature or harmony with nature preferred? Is life experienced as outcome of human effort or the workings of destiny or divine will?

Although the Learning Framework is focussed on values in the working environment and meets the criteria set in the aims and objectives in Chapter 1, it has three specific drawbacks that preclude its use for this study. The first is that it is specifically aimed at the organisational level. Second, at the time of producing this research no trace could be found of the Learning Framework having been applied in practice. This means that it would be difficult to validate the primary data collected for this study without having to return to one or several of the models that the Learning Framework was based on. Finally, the Learning Framework is designed for individuals to test and develop their own understanding through the observation of specific cultures. This approach is highly subjective and open to many of the dangers identified in the methodology in Chapter 2. The following quote provides the complete set of instructions for use of the Learning

Framework. They are scant and imply that the model also suffers from a lack of applied research.

- “1. Use the seven dimensions to observe your own and others’ preferences in three domains of human behavior: relating to others, accomplishing work, and responding to change.
2. Construct a provisional hypothesis, or stereotype, by drawing on various sources of information, projecting how people from a particular culture are likely to behave.
3. Test and modify the hypothesis continually, based on your experiences.
4. Challenge yourself to grow personally by recognizing that your effectiveness as a manager depends on your ability to genuinely appreciate values that seem opposite to your own.” (Wilson, Hoppe et al. 1996, p26)

### **Trompenaars and Hampden-Turner’s Cultural Dimensions**

Exhibit 4-1 shows that Fons Trompenaars proposed a seven dimensional model to understand national cultural diversity in business in 1993 and that the model has been developed in the ensuing years in conjunction with Charles Hampden-Turner. Trompenaars believes that much work in culture has become too theoretically based and aims to reduce the complexity into practical settings that managers can understand and apply (Crainer 1998, pp30-34). Five of the dimensions describe relationships of individuals with others, while the other two describe the relationship with time and the environment. These criteria were originally used by Trompenaars for his Doctoral thesis and were developed from work that had been undertaken in the early 1950s. His model is relatively new in the academic world and although applied in business through Trompenaars’ consultancy, United Notions, literature searches failed to show any references for replication or use of the model. This reduced the desirability of using this survey model, as there is no independent secondary evidence to support primary data that would have been collected for this study.

The first edition of *Riding the Waves of Culture* was published in 1993 and was based upon ten years of research. However, the cultural dimensions were heavily criticised by Hofstede for confusing preconceived conceptual categories with actual dimensions and for a lack of content validity for the model's data bank (Hofstede 1996). The first edition was based upon a database of 15,000 respondents. When the second edition was published in conjunction with Charles Hampden-Turner in 1997 (Trompenaars and Hampden-Turner 1997) and 1998 (Trompenaars and Hampden-Turner 1998) it contained a refined and developed set of ideas based upon an increased database of 30,000 respondents. Professor Woolliams of the University of East London undertook statistical analysis of the expanded database and the implication is that his findings were used to help revise the model. Trompenaars and Hampden-Turner acknowledge the impetus that Hofstede's comments had on their thinking in the second edition.

Trompenaars and Hampden-Turner current seven dimensions of culture are:

- Universalism versus Particularism: The universalist approach believes that 'correct' forms of management can be prescribed in the form of a template whereas with the particularist approach greater attention is paid to individual circumstances and relationships.
- Individualism versus Communitarianism: This dimension asks whether people identify themselves as individuals or as part of a group.
- Neutral versus Emotional: This assesses whether interactions are objective and detached or emotions can be used acceptably.
- Specific versus Diffuse: When the whole person is involved in a business relationship there is a real and personal contact, instead of the specific relationship prescribed by a contract.
- Achievement versus Ascription: Achievement means that you are judged on what you have recently accomplished and on your record. Ascription means that status is attributed to you, by birth, kinship, gender or age, but also by your connections...and your educational record.



- Attitude towards time: In some societies the past tends to be more important than the present or future and in others the reverse case is true. Awareness of this dimension affects how to achieve a successful approach towards achieving a positive result.
- Attitude to the environment: Some cultures see the major focus affecting their lives and the origins of vice and virtue as residing within the person. Other cultures see the world as more powerful than individuals.

### **Geert Hofstede Values Survey Module 94**<sup>3</sup>

Geert Hofstede started his career as an engineer in a Dutch textile firm. In his mid-thirties Hofstede embarked upon a Doctorate in social psychology, which was published in 1967 and called *The game of budget control* (Hofstede 1967). In spite of moving on from this area of interest relatively quickly, Hofstede's thesis became the foundation for a new area of study called Behavioural Accounting. Having moved to work for IBM during his research, Hofstede was tasked to head up an international team to develop an internationally standardised questionnaire for six of the company's Development Laboratories. Managers at many levels used the surveys as a tool for organisational development.

In 1971 Hofstede took two years leave from IBM to teach at IMEDE Management Development Institute. During this time he started to try and answer why many of the responses to the questions varied from country to country on the IBM survey database by using statistical analyses. This initial work showed that the IBM employee survey contained information not only about IBM but "differences in attitudes between nationals of different countries." (Hofstede 1997) The IBM data proved to be extremely well matched for each country as it covered the same corporate culture, same education level, same kind of job and similar age and gender distribution. From a survey of over 110,000 IBM employees in 50 countries, Hofstede designed four indices in order to summarise the differences in value systems, social structures, levels of development and perceptions of self and others.

The VSM indices are designed to reflect national or organisational group values rather than those of individuals. Scores achieved through use of the VSM provide an indication of the cultural distance between groups of people and theoretically should allow a more focused approach to closing the gaps through understanding where these lie. The VSM has the following attributes, which led to it being selected as the tool to survey values for this study:

- It has been subjected to considerable academic discussion and scrutiny and is widely acclaimed in the academic community.
- It has been validated and replicated many times and therefore validity can be compared against independent sources.
- It is flexible enough for the demographic questions to be modified for the purposes of this study without impact on the quality of the data produced.
- It can examine both national and organisational levels of culture.
- Exhibit 4-1 shows that it has been recently revised and updated compared to the other models and has stood the test of time, see (Hofstede 1980) and (Hofstede 2001).
- It is easy to replicate and simple to use.

These are real advantages compared with the World Values Survey, the Learning Framework and Trompenaars and Hampden-turners models analysed above. The VSM indices are described in more detail here than those of the other models, as it became the model chosen to provide the primary data for this study. The indices are as follows:

#### Power Distance Index (PDI)

Humans belong to the animal category that show dominant behaviour and have ‘pecking orders’ which are part of the universal mental programming. The fundamental issue of power distance is that it implies inequality. This can occur in physical and mental characteristics, social status and prestige, wealth, power, laws, rights, rules and privileges. Different societies place different weights on status in these areas. Hofstede bases his definition of power distance on definitions by Mauk Mulder for power as “the

potential to determine or direct (to a certain extent) the behaviour of another person/other persons more so than the other way round.” Power distance is defined “as the degree of inequality in power between a less powerful Individual (I) and a more powerful Other (O), in which I and O belong to the same (loosely or tightly knit) social system.” (Mulder 1977, p90) quoted from (Hofstede 2001, p83).

Hofstede modifies Mulder’s definitions to produce the following for PDI: “The power distance between a boss B and a subordinate S in a hierarchy is the difference between the extent to which B can determine the behaviour of S and the extent to which S can determine the behaviour of B.” (Hofstede 2001, p83) PDI deals with the desirability or otherwise of “inequality and of dependence versus interdependence in society.” (Hofstede 1980, p120) Low and High PDI societies have hierarchies but there is more to the PDI than this. Inequality is combined with values over the exercise of power. Hofstede states that high scoring PDI societies have less need to prove legitimacy in the exercise of power than those with low PDI scoring. Furthermore, in low scoring countries those who exercise power will tend to underplay their position.

Exhibit E-1 at Annex E shows the PDI values Hofstede published and highlights the results that can be expected from Australia, Britain and Canada. Exhibit E-1 shows that the PDI results for all three countries should produce a relatively low score that means that there should be a closer relationship between ‘bosses’ and ‘subordinates’ compared to the samples from Brazil and Japan.

#### Uncertainty Avoidance Index (UAI)<sup>4</sup>

Two basic facts of human life are uncertainty about the future and that time only goes one way. UAI identifies how this uncertainty is dealt with. Methods of adapting to uncertainty vary between societies and coping strategies stem from cultural heritage as well as personality. Hofstede states “The main underlying dimension is the tolerance for uncertainty (ambiguity) which can be found in individuals and which in identical situations leads some individuals to feel more pressed for action than others.” (Hofstede

2001, p148) He further argues that the tendency to avoid uncertainty in organisations varies along with the tendency to avoid ambiguities within nations.

Three indicators are used to build the UAI: rule orientation, employment stability and stress. Rule orientation examines the level of tolerance for uncertainty by asking whether it is acceptable or not to break company rules even when in the company's best interest. Accepting that it is permissible to break the rules indicates a higher acceptance of uncertainty with the opposite view showing less acceptance of rule breaking. Employment stability examines an individual's expectancy of remaining with the organisation they currently work for. A strong rule orientation and high employment stability correlate to indicate a strong desire to avoid uncertainty. The final element, stress, is linked conceptually to the other two, with a higher mean stress linked to stronger rule orientation and greater employment stability. The mean level of anxiety is higher when people feel greater stress and therefore need greater security, which is demonstrated through their attitude towards employment stability and rule orientation.

Exhibit E-2 at Annex E shows the scores that Hofstede published for the UAI. The second score column deals with the average age of each country sample, as age has been shown to affect the results of UAI. Exhibit E-2 shows that Australia, Britain and Canada are expected to produce relatively low to mid-range UAI results. This means that there would be less expectation of remaining with a single organisation throughout an individual's career and a lower commitment to adhering to organisational rules. There would also be a corresponding lower level of perceived stress at work compared to the Brazilian and Japanese examples. Although uncertainty avoidance levels have varied over time, Hofstede claims the differences between the countries on which the index was based are robust (Hofstede 2001, p145).

#### Individualism Index (IDV)

IDV examines the link between an individual and the "collectivity" of his or her society. Humans are classified as gregarious animals; however, different societies demonstrate

this is in differing ways. Hofstede states, “The relationship between the individual and the collectivity in human society is not only a matter of ways of living together, but is intimately linked with societal norms (in the sense of value systems of major groups of the population).” (Hofstede 2001, p210). This affects an individual’s mental programming and the structure and organisation of institutions such as those related to education, religion, politics and public utilities.

In China for instance individualism is generally viewed as selfish and showing a lack of discipline, whereas in the USA individualism is widely perceived as being a good thing. An individual from a Chinese-majority country will generally score much lower on the IDV than one from a western society. One consequence of this is that many of the management theories exported by the USA are of questionable value in many societies, as they are based on the power of the individual.

Exhibit E-3 at Annex E shows that alongside the USA, Australia, Britain and Canada have the highest recorded IDV scores. Samples from these countries can be expected to have strong views of their individual place in society. When these scores are compared to the ongoing examples of Brazil and Japan, it can be seen that as with the PDI and UAI scores there is a significant divergence between the relative scores. It is worth noting that Chinese-majority societies such as Honk Kong have a low IDV score in-spite of over 100 years of influence by Britain.

### Masculinity Index (MAS)

Hofstede identifies that the MAS will vary consistently in societies. He argues that men tend to be socialised to be assertive and women to be nurturing. The implication here is that a society that scores highly on the MAS will be male dominated whereas in a society with a lower score women will have more scope for employment and expression. Hofstede states that organisations that have more ‘masculine’ goals such as the military will tend to promote more men whereas health services with their nurturing role will tend to promote more women. We could also expect a significant negative correlation for the

MAS when compared to the percentage of women employed in professional and technical jobs, particularly in wealthier countries.

Although Australia, Britain and Canada score within 14 points on the MAS scale in Exhibit E-4 at Annex E, there are a greater number of other countries between them than with the other indexes. When the examples are considered for comparison, Japan is quite clearly the most masculine society recorded by Hofstede but the MAS score for Canada is closer to Brazil than it is to Australia and Britain. From the results that Hofstede has published it would be reasonable to expect the samples from Australia and Britain to provide a noticeably more 'masculine' set of results than Canada, if the respective armed forces share the societal values of their countries.

#### Long – Versus Short-Term Orientation (LTO)

LTO was added independently from the previous four, which were developed from the work undertaken on the IBM data. Michael Harris Bond identified the LTO value dimension from the Chinese Values Survey (CVS) undertaken in 1985. The CVS was created from values suggested by Chinese academics in Hong Kong and the concepts related to it are less obvious to the Western mind. "Long Term Orientation stands for the fostering of virtues oriented towards future rewards, in particular, perseverance and thrift. Its opposite pole, Short Term Orientation, stands for the fostering of virtues related to the past and present, in particular, respect for tradition, preservation of 'face' and fulfilling social obligations." (Hofstede 2001, p359) Family life in high LTO cultures is pragmatic but based on real affection and with attention paid to children. Children learn thrift, not to expect immediate gratification, tenacity in pursuit of goals, humility and adaptation to circumstances. Children growing up in a low LTO culture experience two opposing forces. One is towards immediate need gratification, spending, sensitivity to social trends and enjoyment of leisure. The other is towards respecting 'musts' such as tradition, face saving, being seen as stable, respecting the social codes of marriage even in the absence of love, tolerance of others and reciprocation of social rituals. Hofstede adopted this

dimension and reported it in the second edition of *Culture's Consequences* (Hofstede 2001, p361)

East Asian countries tend to score highly and European countries fairly low on the LTO scale. Exhibit E5 at Annex E shows that Japan scores highly with Brazil also scoring significantly higher than Australia, Britain and Canada. The results from Exhibit E5 imply that the surveyed samples of three countries armed forces should favour tradition, tend to look to the past and honour social commitments.

## COMPARING SECONDARY NATIONAL DATA

This section compares published data from Trompenaars' and Hampden-Turner's model with data published from Hofstede's VSM. Annex F summarises data published by Trompenaars and Hampden-Turner in the 1997 and 1998 second editions of *Riding the Waves of Culture* (Trompenaars and Hampden-Turner 1997) and (Trompenaars and Hampden-Turner 1998). Exhibit 4-3 is based upon the data presented at Annex F and provides data summaries for Australia, Britain and Canada, with comparisons for Brazil and Japan. Brazil and Japan are used as comparisons as there are full results provided for these two countries in the data produced by both Trompenaars' and Hampden-Turner's and Hofstede's models. Exhibit 4-3 shows in graphical form that Trompenaars' and Hampden-Turner's model produces very similar profiles for Australia, Britain and Canada. Brazil has a slightly different profile and Japan has a very different profile from the other three countries.

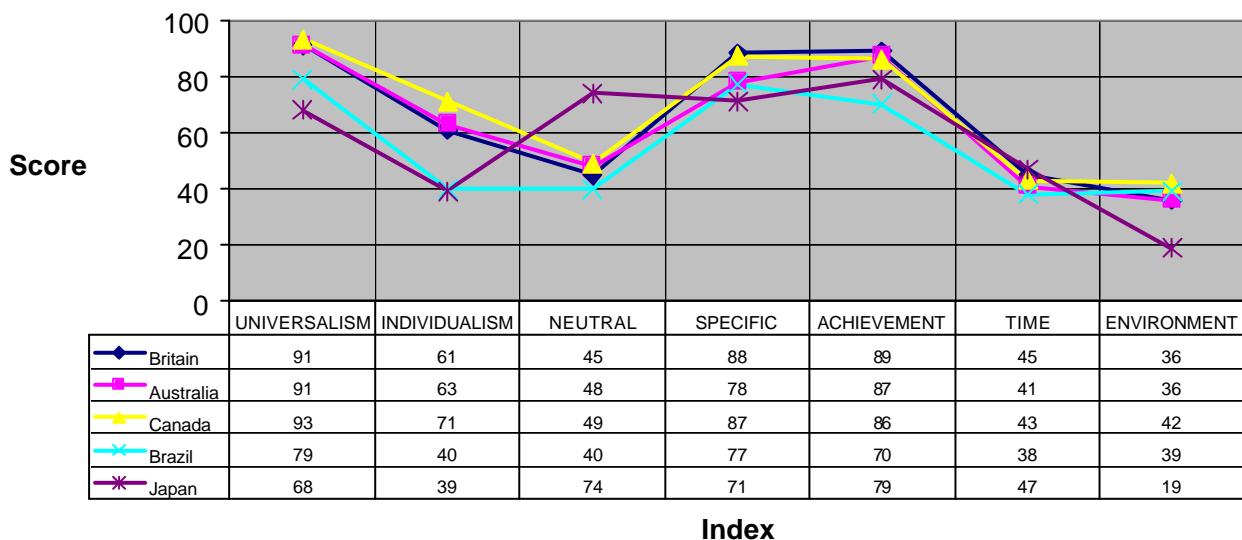


Exhibit 4-3. Country comparisons using Trompenaars' and Hampden Turner's data.

Extracted from data tables provided at Annex F

Annex E summarises the data published by Hofstede in the 1980 and 2001 editions of *Culture's Consequences* (Hofstede 1980) and (Hofstede 2001). Exhibit 4-4 is based upon the data presented at Annex E and provides data summaries for Australia, Britain



and Canada, with comparisons for Brazil and Japan. Exhibit 4-4 shows that Hofstede's VSM 94 also produces very similar profiles for Australia, Britain and Canada and that both Brazil and Japan have very different shaped profiles from the other three countries.

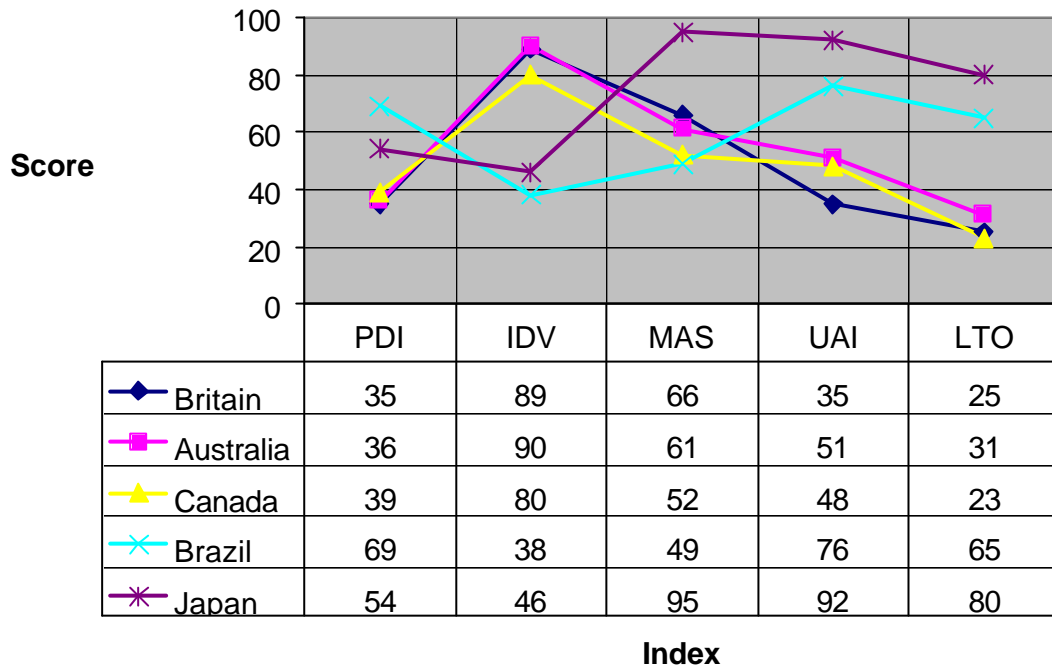


Exhibit 4-4. Country comparisons using data from Hofstede's VSM.  
Extracted from data tables provided at Annex E.

The data and analysis from these two models demonstrate the following:

- It is possible to produce consistent and meaningful results from values surveys.
- Both models support the assumption that the national cultures of Australia, Britain and Canada, are very similar.
- Both models produce results that differ for other nations as the examples of Japan and Brazil demonstrate.
- Both models are based on large data samples that have been updated and amended to reflect subsequent research.
- As the two values surveys have been shown to produce consistent results, they demonstrate the prima facie feasibility of generating meaningful data on the values of the armed forces of Australia, Britain and Canada.

- It is reasonable to expect that the data collected for the armed forces can be compared against the societies from which they stem.
- It is reasonable to expect that the data collected for the armed forces will accurately reflect the organisational values of each service in the three countries.

It should be noted that neither of the models consider all relevant aspects of cross-cultural differences as, “Cultures do not differ only in terms of value priorities.” (Elron, Shamir et al. 1999, p80) For example differences in the approach taken to time such as conception of accuracy, punctuality and speed can be very relevant to the organisation and undertaking of combined military operations. However, in supporting Hofstede’s values dimensions, Elron et al go on to state in ‘Why Don’t They Fight Each Other? Cultural Diversity and Operational Unity in Multinational Forces’, “Yet the dimensions used to classify the various national contingents are not just abstract categories, and they may be highly relevant to the operation of military forces.” (Elron, Shamir et al. 1999, p78)

## **VALIDITY AND RELIABILITY**<sup>5</sup>

In *Integrating Research*, Harris Cooper states, “The most crucial protection against threats to validity caused by inadequate data collection comes from a broad and exhaustive search of literature.” (Cooper 1989, p61) Exhibit 4-6 provides a summary of twenty-seven studies that were found to have replicated some or all of the indices of the VSM. The results of this literature search are considered in conjunction with tests of validity and reliability, shown in Exhibit 4-5, identified by John Cresswell in *Research Design: Qualitative and Quantitative Approaches*. (Cresswell 1994, p121)

<b>Validity Test</b>	<b>Criteria</b>
Content	Do the items measure the content they were intended to measure?
Predictive <sup>6</sup>	Do scores predict a criterion measure?
Concurrent	Do results correlate with other results?
Construct	Do items measure hypothetical constructs or concepts?
Face	Do the items appear to measure what the instrument purports to measure?
Administration Consistency	Were errors caused by carelessness in administration?
Item Consistency	Are the item responses consistent?
Stability	Do individuals vary in time?

Exhibit 4-5. Criteria for validity and reliability of research.  
(Cresswell 1994, p121)

### **Content**

Content validity is defined as “... a subjective measure of how appropriate the items seem to a set of reviewers who have some knowledge of the subject matter.” (Litwin 1995, p35) Content validity is one of the overarching purposes of the literature review to identify academic replications of Hofstede’s VSM detailed in Exhibit 4-6 (also shown at Annex G for ease of reference) over the next few pages.

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
1	(Hofstede 1983)	Yes	Yes	Yes	Yes	No	Arab Countries (Egypt, Lebanon, Libya, Kuwait, Iraq, Saudi Arabia, UAE), Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Colombia, Costa Rica, Denmark, East Africa (Kenya, Ethiopia, Zambia), Ecuador, Finland, France, Great Britain, Germany, Greece, Guatemala, Hong Kong, Indonesia, India, Iran, Ireland, Israel, Italy, Jamaica, Japan, South Korea, Malaysia, Mexico, Netherlands, Norway, New Zealand, Pakistan, Panama, Peru, Philippines, Portugal, South Africa, Salvador, Singapore, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, Uruguay, United States, Venezuela, West Africa (Nigeria, Ghana, Sierra Leone), Yugoslavia	'Culture's Consequences' (Hofstede 1980) primarily focussed on National differences. This paper uses the same data to discuss the influence of national culture on organisations. It argues that ethnocentric management theories, based on the value system of a particular country, are untenable. PDI and IDV are the most relevant dimensions for examining leadership.
2	(Hofstede and Bond 1984)	Yes	Yes	Yes	Yes	No	Australia, Hong Kong, India, Japan, New Zealand, Taiwan	Demonstrates the synergy between different cross-cultural studies.
3	(Hofstede and Bond 1988)	Yes	Yes	Yes	Yes	Yes	Australia, Brazil, Canada, Germany, Great Britain, Hong Kong, India, Japan, South Korea, Netherlands, New Zealand, Pakistan, Philippines, Singapore, Sweden, Taiwan, Thailand, United States, East Africa, West Africa	This paper marks a key development in the VSM. It demonstrates the power and influence of culture not only our daily lives but on the way we think and develop theories. The Chinese Value Survey (created by 'Eastern minds') demonstrated the existence of Confucian Dynamism, later to be known as Long Term Orientation.
4	(Shackleton and Ali 1990)	Yes	No	No	Yes	No	Based on the following organisations: four Sudanese, two British and one Pakistani based in Britain.	Values reported by the study demonstrate that the values of Sudanese managers matched those for other African and Arab nations. Values of the British samples were close to those reported by Hofstede. The study shows that the Pakistanis in Britain, despite a lifetime spent there, scored closer to their country of origin than to their current home.
5	(Leung, Bond et al. 1990)	No	No	Yes	No	No	Canada, Netherlands	On the basis of the Hofstede's analysis of femininity, it was predicted and confirmed that Dutch subjects preferred harmony-enhancing procedures more, and confrontational procedures less than did Canadian subjects.
6	(Hoppe 1990)	Yes	Yes	Yes	Yes	No	Australia, Belgium, Denmark, Finland, France, Germany, Britain, Greece, Ireland, Italy, Malta Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United	Supports the validity of Hofstede's original four dimensions. Identifies that samples need to be matched to achieve valid results.

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
							States	
7	(Hofstede, Bond et al. 1993)	No	Yes	No	No	No	20 organisations from Denmark and Netherlands	Not specifically VSM but extends work on individualism. All text books on factor analysis assume that the cases in factor analysis derive from individuals and do not consider ecological data. Stability of results depends not on number of cultures or ecological groups studied but by the number of individuals.
8	(Randall 1993)	Yes	Yes	Yes	Yes	No	Compares VSM with results of organisational surveys from Australia, Britain, Canada, Israel, Japan, South Korea, New Zealand, Pakistan, Scotland, Singapore, United States,	Further research is required to examine the practical utility of the VSM. Linguistic, regional, tribal, ethnic, religious, social class, and caste cleavages within nations make a single VSM score non-representative of a Nation. Organizational subcultures may add further differentiation. Researchers need to describe settings and samples in sufficient detail so that potential limitations can be recognized.
9	(Triandis, McCusker et al. 1993)	No	Yes	No	No	No	France, Venezuela, Poland, China, Chile, Illinois, Japan, Hong Kong, Indonesia, India	Results not specifically extracted from VSM but linked to IDV throughout. States that the most complete results are obtained when both etics and emics are examined.
10	(Bochner 1994)	No	Yes	No	No	No	Australia, Britain, Malaysia	IDV index is validated using the "I am" test.
11	(Chadwin, Rogers et al. 1995)	Yes	Yes	Yes	Yes	No	Refers to State and Local officials in United States	Argues that VSM indices are not perfect or eternally stable but they do provide an indication of cultural distance.
12	(Chew and Putti 1995)	Yes	Yes	Yes	Yes	No	Japan, Singapore	Findings of this paper suggest that VSM needs to be modified to be applicable to Singapore.
13	(Harrison 1995)	Yes	Yes	No	No	No	Australia, Singapore	Corroborates theoretical construct of PDI and IDV.
14	(Yeh and Lawrence 1995)	No	Yes	No	No	Yes	18 Countries not specified in the paper.	Argues that IDV and LTO are highly interrelated and are not independent dimensions of culture as presented by Hofstede. Also argues that the VSM is not sufficiently refined to provide an adequate relationship between culture and economic success.
15	(Salter 1995)	Yes	Yes	Yes	Yes	No	29 Countries not specified in the paper.	Compares Gray's model which was developed from Hofstede's work with VSM. Finds that Gray's model is weak in explaining professional and regulatory structures from a cultural base.
16	(Albers-Miller and Gelb 1996)	Yes	Yes	Yes	Yes	No	Brazil, Chile, Finland, France, India, Israel, Japan, Mexico, South Africa, Taiwan, United States,	Identifies what it considers to be the following weaknesses of the VSM: <ul style="list-style-type: none"> <li>• It was based upon work undertaken twenty years prior to this paper</li> <li>• Developed empirically rather than theoretically.</li> </ul>

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
								<ul style="list-style-type: none"> <li>Scales for the model were developed within an organizational setting.</li> </ul>
17	(Dawar, Parker et al. 1996)	Yes	Yes	No	Yes	No	Belgium, Britain, Canada, Denmark, France, Germany, Italy, Netherlands, Norway, Spain, United States	The interest of the VSM scores is not their absolute levels but the pattern of differences. UAI and PDI influence the locus of product information search. IDV in this context shows no relation to patterns of product information search.
18	(Eyjolfsson and Smith 1996)	Yes	Yes	Yes	Yes	No	Iceland	Examines the Icelandic pattern of business and management in relation to Iceland's culture.
19	(Humphreys 1996)	Yes	Yes	Yes	Yes	No	Senior technical managers from Britain and Egypt	Uses the VSM on matched samples of principals, vice principals and heads of department. Demonstrates that the export of culturally specific training is fraught with difficulty. Instruments such as the VSM can be used as diagnostic devices in order to determine the nature of cultural difference.
20	(Redpath and Nielsen 1997)	Yes	Yes	Yes	Yes	Yes	Native and non-Native Canadians	Uses the VSM to examine the connections between cultural values and management practices.
21	(Fernandez, Carlson et al. 1997)	Yes	Yes	Yes	Yes	No	Chile, China, Germany, Japan, Mexico, Russia, USA, Venezuela, Yugoslavia	This study suggests there have been significant shifts in values in some countries since Hofstede conducted his original study.
22	(Iribarne 1997)	Yes	Yes	Yes	Yes	No	France, Netherlands, United States	Concludes that the VSM (after 16 years at the time this study was published) has not been surpassed by any other work of the same kind. Limitations tend to be of social science research in general.
23	(Soeters 1997)	Yes	Yes	Yes	Yes	No	Military academies from Belarus, Belgium, Britain, Canada, Denmark, France, Germany, Hungary, Italy, Netherlands, Norway, Spain, United States	Results were: <ul style="list-style-type: none"> <li>PDI much higher than civilian samples from Hofstede's and Hoppe's studies</li> <li>IDV all but two lower (more collective) previous studies.</li> <li>MAS all lower than their civilian counterparts.</li> <li>UAI mixed results but most within three positions of previous studies</li> <li>LTO conceptual relevance for military not clear and therefore not included in this study.</li> </ul>
24	(Soeters and Recht 1998)	Yes	Yes	Yes	Yes	No	Military academies from Argentina, Belarus, 25Belgium, Brazil, Britain, Canada, Denmark, France, Germany, Hungary, Italy, Lithuania, Netherlands, Norway, South Africa, Spain, Sweden, United States	The results of this paper indicate the existence of one international military culture, although there are significant differences between the various national academies. This study is important as it not only replicates the VSM but examines military culture from an organisational perspective.

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
								Samples were an average of just over 50 cadets per country and were extended from the 1997 study above.
25	(Soeters and Recht 1998)	Yes	Yes	Yes	Yes	Yes	Britain, Germany, Italy, Norway, Spain, United States	National differences in military cultures are at least as large as in civilian business and public administration organisations. Military cultures tend to correspond to the national cultures from which they stem.
26	(Merritt) accessed 2000	Yes	Yes	Yes	Yes	No	9,000 male commercial airline pilots in 18 countries	Data were used to conduct a replication study of Hofstede's four dimensions of national culture. The dimensions of PDI and IDV were replicated successfully. MAS and UAI showed only moderate replicability – the former due to poor conceptual relevance in the aviation context, the latter due to the operational derivation of a valid concept. PDI and UAI were identified as the most relevant dimensions for aviation
27	(Hagen 2001)	Yes	Yes	Yes	Yes	No	Dutch and German contingents of the GE/NL Corps (Army)	Examines the similarities and differences between the German and the Dutch contingent of the GE/NL Corps at the date of the survey, and how these relationships have changed over time. One question here is of long-term interest: Is it in the future possible for a common organisational culture to develop in the context of diverse nations, ones which are differentiated by culturally-specific values? If so, what role does time play in the crystallisation of a common culture?

Exhibit 4-6. Replications of Hofstede's VSM  
 Authors identified in Column 2 of the Exhibit.

Specific comments are identified as follows:

Study 6 at Exhibit 4-6 supports the validity of the original four dimensions of the VSM at the country level, “Overall, the positions on PD(I), UA(I), and IDV relative to one another held remarkably well when compared to those in CC (*Culture's Consequences* (Hofstede 1980)). Those on MAS did so only when Sweden was excluded.” (Hoppe 1990, p185 (Brackets added))

Study 26 at Exhibit 4-6 (Merritt) replicated Hofstede's original four dimensions of national culture in the aviation context. The dimensions of PDI and IDV were replicated

successfully. MAS and UAI showed only moderate replicability – the former due to poor conceptual relevance in the aviation context, the latter due to the operational derivation of a valid concept. PDI and UAI were identified as the most relevant dimensions for aviation.

Study 1 at Exhibit 4-6 (Hofstede 1983), states that *Culture's Consequences* (Hofstede 1980) was primarily focussed on national differences. This paper uses the same data to discuss the influence of national culture on organisations. This approach supports the methodology identified in Chapter 2. Hofstede further states that the PDI and IDV indexes are the most relevant dimensions for examining leadership. The following papers covered specific indexes:

### IDV

Study 9 at Exhibit 4-6 (Triandis, McCusker et al. 1993) is closely referenced and linked to Hofstede's work on IDV. The study states that the most complete results are obtained when both etics and emics are examined. Study 10 (Bochner 1994) also validates the IDV index using the "I am test".

### PDI and IDV

Study 13 at Exhibit 4-6 (Harrison 1995) corroborates the theoretical construct of both PDI and IDV, as does Study 26 mentioned previously.

### MAS

Study 5 at Exhibit 4-6 (Leung, Bond et al. 1990) predicted and confirmed, on the basis of the VSM, that Dutch subjects preferred harmony-enhancing procedures more, and confrontational procedures less than did Canadian subjects.



## IDV and LTO

The LTO appears to be suspect with Study 14 at Exhibit 4-6 (Yeh and Lawrence 1995) arguing that IDV and LTO are not independent dimensions of culture. Study 20 states that LTO was the least useful of the dimensions, “The distinctions between long- and short-term orientations are not clear, and the concept groups together a rather disparate set of characteristics that have little to do with time orientation.” (Redpath and Nielsen 1997, 12)

## Content validity for military samples

Study 23 at Exhibit 4-6 (Soeters 1997) found the following<sup>7</sup>:

- PDI much higher than civilian samples from Hofstede’s and Hoppe’s studies.
- IDV all but two lower (more collective) than previous studies.
- MAS all lower than their civilian counterparts.
- UAI mixed results but most within three positions of previous studies.
- LTO conceptual relevance for military not clear and therefore not included in Study 23.

## Predictive

“Predictive validity is the ability of a survey instrument to forecast future events, behaviors, attitudes, or outcomes.” (Litwin 1995, p40) Four studies from Exhibit 4-6 specifically comment on the predictive ability of the VSM. Study 11 (Chadwin, Rogers et al. 1995) concludes that from an organisational perspective the VSM indices are not perfect or externally stable but that they do provide an indication of cultural distance. Time is shown to be of interest and this study demonstrates that there is a need to replicate studies to assess the change in cultures. From a national perspective, Study 17

(Dawar, Parker et al. 1996) states that the interest of the VSM scores is not their absolute levels but the pattern of differences.

Study 20 (Redpath and Nielsen 1997) uses the VSM to examine connections between cultural values and management practices, while Study 19 (Humphreys 1996) demonstrates that the export of culturally specific training is fraught with difficulty. The conclusion from these studies is that although instruments such as the VSM can be used as diagnostic devices to determine the nature of cultural differences they are not precise and the results are not a panacea for cross-cultural understanding. This is supported by Gudykunst in *Bridging Differences* where he states “Individualistic and collectivistic tendencies (for example) exist in all cultures, but one generally predominates. Everyone, however, has individualistic and collectivistic thoughts. It is possible, therefore, for there to be collectively oriented persons in an individualistic culture and individualistically oriented persons in collectivistic cultures.” (Gudykunst 1994, p50)

### **Concurrent**

“Concurrent validity requires that the survey instrument in question be judged against some other method that is acknowledged as a ‘gold standard’ for assessing the same variable” (Litwin 1995, p37). Part 2 of Chapter 2 extensively demonstrates the concurrence of the VSM with other models that have also been thoroughly researched. This evidence is supported by Study 2 at Exhibit 4-6 (Hofstede and Bond 1984) which demonstrates the synergy between different cross-cultural studies. The VSM was amended to include a fifth dimension, in accordance with the findings of Study 3 (Hofstede and Bond 1988) which demonstrated the power and influence of culture not only on people’s daily lives but on the way they think and develop theories. The Chinese Value Survey (created by ‘Eastern minds’) demonstrated the existence of Confucian Dynamism, later to be known as Long Term Orientation (LTO). The findings of Study 3 are supported by Study 12 (Chew and Putti 1995), which suggests that the VSM would need to be modified to be applicable to Singapore.

## **Construct**

“Construct validity is the most valuable yet most difficult way of assessing a survey instrument.... This form of validity is often determined only after years of experience with a survey instrument.” (Litwin 1995, p43) The VSM was first published in *Culture’s Consequences* in 1980 (Hofstede 1980) and has since been refined. Hofstede published the results of an updated version of the VSM in the second edition of *Culture’s Consequences* in 2001 after further extensive research (Hofstede 2001). The most significant change to the VSM is the introduction of a fifth index, LTO, which may require further research as there is considerably less evidence to support the construct validity of this index. The factor analysis that Hoppe undertook in Study 6 at Exhibit 4-6 supports the construct validity of the original four dimensions of the VSM (Hoppe 1990, p188).

Study 6 at Exhibit 4-6 supports Hofstede’s requirement that samples for the VSM should be chosen with care, “...it is important to ensure that the country samples are matched in regard to pertinent demographic variables in order to distinguish meaningfully among them.” (Hoppe 1990, p186)

Study 16 at Exhibit 4-6 (Albers-Miller and Gelb 1996) identifies construct validity weaknesses of the VSM which are addressed below:

- It was based upon work undertaken twenty years prior to this study. This criticism is addressed by the publication of the second edition of *Culture’s Consequences* (Hofstede 2001).
- It was developed empirically rather than theoretically. This argument is unfair; Hofstede gained the data empirically but the subsequent analysis for each of the dimensions arose from theoretical reasoning and extensive research.

- Scales for the model were developed within an organizational setting. This is true and is in fact one of the reasons the VSM was chosen for this study. Successful replications identified at Exhibit 4-6 have examined the following:
  - National level studies ranging from 2 to 54 countries.
  - Different sub-cultures within a single country.
  - Organisational level studies from 2 to 20 organisations.
  - Armed forces from 2 to 18 countries.

### **Face**

“Face validity is based on a cursory review of items by untrained judges... It is the least scientific measure of all the validity measures and is often confused with content validity.” (Litwin 1995, p35) This method of checking validity was not used for this study.

### **Administration**

Any data that is collected through surveys will be subject to a certain amount of error. “In survey research, error comprises two components: random error and measurement error.” (Litwin 1995, p5) Careful administration can help to improve the reliability of survey results and is discussed in more detail in Chapter 5.

Study 8 (Randall 1993) identifies several specific administration issues:

- Further research is required to examine the practical utility of the VSM. Evidence in Chapter 2 shows that there are no perfect models for examining culture. It has been demonstrated that the VSM has been thoroughly researched and tested with supporting evidence provided at Exhibit 4-6.

- Linguistic, regional, tribal, ethnic, religious, social class, and caste cleavages within nations make a single VSM score non-representative of a nation. Study 4 at Exhibit 4-6 (Shackleton and Ali 1990) supports this observation and found that the values of the Pakistanis in Britain, despite a lifetime spent there, scored closer to their country of origin than to their current home country. This was addressed in the definition of ‘nation’ in Chapter 1.
- Organizational subcultures may add further differentiation. Although the military cultures of Australia, Britain and Canada were broken down into the three services of the Army, Navy and Air Force, further subdivisions could be considered. This issue is addressed further in Chapter 10.
- Researchers need to describe settings and samples in sufficient detail so that potential limitations can be recognized. This issue is discussed in detail in the following chapter and is examined in the methodology section of Chapter 2.

### **Item**

“Internal consistency reliability....is applied not to single items but to groups of items that are thought to measure different aspects of the same concept.” (Litwin 1995, p21) Litwin argues that although single items may be easier to administer, the data set is richer and more reliable if several different items are used to gain data for a particular topic. The VSM provides internal consistency reliability with each of the five indexes calculated from answers to four different questions. Study 6 at Exhibit 4-6 specifically supports the item consistency of the VSM; “Old and new items in their majority correlated with one another as expected by Hofstede.” (Hoppe 1990, p190).

### **Stability**

Several aspects of stability were identified by the studies in Exhibit 4-6. Study 7 (Hofstede, Bond et al. 1993) argues that textbooks assume that the cases in factor analysis

derive from individuals and do not consider ecological data (which this study uses). Stability of results depends not on number of cultures or ecological groups studied but by the number of individuals. The stability of the VSM was demonstrated in Chapter 3, at Annex C and is examined further in the next section.

Study 21 at Exhibit 4-6 (Fernandez, Carlson et al. 1997) suggests there have been significant shifts in values in some countries since Hofstede conducted his original study. It warns that the data were collected from a large organisation with a strong organisational culture. Although the relative values of each country may shift over time, the study makes no observation about the stability of the values themselves. Study 22 at Exhibit 4-6 (Iribarne 1997) concludes that the VSM has not been surpassed by any other work of the same kind and that its limitations tend to be of social science research in general.

### **Triangulation**

One important test of validity not considered in Exhibit 4-6 is triangulation. Triangulation can help to verify the validity of data and information used for a research project. John Creswell describes this test in *Research Design*, “The concept of *triangulation* was based on the assumption that any bias inherent in particular data sources, investigator, and method would be neutralised when used in conjunction with other data sources, investigators and methods.”(Cresswell 1994, p174) Triangulation requires multiple sources of data and information to enable the development of ‘converging lines of inquiry’ (Yin 1994, p91-93).

Triangulation is achieved in this study in several specific ways. First, Chapter 3 examines a variety of methods to map culture and explains why values are the logical element of culture to examine for this study. Second, the VSM is compared in this Chapter against other widely researched academically based cross-cultural research surveys and subsequent VSM replications to ensure that consistent results are achievable. Third, triangulation is achieved through the production of nine different sets of data

samples from three countries. Finally, the academic literature review of factors that shape values in Chapter 5 provides an overarching triangulation check to the logical flow of this Study.

### **Standard criticisms**

In *Culture's Consequences* (Hofstede 2001, p73) Hofstede identifies five standard criticisms of the VSM and provides answers. The issues are outlined here as they draw this Chapter to a suitable close:

- “Surveys are not a suitable way of measuring cultural differences.”
  - Hofstede’s answer: “They should not be the only way.”
  - Comment: In this study the survey data is supplemented by the literature review in Chapter 5, which examines influences on the five indices of the VSM.
- “Nations are not the best units for studying cultures.”
  - Hofstede’s answer: “True, but they are usually the only kinds of units available for comparison and they are better than nothing.”
  - Comment: This issue is acknowledged and is examined in Chapter 1.
- “A study of the subsidiaries of one company cannot provide information about entire national cultures.”
  - Hofstede’s answer: “What were measured were the *differences between* national cultures. Any set of functionally equivalent samples from national populations can supply information about such differences. The IBM set consisted of unusually well matched samples for an unusually large number of countries.”
  - Comment: The samples surveyed for this study are as functionally equivalent as is possible to get and are defined in the methodology in Chapter 2. Subsequent chapters analyse the differences and similarities between the samples used in this study.
- “The IBM data are old and therefore obsolete.”

- Hofstede's answer: "The dimensions found are assumed to have centuries-old roots; only data that remained stable across two subsequent surveys were maintained, and they have since been validated against all kinds of external measurements; and recent replications show no loss of validity."
- Comment: The VSM has been comprehensively validated in detail in Chapter 3 and throughout this Chapter. In addition a second edition of *Culture's Consequences* was published in 2001, which was the same year the primary data for this study was collected. (Hofstede 2001)
- "Four or five dimensions are not enough."
  - Hofstede's answer: "Additional dimensions should be both conceptually and statistically independent from the five dimensions already defined and should be validated by significant correlations with conceptually related external measures."
  - Comment: Annex C demonstrates that there is congruence across the various dimensions identified by each of the models.



## **CHAPTER SUMMARY**

This Chapter has examined models for surveying national and organisational cultures in order to demonstrate that a consistent approach to analysing values is achievable. The Values Survey Module (VSM) is identified as the most widely researched and best matched model to support this study. The VSM is verified for validity and reliability by matching previous replications against defined tests. Triangulation is also used to compare the expectations of the VSM from this Chapter to those in subsequent chapters.

Chapter 5 identifies influences on the cultural values measured by the VSM for the armed forces sampled in this study based upon the evidence of reviewed literature. Although the comparisons have been carefully structured and defined, the reviewed literature does not always provide evidence that exactly corresponds to this structure. Chapter 5 addresses complex issues based on cultural values that are seldom clear or precisely defined. This makes the precise definitions presented in this Chapter an important aid to extracting useful information from the reviewed literature.

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## **CHAPTER NOTES**

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<sup>1</sup> The codebook and data are provided for academic research through the following website:

<<http://www.icpsr.umich.edu/ACCESS/nonpub.html>>

<sup>2</sup> Hoppe's PhD thesis was based upon Hofstede's VSM and much of the thinking behind the Learning Framework appears to be based on this research. Hoppe, M. H. (1990). A comparative study of country elites: International differences in work-related values and learning and their implications for management training and development. School of Education. Chapel Hill, The University of North Carolina.

<sup>3</sup> The VSM can be downloaded in various languages electronically from the following website:

<[http://cwis.kub.nl/~fsw\\_2/iric/index2.htm](http://cwis.kub.nl/~fsw_2/iric/index2.htm)>

<sup>4</sup> UAI should not be confused with risk avoidance. "Uncertainty is to risk as anxiety is to fear. Fear and risk are both focused on something specific: an object in the case of fear, an event in the case of risk. Risk is often expressed in a percentage of probability that a particular event may happen. Anxiety has no object, and uncertainty has no probability attached to it. It is a situation in which anything can happen and one has no idea what." Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. Thousand Oaks, Sage.

<sup>5</sup> Hofstede states, "A problem for replications on few cultures is that the reliability of the measurement cannot be checked in the usual way. Thesis committees and journal reviewers often ask for proof of the reliability of the instruments used. Novice researchers, forgetting that they are comparing cultures, not individuals, then apply reliability calculations... on individual scores and find very low values. However, the reliability of a cross-country test can be tested only across countries. This requires data for a sufficient number of countries – say, 10 or more – without which the reliability of the instrument can simply not be tested in the textbook way and has to be taken for granted based on the literature. PhD candidates may have some trouble explaining this to thesis committee members who are not accustomed to ecological-level research." Ibid.

<sup>6</sup> Predictive and Concurrent Validity are often considered as two components of Criterion Validity which is defined as "...how well one instrument stacks up against another instrument or predictor." Litwin, M. S. (1995). How to Measure Survey Reliability and Validity. Thousand Oaks, Sage.

<sup>7</sup> The results of this Soeters' study are discussed in more detail in Chapter 10 as he raises interesting issues when they are compared to the results obtained by this study.

## **INTRODUCTION TO CHAPTER 5 – CULTURAL INFLUENCES**

This Chapter identifies influences on the shaping of cultural values of the armed forces sampled in this study. A variety of works relevant to cultural values are examined including academic literature, official documents and authoritative articles from journals and other publications. Much of the evidence produced by this literature review is based on different approaches and research methodologies that are less formal than that used for this study. In addition, this Chapter addresses complex issues that are seldom clear or precise and it is important to note that it is not a general literature review but is targeted at finding specific value influences to support the Values Survey Module research.

The issue of making valid comparisons is problematic. The British Army and Royal Air Force have published 'Values and Standards' documents but the Royal Navy has not (MOD 2000) and (MOD 2000). This means that the national and international and intra-national organisational influences on cultural values identified in this Chapter need to be examined and tested using a carefully defined structure. Although the comparisons are carefully structured and defined, the reviewed literature does not always provide evidence that exactly corresponds to this structure.

It is worth reiterating at this point that Hofstede is quoted in Chapter 1 as stating that national and organisational cultures are not the same<sup>1</sup>. The requirement to separate national culture from organisational culture is supported by Nancy Adler in *International Dimensions of Organizational Behaviour* where she states, "Does organizational culture erase or at least diminish national culture. Surprisingly the answer is no." (Adler 2002, p67) Throughout this Chapter national, intra-national organisational and international organisational influences are highlighted at the end of each section. These influences are collated and profiled in detail in Chapter 6.

## **IDENTIFYING SPECIFIC VALUE INFLUENCES**

Armed forces do not exist in a vacuum and they do not develop separately from the values of the societies from which they stem, “All military organisms, and the forms and concept of war they adopt, interact with the conditions and circumstances of which they form a part.” (Applegate and Moore 1990, p13) However, most armed forces embrace a distinct and recognisable way of life that differs from civilian society in some form. This is based upon concepts such as bonds of comradeship, shared values and mutual respect. In ‘Why Don’t They Fight Each Other? Cultural Diversity and Operational Unity in Multinational Forces’, Elron et al state that, “Military troops often arrive for service in multinational forces sharing what may be called a common (worldwide) military culture.” (Elron, Shamir et al. 1999, p84) This view is shared by Joseph Soeters in a paper entitled ‘Commander’s responsibility in multinational operations’ where he states, “It was found that in comparison to the business sector the armed forces in some twenty countries show an overarching international military culture which is relatively bureaucratic-hierarchical and institutional or parochial...” (Soeters 1998, p2)

The view that a common military culture exists is not subscribed to universally. Samuel Huntington writes in *The Soldier and the State*, “An alternative approach is to define military values by source... But the difficulty here is that everything which comes from a military source does not necessarily derive from its character as a military source. Military men are also Frenchmen and Americans, Methodists and Catholics, liberals and revolutionaries, Jews and antisemites.” (Huntington 1957, p60) This reflects the issues described in Chapter 1 whereby cultural influences vary according to the level and context in which they are being examined. Christopher Dandeker supports the view that military cultures are diverse and states “... individual services also have their own specific cultures: For example, the combat units of the different services.” (Dandeker 2000, p175) Every culture has to deal with a limited number of universally shared problems but many will deal with these in different ways. Values define the way these problems are dealt with and they in turn are shaped by outside influences and ecological factors. In order to try and explain the similarities and differences of values of the armed



forces identified in this Chapter an approach is required that ensures factors are examined consistently in the literature.

In *Cross-cultural Encounters: Face-to-Face Interaction* (Brislin 1981, p10-15) Richard Brislin identifies six factors that are central to empirical cross-cultural research. Part 1 of this Chapter provides evidence to support the use of these six factors. These factors are used as a framework to examine national and organisational influences on the cultural values of the armed forces sampled for this study, as shown in Exhibit 5-1 below.

Paragraphs are annotated throughout the text, in order to identify the links to influences listed at the end of each section.

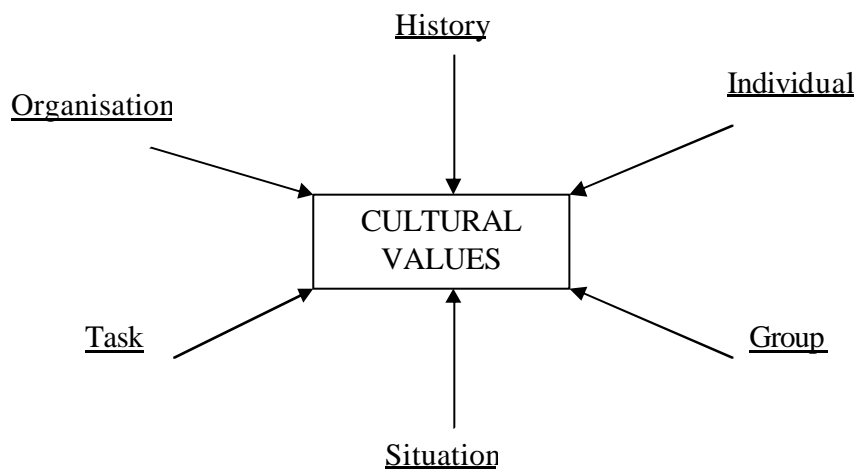


Exhibit 5-1. Six influences that shape cultural values  
Identified from (Brislin 1981, p10-16)

### History

All cultures are influenced by their history and it is therefore an important initial factor in attempting to understand the influences on a group's specific values. In *When Cultures Collide* Richard Lewis states, "The behaviour of the members of any cultural group is dependent, almost entirely, on the history of the people in that society." (Lewis 1996,

p65). Brislin defines history in the following manner, “History, then, refers to aspects of a people’s world which they are ‘born into’ and which they are expected to learn or accept in order to become a normal, functioning member of society.” (Brislin 1981, p11) A danger is that histories can be rewritten to reflect a desirable outcome rather than what actually occurred. They are also open to interpretation. However, preceding events do influence the evolution of cultures and it is generally accepted as good practice to look for the antecedents to specific values. “By studying history comparatively... we can detect the workings of the cultural system rather than attributing the outcomes to the machinations of persons or the muscle-flexing of political movements.” (Bohannon 1995, p163)

### **Individual**<sup>2</sup>

Individual factors include personality traits and skills, which an individual has discovered to be negative and positive when dealing with people in a cross-cultural environment. This factor stems from cross-cultural psychology, which studies “...the diversity of human behavior in the world and the link between individual behavior and the cultural context in which it occurs.” (Berry, Poortinga et al. 1992, p1) The specific group focus of this study was discussed in Chapter 1 and identified at Exhibit 1-2, which makes individual factors difficult to incorporate within the framework of this study. Although ‘the individual’ is not considered in any detail, it is impossible to ignore the need for individuals from organisations to deal with each other, if their respective organisations are to work together effectively. The aspect of the individual factor that is most useful in the context of this study is where individuals can achieve cross-cultural understanding to become mediators for two or more groups.

## **Group**<sup>3</sup>

When considering the group factor a number of issues need to be considered:

“Human beings are intensely social animals. The amount of time each of us spends with others is immense. But human beings are also highly creative in the sociality. When the size of any group increases, for example, new culture...can be invented to keep the group from falling to pieces.” (Bohannan 1995, p27)

Many communication problems between groups are due to different values. Groups may also be competing for scarce resources, which will exacerbate discomfort and mistrust if effective communication is not established. There are a number of key variables which include the intensity of pre-contact attitudes, opportunities for intimate contact, relative status of the groups and opportunities to establish super ordinate goals valued by both groups. To maximise the chances of success ethnocentrism needs to be eliminated as far as possible and cultural relativism successfully applied.

Cultural homogeneity and subcultures were identified in Chapter 1 as issues that require consideration within this study. The discussion is based on the assumption that all nine of the samples examined in this study are treated as homogeneous groups that do not have subcultures. As discussed in Chapter 1, from many perspectives this is not the case. For example, the samples relate only to staff college officers and do not consider the values of non-commissioned personnel, although it could justifiably be argued that their values are just as important. Another example is the regimental and corps system of the British Army, which has been fostered by the Australian and Canadian Armies and has created distinct subcultures. Much of the literature reviewed for the ‘group’ refers to divisions such as these. It is a valid observation that these divisions merit study in their own right. However, due to the focus of this study it is worth re-emphasising the point, made in Chapter 2, that a specific set of samples has been chosen and that to consider others would cause this study to fragment and become unmanageable.

## **Situation**

“The situation is a very important determinant of behavior. Most of us act as expected in a particular situation *as we see it.*” (Triandis 1994, p210) When dealing with other cultures the expected behaviour may well be very different from one’s own perspective of what is required. When the expected responses are not forthcoming from either party stress can accumulate caused by an unfamiliar environment and the change in lifestyle this requires. This effect can lead to culture shock, which must be managed to ensure that effective communication is established<sup>4</sup>.

## **Task**

Understanding of tasks and how they should be completed may well be different for individuals and groups from different cultures. Their perceptions of structures, practices and policies within a culture will be defined by their values. Bohannan states, “Human beings have, using culture, added many new modes of dividing tasks. Indeed the more complex the society becomes, the greater the need for division and the more specialised the criteria for division are likely to be.” (Bohannan 1995, p33) The Protestant work ethic encourages a positive attitude towards tasks, which is not reflected across all social groups. Influences such as the environment can significantly affect the perspective of how tasks should be approached “...the changing seasons regulated agricultural work, while domestic textile workers determined how hard they worked and when they completed their tasks.” (Haralambos and Holborn 2000, p686). Although similar organisations in different cultural environments may appear to be alike, this may be the result of an imposed structure rather than from a shared understanding of the structural requirement. This approach frequently does not translate across cultures and superficial acceptance may mask value related conflicts that will surface at a later and more damaging time. When working with other cultures the task, preparation for completing it, and success criteria become more important. If these are not understood in the target culture, there is a good chance of task failure.

## **Organisation**

Schein states that, although individuals influence organisational culture, organisations develop from group learning when members resolve challenges together. (Schein 1997, Ch7) How contact with other groups is conducted is a part of the organisational culture. This is true for all armed forces and other agencies that may be found during a deployment. The potential advantage of understanding other organisations is that it will automatically encourage leaders and managers to think across cultural boundaries and enhance the conduct of their organisation's activities

## **Dangers of the approach**

There are three dangers with this approach to understanding cross-cultural issues:

- The first is ethnocentrism as Brislin based most of his conclusions from work undertaken in the United States. Ethnocentrism is covered in detail elsewhere in this study.
- The second issue is that there can be so many concepts that there is a risk of the results becoming an amorphous mass that is difficult to comprehend. This is reduced through the medium of two complementary concepts. The first are the national, intra-national and international foci, which are followed throughout this study. These alone would not suffice for this chapter to provide a straightforward logical discussion and they have therefore been supported by the six cultural influences to break the discussion into unambiguous but relevant elements.
- The final issue is that these concepts can be treated as pigeon holes which "...encourage people to ignore the important interrelationships among them." (Brislin 1981, p16) A fundamental problem with the national, international and intra-national levels and the six influences on cultural values is that although they bring structure to the discussion they are artificial constructs. While these constructs are useful in attempting to provide a logical flow, they have limitations. One is that they might constrain the discussion and understanding through over rigid application of preconceived ideas and stereotypes. A second is that many of the issues discussed in

this chapter do not sit comfortably in a single pigeonhole and may have an impact across more than one concept. Finally, the flow of the discussion can become stilted and over-constrained to the point where the issues raised are strangled through over regulation.

This chapter attempts to provide a non-ethnocentric, logical and balanced discussion of the influences on the cultures of the armed forces of Australia, Britain and Canada. It must be acknowledged that this is all but impossible to achieve and that there is room for discussion in the final assessments made in this Chapter.

## **HISTORY**

Before the 19<sup>th</sup> Century, military values were impossible to separate from those of the ruling classes of Europe, as they were in effect the same. Until the start of the 19<sup>th</sup> Century officers were either mercenaries, with little opportunity to progress past field rank, or aristocrats. The period of the Revolution from 1789 to 1795 transformed the French Army in ways that had a dramatic domino effect on the armed forces of the western world in a relatively short time. The composition and disposition of the French officer corps went through changes which although perhaps less overt than the purging of the nobility, fundamentally transformed the relationship between officers and soldiers and expectations of the officer corps. Some central elements to this change were:

- The French officer knew that he would be expected to undergo the same privation, workload and risks as his men. (Lynn 1984, p68)
- Duties and responsibilities of officers differed from the soldiers but all were equal as citizens. (Lynn 1984, p94)
- Discipline was equally and fairly enforced, from generals down to private soldier. (Lynn 1984, p95 and pp115-116)
- Pillage, with the resulting breakdown of military discipline and civil good will, became punishable by death. (Lynn 1984, p95 and p116)

These changes to the French Army were not without difficulties with officers executed for making 'incivic' comments and "all too often French troops resisted their officers." (Lynn 1984, p116 and 109) In spite of these difficulties, the officer corps generally became full time professionals and closely-knit teams were created. These transformations were to allow Napoleon Bonaparte to rise from the rank of lieutenant at 20 and a relatively poor background to command of an army at the age of 26 and then on to enable France to be one of the major European military powers for nearly twenty years. (H1)

In 1806 Napoleon's armies convincingly defeated those of Prussia in two battles. On 16 August 1808 the Prussian government followed the French example and directed a radical new approach for the appointment of officers. The decree on this date stated:

“The only title to an officer's commission shall be in time of peace, education and professional knowledge; in time of war, distinguished valor and perception. From the entire nation, therefore, all individuals who possess these qualities are eligible for the highest military posts. All previously existing class preference in the military establishment is abolished, and every man, without regard to his origins, has equal duties and rights.” (Huntington 1957, p30-1)

The impact of the French changes, followed by the Prussian reform, was such that by the start of the 20<sup>th</sup> Century, only one hundred years later, almost all western countries had created similar officer corps. The removal of social barriers to commanding at all levels enabled the development of a professional corps of officers whose full time focus was on the armed forces in much the same way that doctors and lawyers generally concentrated on their profession. This enabled the development and promotion of the most able leaders. The European approach to forming the leadership of armed forces continues today in the practices of Australia, Britain and Canada. (H1)

The British military tradition has heavily influenced Australia and Canada and throughout the Twentieth Century all three countries closely shared significant military and political experiences. In 1914, the British Expeditionary Force in France consisted of just 120,000 men. In comparison to the other European armies, it was tiny but its performance in battle and contribution to the war proved to be out of all proportion to its size. Britain is proud of the contribution of its armed forces to World War I (WWI) and Australia and Canada are also just as proud of their military heritage. “Canadians and Australians barely notice each other in their writing of their own nation's histories. Though each nation was substantially a colony of British settlement - a British dominion - and therefore had and still has much in common with the other... Nowhere are the similarities



(and contrasts) clearer than in the histories of the two countries' experiences of the two world wars of the last century." (Bridge 2001, p623) Throughout WWI British and Commonwealth soldiers from Canada, Australia and elsewhere fought with distinction against the Central Powers to defend similar values. "Deeply unfashionable though it may be to say so, Canada, Australia and our allies fought the two world wars in defence of democracy and freedom, values which, at least for us in the British Commonwealth, were struck from a common English root." (Bridge 2001, p629) (H2)

If one gallops rapidly through history to a more recent operation where the three countries deployed side by side in East Timor it is possible to see the continuing effect of these shared values on the armed forces. General Cosgrove who lead the deployment to East Timor is quoted as saying, "While I take my hat off, of course, to the Australian infantry, the Kiwis, the British, the Irish and the Canadians... were all cast from the same mould." (Jane's 2002, Current Developments and Recent Operations) (H2)

### **Australia - History**

The Australian armed forces enjoy an enviable reputation throughout the world due to their effective involvement in World War One, World War Two and operations in Borneo, Korea, Malaya and Vietnam. This success is in spite of the fact that Australia was relatively tardy in developing its own military capability. "Military forces were slow to develop in Australia. Nineteenth century Australia was remote and division of the Continent into six colonies did not encourage coordination of defence." (Perry 1988, p149) In spite of this relative late development, the military tradition has had a profound effect on the national psyche, "In so far as Australia has ever influenced the course of events on the world stage, it has been on the battlefield. In so far as Australians observe a national day, that day is not Australia Day, the anniversary of our foundation as a settler nation in January 1788, but Anzac Day..." (Coulthard-Smith 1993, pXIII) (H7)

For the first part of its history, Australia was protected through the naval might of Britain. "So far as defence policy is concerned the supremacy of the Royal Navy protected

Australia from serious threat of invasion throughout the 19<sup>th</sup> century.” (Perry 1988, p150) The withdrawal of the last British Regiment in 1870 was the catalyst for the eventual creation of a separate and distinctive military tradition in Australia, although any such divergence would have been difficult to discern at the outset. (Lee 2004, p1) For over a century the traditions and reputations of the British Army and Royal Navy heavily influenced the development of Australia’s armed forces. Up to World War Two leaders sought to maintain a close relationship with Britain’s armed forces in order to maintain Australia’s military capability, “In particular, Chauvel sought to keep a close relationship with the British Army, by sending officers to the staff colleges and to the Imperial Defence College and on exchange duty in various British headquarters. Insistence on this policy prepared the more senior officers of the Australian Staff Corps for their outstanding part in World War II.”<sup>5</sup> (Coulthard-Smith 1993, p111) (H3,H4,H9)

When Australia became a federation in 1901 it had already acquired an impressive military record through participation in a wide range of operational deployments. This might seem surprising, “...given the absence of any direct threat to any of the Australian colonies in the nineteenth century.” (Coulthard-Smith 1993, p9) It is also surprising given the complexities of forming a national army from the colony’s defence forces and the ongoing influence of the Royal Navy in Australia. In contrast, the formation of the Royal Australian Air Force was uncomplicated. The official birthdays for Australia’s armed forces are: Army 1 March 1902, Navy 10 July 1911 and the Air Force 31 March 1921.(Lee 2004, p1) The active involvement in the campaigns of the empire partly explains Australia’s military readiness in under a decade of effort before WWI. “On the eve of the First World War Australia was in a relatively advanced state of defence preparedness, considering that it was a large, difficult and unlikely target for any potential aggressor, located far from the main focal points of tension between the world powers.” (Coulthard-Smith 1993, p60) WW1 was a ‘baptism of fire’ for the Australian Army with significant casualties in terms of proportion to total involvement and as a proportion of the national population. (Lee 2004, p1)

The lessons of being prepared for military involvement in world events were not supported politically in the inter-war years before World War Two. “From 1922 through 1938, the army consisted of skeleton formations that were so far under strength that even after linkage they more closely resembled social clubs than military units... The government’s attitude towards its armed forces assured that military competence would decline from the high point in 1918, when Australian divisions were among the elite on the Western Front, to 1939 when, on the eve of war, the nation’s army was virtually impotent.” (Palazzo 2001, p132) The lesson was re-emphasised during the Korean War, which “...highlighted the continuing deficiencies in the army’s readiness and difficulties that it had in maintaining its in-theatre forces, even at the nation’s token level of commitment.” (Palazzo 2001, p218) In spite of tight budgets in recent decades, the Australian Defence Force has attempted to ensure that it retains a credible fighting capability that can intervene effectively in regional disputes. During October 1999 the ADF deployed to East Timor to protect the population following post referendum violence. “Under Australian leadership this operation (INTERFET) appears to have been extremely successful and almost certainly has laid the foundations for future UN operations of this type.” (Jane's 2002, National Overview) On the surface, this was a hugely successful operation but it stretched the ADF to its limits and resulted in renewed political interest in the capability of the Australian Armed Forces. (H5, H11)

With the decline of British influence throughout the Commonwealth, Australia turned to the United States to provide a lead in the region. “During WWII the United States took up this duty, and Australia has remained closely allied with America ever since.” (Palazzo 2001, p310) The creation of jungle divisions during WWII was significant for Australia as it was the first time it had developed a force structure of its own design expressly for conditions in which its forces would operate. “In the past, imperial authorities had designed the organisations that the Australian Army had utilised. Consequently, previous formations satisfied more the needs of London than Canberra. Australia’s decision to develop a local organisation also reflected the growing maturity of its commanders and a willingness to decrease their association with the imperial army.” (Palazzo 2001, p184) (H6)

The growing influence of the US over Australia was demonstrated during the Vietnam War where "... it was only natural for the Australian Army to have more in common with, for example, the American ground structure in Vietnam than with the RAN or RAAF." (Palazzo 2001, p320) Until recently the Royal Australian Navy (RAN), Australian Army, and Royal Australian Air Force (RAAF) have had little contact with each other, with services preferring affiliations to other countries for operational development, with the RAN for example having very close links with the RN. "The conduct of joint operations was one of the areas in which there was great potential for the ADF to improve its effectiveness. In the past each service had tended to undertake combined or joint operations with the equivalent branch of allied armed forces." (Palazzo 2001, p318) In December 2000 the Australian Government "...abandoned the so-called 'fortress Australia' mentality in recognition of the need to become a partner in the broader span of Asia Pacific regional affairs." (Gackle 2001, p6) (H3, H4, H6, H8, H9, H10, H11 T2)

### **Britain - History**

Like many other countries, the British Government uses its armed forces to further foreign policy. Today, Britain balances political and military support between US and European policy, whereas in past centuries it was a major imperial force. There is a significant difference in the nature of the Britain of the 21<sup>st</sup> Century and that of the past. Imperial expansion began in the 17<sup>th</sup> Century and by the time of Queen Victoria's death in 1901 Britain ruled over a quarter of the land mass and population of the planet. Much of the Empire existed to protect routes to India, which was considered as the 'jewel in the crown'. With the partition and independence of India in 1947, the rationale for maintaining the empire ceased, and by 1965 most of the other colonies had achieved independence with many electing to remain in a loose association called the Commonwealth<sup>6</sup>. (H12)

As the first industrial society, sources of raw materials, markets for finished goods and room for population expansion were needed. Consequently, Britain established the 'old'

colonies in North America, Australasia and the West Indies. As the empire grew during the 17<sup>th</sup> and 18<sup>th</sup> Centuries, the Royal Navy and the British Army were used to support the establishment of colonies, protect trading posts and suppress the activities of rivals such as the Dutch, Spanish and the French. In the 19<sup>th</sup> Century, the British Army was largely 'supplanted' by the Indian Army as a colonial force in India. This second colonial army, commanded mostly by British officers, had a great influence on the development of the British Army. (Barnett 1970, p314-6) (H12, H13)

The basic 'building block' of the Royal Navy was and is the capital warship. "In Britain, the battleship was considered the 'final arbiter' of naval combat and dominated the war-fighting culture of the British Navy," (Legro 1994, p123) This influence continues today with the 'ship' providing the fundamental level of maritime influence to support government policy.

In *Redcoat: The British Soldier in the Age of Horse and Musket*, Richard Holmes states that "The framework of the British Army was clear by 1760. It was to change little until the eve of the First World War, and its influence has persisted well into our times." (Holmes 2001, p13) With the withdrawal of British armed forces from many of its colonies in 1870, imitations of the British Army grew in place. Regimental systems existed in most of the colonies but few, as in the case of Australia in 1901, had been effectively nationalised by the time of independence. Many former colonial regiments of Australia and Canada maintain 'alliances' with each other and with their British counterparts. (Mills 1996, Military History) (H12)

Over three and a half centuries the Royal Navy and British Army evolved from small ad hoc organisations to professional and widely deployed imperial forces. All three services have greatly reduced in size in recent decades, although they continue to operate throughout the world in support of British Government policy. Traditionally the British armed forces have been all volunteer professional organisations but conscription was resorted to from 1916 to 1918 and was reintroduced in early 1939 lasting throughout WWII until it was phased out in 1962. (Jane's 2002) (H12)

With few exceptions, Britain's armed forces have historically supported the civilian political leadership of the country. "Among other things, this results from a high degree of harmony between political leaders and officers based on the assumption that they have complementary roles to play in deciding and managing national defense." (Bland 1999, p12) The decline in Britain's international presence has resulted in smaller more regionally focussed forces. In the United Kingdom chapter of *The Defense Policies of Nations* David Greenwood asserts that this focus has started to expand into a global interest once more, as a "major power of the second order." (Greenwood 1994, p281) (H13)

### **Canada - History**

Canada's military history is similar to that of Australia in that for the first part of the country's divided existence it was protected by its colonial masters. The significant difference from Australia is that Canada was divided between France and Britain and it was only in 1841 that the Act of Union joined the two Canadas. In both Canadas there was similar protection from the mother country, "One must realise that the military tradition of French and English Canada was functionally almost non-existent. Both were acquainted with the concept of functional military effectiveness and/or leadership residing in an extraterritorial overlord who assumed responsibility for Canadian defense." (Vano 1988, p137) This protection developed Canada's armed forces in two distinct ways for the navy and the army. "Canada's army originated in the militia formed by the French in the seventeenth century, continued and supplemented by units formed in British Canada." (Perry 1988, p126) However, the Royal Navy continued to provide security of the trade routes throughout the British Empire "Canada's security was based on the shield provided by the Royal Navy although there were perennial fears of invasion from the United States." (Perry 1988, p126) (H3, H14)

With the withdrawal of the remaining British troops in 1854 to support the Crimean War, Canada developed its own land force. Although Canada's Army adopted the British

'Regimental System' it did not become a small replica of the British Army. "The role of the Militia in the defence against internal and external threats, the peculiar political influences that were at play during its formative years, and the struggle for national sovereignty during the wars, all influenced the culture of the Canadian Army, making a very unique national institution." (Capstick 2001, p10) (H14)

The Royal Canadian Navy did not formally come into existence until 1910 and even then its role was not fully supported by Britain, "...it soon became apparent that the goal was contribution to the Royal Navy and the abandonment of a separate Canadian navy... Sir Robert Borden went to England in the summer of 1912 and there he was advised by the Admiralty that the most effective aid he could give Great Britain would be some of 'the largest and strongest ships of war which science can build or money supply' ..... so he came back with any ideas for a Canadian navy laid aside and the scheme for contributing to Great Britain \$35,000,000 to enable the country to build three extra Dreadnoughts." (Lower 1946, p451) Canada created an Air Force in 1920, "... and for some years it was a semi-military force performing some civil functions." (Roy 1972, p40) (H17)

Canada's military support for WWI caused political problems within the country, as French Canada had no great empathy for the War while English Canada with its British associations was favourably disposed. This was in part caused by the perception that the Canadian war effort was in support of the British empire "Although the Canadian Expeditionary Force in Europe remained united, its technological base, training and perspectives were extensions of imperial effort; so, too, was the Royal Canadian Navy. The Canadian experience in the air war was part of the larger British effort and received no special (Canadian) corporate delineation." (Vano 1988, p128) This split between the two cultural elements of Canadian society did not adversely affect its war contribution but did have a domestic political impact. "Suffice it to say, the military effort in Canada disunited the country to the point of constitutional imperilment." (Vano 1988, p130) (H14, H17)

Although Canada's armed forces continued to mirror many aspects of their British counterparts, they started to develop a more distinct culture of their own during World War Two. "As in the First World War, Canada's three services were closely patterned on those of Great Britain, but this time owing to the size of Canada's contribution, both military and economic, to the allied cause the Canadian identity was quickly established." (Roy 1972, p42) Since the end of WWII Canada has only deployed its armed forces into major combat operations on one occasion "During the Korean conflict, Canada deployed an infantry brigade to Korea. Since that time no Canadian troops have been involved in major combat operations." (Cotton 1983, p44) Canada has been actively involved in many peace support operations throughout the world including the Balkans, East Timor, Rwanda and Haiti (Jane's 2002, Current Developments and Recent Operations). Canada has developed its own way of conducting operations with "Canadian Army doctrine... heavily based on US Army thoughts regarding manoeuvre warfare. At the same time, our practice during Peace Support Operations is far closer to the style of the British Army." (Capstick 2001, p9) (H15, H16)

### **Historical Influences**

Influence H1: The armed forces of Australia, Britain and Canada recruit and train their officers in accordance with the Prussian model. This implies that the armed forces of all three countries will have similar values to the national level culture and that this will be mirrored at both the international and intra-national organisational levels.

Influence H2: The mutual history shared between Australia, Britain and Canada should continue to be reflected in the respective national and armed forces cultural values. This is supported by evidence that in the past Britain has heavily influenced the armed forces of Australia and Canada. There should be strong international links between the armed forces.



Influence H3: The Royal Navy has had a significant influence on the Royal Australian Navy and the Canadian Navy. The historical influence of the Royal Navy can be expected to remain in the cultures of the other two navies.

Influence H4: The Armies of all three countries have traditionally maintained extremely close links many of which continue today. The historical influences can be expected to remain in the cultures of the three armies.

Influence H5: The relative lack of political attention to the internally perceived requirements of the armed forces of all three countries may lead to a divergence in some cultural values from the national values.

Influence H6: Although British influences and ties remain, Australia and Canada and perhaps to a lesser degree Britain have all looked to the United States to help them develop their armed forces in recent decades. This may have an impact on cultural values at both the national and international organisational level.

### Australia

Influence H7: The Australian military tradition has had a deep effect on the national culture. It is reasonable to expect similarities between civilian values and those of the ADF.

Influence H8: The historical links of the RAN to the RN may lead to organisational values that are more closely related between the services of the two countries than within Australia's armed forces.

Influence H9: Before WWII the senior leadership of the Australian Army chose to closely shadow British staff officer training, rather than develop a national system. This would lead to the expectation that the Australian Army and the British Army would continue to share a similar set of core values.

Influence H10: The historical links of the RAAF to the RAF may lead to organisational values that are more closely related between the services of the two countries than within Australia's armed forces.

Influence H11: The lack of political support for the Australian armed forces over several generations may lead to an increased Long Term Orientation (LTO) by all three services as they cannot afford to rest on tradition and need to look to the future in order to survive as credible forces.

### Britain

Influence H12: British armed forces have evolved over several centuries with a variety of influences affecting their cultural values. In the last five decades, Britain's armed forces have adapted to meet the change of political imperatives. It follows that the Uncertainty Avoidance Index (UAI) should be relatively low in comparison to Australia and Canada where the armed forces have had to deal with relatively less change in their historical roles.

Influence H13: The military history of Britain extends back several centuries before Australia and Canada became independent states. Additionally, the British armed forces are more closely linked to the ruling establishment than in Australia and Canada. It is expected that the British armed forces will have relatively low LTO scores compared to those of Australia and Canada, due to a respect for the long standing traditions and the political support they enjoy.

### Canada

Influence H14: Canadian society has a significant French influence which should be reflected in the culture of its armed forces. This influence is particularly strong for the

Canadian army whose roots stem from the French militia. This may have an influence that is reflected when compared to the values of the British and Australian armed forces.

Influence H15: Physical proximity to US and basing doctrine on their neighbour will lead to a drift away from both the French and British forming influences on the Canadian Forces (CF).

Influence H16: Organisations need to practise their core skills in order to deal effectively with uncertain environments. Canada has only deployed a significant war fighting force once since WWII and it is likely that this will lead to a higher UAI score in the CF than in the ADF and British Armed Forces.

Influence H17: As the Canadian military has not received unreserved political support during operational deployments in the past it is likely that it will have a relatively high LTO score.

## INDIVIDUAL

At the individual level the military will often appeal to a sense of patriotism, unit pride and peer loyalty in order to maintain the 'warrior core' culture. The military requires that its members have "respect, honor and regard" for fellow military personnel and that they recognise "that a person's rank and position fosters respect in an organisation." (Haug 1998, p1) It is often believed by military personnel that civilians, even in supportive societies, undervalue their contribution to society. Rudyard Kipling captures this view in his poem *Tommy* which highlights the feeling by many military personnel of all ranks that they are misunderstood and are not respected by civilians:

"For it's Tommy this, an' Tommy that, an'  
    'Chuck him out the brute!'  
    'But it's 'Saviour of 'is country' when the  
        guns begin to shoot;  
An' it's Tommy this, an' Tommy that, an'  
        anything you please;  
An' Tommy ain't a bloomin' fool – you bet  
        that Tommy sees!"  
    (Kipling 1892, p9)

Perceived differences and a mutual lack of understanding sustain a shared suspicion between individuals from military and civilian organisations. Soldiers are considered to be "a class of men set apart from the general mass of the community, trained to particular uses, formed to peculiar notions, governed by peculiar laws, marked for peculiar distinctions." (Ministry of Public Works and Government Services Canada 1997, p11) Conversely, civilians are commonly thought by the military to be unworthy of the professionalism and personal standards that the military are expected to maintain (Ministry of Public Works and Government Services Canada 1997, p12).

Evidence suggests why personnel from armed forces may feel civilians misunderstand them, “There is a military mind and all military men, to one degree or another, possess it. It is a mind that is used to order and predictability, that insists on decisions being made, that cannot tolerate procrastination...” (Tromp 1971, p361). If there is a typical ‘military mind’ it is possible that there is also a typical officer’s mind in spite of the fact that officers are trained in many specialist subjects, many of which are directly related to civilian professions and occupations. In *The Military in the Political Development of New Nations* Janowitz argues that, “The officer is trained as a commander, which requires a combination of heroic leadership and military management. The typical officer comes to realise that the desired qualities of military management are those of initiative, improvisation, and the taking of responsibility.” (Janowitz 1964, p41) These traits are common for many military officers but not all. A captain of a ship, a commander of an armoured battle group and a fighter pilot are faced with very different problems requiring highly developed and specific skills. What is central to almost all military officers and very few civilians is that they are skilled in successfully dealing with armed combat through “... the management of violence...” (Huntington 1957, p11)

This Janowitz model appears to match the officer of the individual Australian, British and Canadian military officer but does not have global relevance. Distinctions between individuals in civilian and military organisations are not always as clearly identifiable as they might be across the world, for example, “...it is difficult to differentiate the Chinese civilian elite from the Chinese military elite.” (William Pang-yu Ting 1982, p31) Historically individuals in the Chinese armed forces have simultaneously undertaken roles that western societies would consider the exclusive domain of either the civilian or military organisation. (I1)

### **Individual Influence**

**Influence I1:** As mentioned in the introduction to this Chapter, examination of the Individual does not sit comfortably with this study. One individual influence that is relevant for officer’s of the three countries’ armed forces is that can all be expected to

provide a high IDV score relative to the national scores. This is due to two factors identified in this section. First, the act of legitimately bearing arms places the individual sailor, soldier and airman at the extreme edge of most western society. Second, in comparison to most civilian managers, officers are trained to make rapid decisions under pressure and 'lead from the front' as individuals rather than to make group decisions.

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## **GROUP**

It might be assumed that all armed forces are based on the same group values. When armed forces from around the world deploy together for operations, there will be a dimension added to the cultural stew created by the multiplicity of civilian agencies already operating in the area. Many armed forces involved in operations will have a different understanding of how civil-military and military-military relations should be conducted. These differences in approach are usually reflections of the group experience at home. In 'Reforming Civil-Military Relations' Samuel Huntington cites several examples where armed forces are facing very different challenges in their home countries from those experienced by Australian, British and Canadian armed forces (Huntington 1995, p10 and p14-15):

- Authoritarian regimes have no civilian control and the military performs functions only distantly related to normal military functions.
- Civil authorities in countries such as Turkey, South Korea, Nicaragua, Brazil and Chile are working to increase their authority over the military after it has ceded power.
- South Africa is dealing with integrating its military after apartheid.
- Russia is dealing with disintegration with the end of the Cold War.

The American military expects, often without much success, its international military partners to be under three salient influences that its own armed forces are subject to. "They are rigorously apolitical, with a total separation between political policy formulation and nonpolitical policy implementation. Chains of command are fixed, rigid and genuinely hierarchical, with well-understood, specified and firm areas of authority, responsibility and accountability. The actions of military personnel are governed and controlled by external, enforceable legal codes of conduct and behaviour." (Cable 1996, p15) While these influences are matched by the Australian, British and Canadian armed forces of today, it has not always been the case. There are examples of serving British military officers being actively involved in politics. In 1827 the Duke of Wellington was

concurrently a member of the cabinet and commander-in-chief of the army and more recently, albeit on a lesser scale, Lieutenant Colonel Michael Mates was elected as a member of parliament in 1974 while still serving in the British Army. (Barnett 1970, p259) and (Strachan 1997, p58 and p35) Even within NATO, armed forces are politically active in other states. The following reports by *The British Broadcasting Company* and *The Economist* demonstrate an ongoing and overt political influence and interference that is not reflected by Australian, British or Canadian armed forces: (G1, G2)

“The statement said the armed forces did not favour one party over another. However, it is common knowledge that the High Command distrusts the Islamist movement and sees itself as the guardian of Turkey’s strict secular system. Pressure from the military, which traditionally prefers secular government, led to the fall of the country’s first Islamist coalition last year.” (Morris 1998, p1)

“The top soldiers who zealously guard Turkey’s secular tradition have never concealed their contempt for Mr Erdogan, who, partly thanks to their pressure, was previously ousted as mayor of Istanbul and put briefly behind bars for reciting a poem that allegedly tried to incite religious rebellion.” (The\_Economist 2003, p42)

Both military and civilian groups can cite cases that demonstrate their misunderstanding of each other. The following quote by Christopher Dandeker demonstrates how political ignorance of military values can lead to potentially serious situations: (G2)

“The task of building a national consensus on what armed forces the UK needs for its security and defence policy is not made any easier by a second difficulty: the decline in ‘knowledgeability’ of military affairs in the civilian community – both opinion formers and the general public.” (Dandeker 2000, p176)



The ongoing reduction of people in society who have served in the armed forces combined with unit amalgamations, base closures and security requirements reduces the inherent legitimacy of the core war-fighting mission of the armed forces. The danger for armed forces is that, by having to focus in detail on shaping civilian determined imperatives, the military group will be unable to concentrate on its primary purpose of the effective application of armed force. (G1)

From the civilian perspective, the military group has the potential to be a dangerous liability which can threaten the stability of the society it purports to represent. This becomes particularly likely when the armed forces of a country become culturally isolated from the general population. The following extract from the Human Rights Watch publication *Leave none to tell the story: Genocide in Rwanda* demonstrates the horrors that can ensue when an armed force loses personal contact with the civilian population: (G2)

“Soldiers and National Police, whether on active duty or retired, killed civilians and they gave permission, set the example, and commanded others to kill. Although fewer in number than civilian killers, the military played a decisive role by initiating and directing the slaughter. In the first hours in Kigali, soldiers of the Presidential Guard and the paracommando and reconnaissance battalions, along with some National Policemen, carried out the carnage in one neighborhood after another.” (Forges 1999, p2)

### **Australia - Group**

In an article in the *Australian Defence Force Journal* entitled ‘Joint Warfare - Australia's Approach to Joint Operations’ Behm et al state that there are certain cultural values that are either part of the ADF culture, the Australian culture, or both. These cultural factors also influence the ADF’s approach to operational deployments. Among the cultural values or traits are the following (Behm, Allen et al. 2001, p21-22): (G8, G9)

- Emphasis on economy. Since resources are limited, the conduct of military operations by the ADF emphasises economy of effort, and the need for ingenuity and resourcefulness. Ingenuity is something that deeply informs the ANZAC tradition.
- Australia's European roots as a dumping ground for British criminal classes and as a land of opportunity for free settlers have left a strongly egalitarian streak in the Australian psyche that often questions authority.
- There is a strong emphasis on equity in Australian society, often expressed in terms of 'a fair go'.
- In keeping with the Australian attitude of 'have a go', the ADF has a 'can do' mentality about tasks that it is given to do by government.
- The concept of 'mateship' is deeply rooted in Australian social and military history. A former ANZAC defines 'mateship' as "Mates can say and do nothing to offend another mate – you stick together through thick and thin! You cry together, fight together, drink together – whatever it takes! You defend them to all comers and give them yourself, not a façade." (Kalmund Undated, p1) The pervading concept of 'mateship' affects the ADF attitudes to conducting operations with emphasis being placed on teamwork, caring for personnel and minimising casualties

*In Culture and its Consequences. The Organizational Character of the Australian Army*, Nick Jans identifies five cultural dimensions that he believes differentiate it from other organisations (Jans 2000, p6). A brief summary of these dimensions is given below: (G5, G10)

- Professionalism pervades across the total institution and esprit de corps stems from a sense of 'service to the nation'.
- A Long-term view is taken of its fundamental purpose, as the need for the 'soldiers art' will always be necessary.
- The Army has a strong sense of community, built on widely shared values and a common professional identity based around the 'warrior core competency'.
- The Army is hierarchical in its professional relationships.

- The Army is conservative and inward-looking in its general approach to problems and is wary of ideas from outside the military establishment.

Jans also identifies that each of Australia's services has its own distinct culture. "In actuality, each of the Services of the ADF ...are powerful national institutions with their own identities and cultures." (Jans 1999, p16) Each service has a unique culture and traditions and requires its own unique brand of officers. The differences are summarised in Exhibit 5-2. (G6)

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<b>Army cultural Dimension</b>	<b>Compared to the Navy and Air Force</b>	<b>Compared to civilian Organizations</b>
<i>A professional identity that is strongly uniform across the total institution, bound by the two dominant common strands of 'service to the nation' and of the warrior core competency' of infantry minor tactics. (G5)</i>	Navy personnel tend to be more focused on their areas of specialization than are their Army counterparts and are less likely to be employed outside their area of functional expertise. The <i>Air Force</i> is characterized by the twin roles of 'samurai/knight' and 'technocrat', both roles centering on the 'flying machine' and the excitement of aviation as a skill.	Work in civilian organizations tends to have much less skill overlap. And most civilians work for pragmatic and individual reasons.
<i>A strong sense of community', with members seeing themselves as part of a 'family' or 'tribe' within the total social group. (G2)</i>	The Army has a stronger sense of community than the other two Services. This stems from the commonality of the socialization process, the interdependence and 'versatile cooperation' required of Army units during operations, the reality of the greater risk experienced by the most junior ranks, and the comparatively early opportunities for junior officers and NCOs to exercise leadership.	Organizational relationships tend to be business-like and calculative.
<i>Hierarchical in its organizational relationships: authority figures direct and control the organization and there is a clear recognition of who they are. Leadership and authority are based on formal status and seniority. (G4)</i>	The <i>Navy</i> is the most hierarchical of the three services, due to the extension to the organization as a whole of the concept of 'ship command hierarchy' (G7). <i>Air Force</i> is the least hierarchical of the Services, because of the strong technological differentiation of employment and the low emphasis on group leadership for junior officers. (G6, O2)	Authority and decision making are often devolved and variable, with leadership and authority based on expertise, and different members exercising authority at different times, depending on the contribution they can make at a given time and situation.
<i>Long-termist view in its fundamental purpose. The Army perceives its fundamental purpose as being essentially fixed.</i>	For the <i>Navy</i> and <i>Air Force</i> , the acquisition of a given ship class or aircraft fundamentally shapes operational doctrine and career structures for upwards of a generation. Because the practice of the 'soldier's art' is less technology-dependent, the Army is the least 'long-termist' of the three Services.	The concern is for immediate results in a world that, since it is unpredictable, cannot 'be planned for'. Planning horizons tend to be less than three or so years, except for very large companies. Organizational purpose itself may Change every few years.
<i>Conservative and inward-looking in its general approach to problems.</i>	In those areas of the ADF that are most integrated and common in function, it has been observed that the Army tends to be the <i>least</i> likely of the Services to embrace new ways and new management techniques, with the <i>Air Force</i> the <i>most</i> likely to do so.	Increasingly, civilian organizations display a greater readiness to consider change, to challenge the status quo, to experiment with different ways and to look beyond their boundaries for guidance (G10)

**Exhibit 5-2. Dimensions of ADF Culture**  
(Jans 1999, p3)

## **Britain - Group**

“The biggest problem for the British armed forces is people. The three services need some 25,000 recruits annually in order to meet their manpower obligations.” (Jane's 2001, p2) The Duke of Wellington is reputed to have had a high regard for his soldiers' fighting ability once they were trained but the army of his day found the same difficulties in recruiting people of the right calibre. “One officer said that every battalion had a criminal element of 0 to 100 men. The recruiting sergeants did not find it easy to man a volunteer army when the population was only 11 million.” (Boyd 2001) A criminal record today knocks out five to ten percent of applicants to the British armed forces, as does admission of taking class ‘A’ drugs<sup>7</sup> (Vallely 2001). As an example of how this affects the armed forces, the then Directorate of Manning (Army) predicted in 1996 that the shortfall in personnel levels would peak in the year 2003 at 6400 and was going to remain in excess of 5000 for the foreseeable future (MOD 1996, p1). In spite of considerable effort to reduce the shortage of personnel throughout the armed forces this report remains correct in its overall forecast.

There is further pressure on the armed forces to recruit people of sufficient quality as all military personnel are expected to adhere to a set of values that do not always appear to reflect those prevailing in modern British society. Many young people believe that the values and standards of the armed forces and the personal commitment expected from them are out of date. “Being prepared to die for your beliefs now looks like the result of indoctrinated insanity or a quaint old-fashioned naivety.” (Williams 2001) The problem of recruiting is exacerbated when recruiting for the officer corps as they tend to be graduates and older than the enlisted cohort. “So, as things stand, we appear to take only fully formed men and women as our officers. Meanwhile we recruit 16- and 17-year-olds as the basis of our non-commissioned entry. They are mouldable and will form the backbone of our Army. They are truer holders of our traditions and values because they made the commitment when they were youths, when those values will stick firm.” (Wilson 2001, p49) (G3)

The values that members of the armed forces are expected to adhere to are defined below (Select Committee on Defence 2001, Chapter 2): (G11)

- Integrity (reflected in their honesty, sincerity, reliability and unselfishness);
- Courage (both physical and moral);
- Selfless commitment (putting the needs of the mission, and of their team, ahead of their own interests);
- Professionalism and pride;
- Loyalty (to their commanders, their comrades, those they command and their duty);
- Self-discipline and respect for others.

These values are reflected closely in *Values and Standards of the British Army* (MOD 2000) and *Core Values and Standards in the Royal Air Force* (MOD 2000). These espoused values are held to be extremely important by commanders of the British armed forces as they are considered to affect operational capability, “The values that the Army espouses, and the standards that are required to sustain those values, are therefore the values and standards that are necessary... They thereby contribute directly to fighting power.” (MOD 2000, p5) In addition to the espoused values personnel in the British armed forces are also expected to maintain high standards of personal conduct that are stricter than those required from the majority of their civilian counterparts. They must: (G12)

- Abide by the civil law, wherever they are serving;
- Abide by military law and the laws of armed conflict;
- Avoid any activity that undermines their professional ability, or puts others at unnecessary or unreasonable risk, or any behaviour that damages trust and respect between them and other members of their team.
- Respect and value every individual’s unique contribution, irrespective of his or her race, ethnic origin, religion or gender and without reference to social background or sexual orientation.

## **Canada - Group**

In the last decade the Canadian Forces found themselves having to defend their credibility as an armed force, “On the night of 16 March 1993 Shidane Abukar Arone, a young Somali man, was murdered while in the custody of Canadian soldiers.” (Capstick 2001, p1) In conjunction with investigations into issues such as this, the leadership of the forces and the military justice system have come under critical scrutiny<sup>8</sup>. (Jane's 2002, Current Developments and Recent Operations) In an article entitled ‘A Crisis of Character? Ethical development in the Canadian Officer Corps’ in *Canadian Defence Quarterly* CR Shelley portrays one argument which states that, “By contrast, today’s, lack of societal consensus on values has led to moral drift, which, in the armed forces, manifests an unethical conduct by some members.... In short the argument concludes, one could expect little else from people who simply lack basic values.” (Shelley 1996, p23) This argument is difficult to reconcile with the belief that Canada’s armed forces recruit from among society’s best. The question of poor quality personnel rebounds onto the armed forces which have had to answer what happens to recruits after they join the military and why the following statement appears to be no longer considered as true as it once was: “Overall, Canadian Army personnel are highly trained volunteers with a reputation for military professionalism within NATO. On an individual basis, they are among the best trained, best paid, and most motivated professional troops in the Western Alliance.” (Cotton 1983, p54) (G13, G15)

The Canadian armed forces pride themselves on their military heritage which has developed from Canadian society, with acknowledged external military influences from France, Britain and the USA. This heritage is held to be important and “One must account for the fact that the military, more than most other types of human institutions, has maintained itself by adherence to and perpetuation of not only organizational but also social traditions. To what extent has the ‘Canadian Military Tradition’, so deeply pervaded by the ‘British Military Tradition’, made places for other than the British Anglophone group? To preserve certain sensibilities, one might ask to what extent the

groups forming the Canadian mosaic are present and active in the Canadian Armed Forces.” (Coulombe 1972, p144) (G14, G16)

Ethnic Origin	Canadian population	Canadian Forces		
		All personnel	Officers	Men
British	43.8	64.6	73.2	63.1
French	30.4	19.2	12.5	20.3
Other	25.8	16.2	14.3	16.6
German	5.7	5.3	4.2	5.5
Italian	2.7	0.4	0.5	0.4
Polish	1.8	0.8	0.9	0.8
Ukrainian	2.6	1.7	1.7	1.7
Other	13.0	8.0	7.0	8.2
Total	100.0	100.0	100.0	100.0

Exhibit 5-3. Ethnic Composition of the Canadian Population in 1961, and of the Officers and Men of the Canadian Armed Forces in 1966 in percentages  
(Coulombe 1972, p145)

Canada has the distinct difference from Australia and Britain<sup>9</sup> in that it officially recognises two international languages. “Another salient feature of the Canadian situation involves the nation’s dual language and culture: in Canada French and English have equal rights in law. This culture is formally recognised in the military, and Canadian soldiers have the opportunity to pursue careers in their mother tongue.” (Cotton 1983, p45) Exhibit 5-3 shows the ethnic composition of the Canadian population and compares it against that of the Canadian armed forces. Exhibit 5-3 demonstrates that there is a significant ‘British’ influence in the armed forces, particularly in the officer corps, which is considerably in excess of the influence found in civilian society. (G14, G16)

The Canadian Forces are subject to a number of lists of values which are important to the creation of a balanced military culture. In *Defining the Culture: The Canadian Army in*



*the 21<sup>st</sup> Century* Mike Capstick details four different lists and states "... it is obvious that we have too many lists and that any description of the army's core values can only be confused... Since none of the lists of 'values' or 'precepts' are contradictory, and the core values should probably apply to all three fighting services, it is vital the CF develop a commonly agreed list of core military values that could be applied to each service's unique operational requirements." (Capstick 2001, p19) Capstick's list of values is as follows: (G14, G15)

- Duty is based on the concepts of service to Canada. This must support the basic Canadian values of peace, tolerance, security, stability, and a respect for democracy, human rights and the rule of law.
- Integrity means doing the right thing. Integrity includes the self-discipline necessary to abide by the laws of Armed Conflict, Rules of Engagement, Codes of Conduct, and other regulations and laws. Integrity also includes the sense of honour that is required to ensure that prisoners, detainees and civilians are treated properly during operations, and that all service members uphold Canadian values.
- Courage consists of the moral and physical. Moral courage to do the right thing when confronted with difficult choices is at least as important as the traditional concept of physical courage on the battlefield.
- Professionalism is essential for the successful conduct of operations. It includes life-long learning in respect to the military profession and international affairs as well as the ability to engage in self-examination and constructive, open criticism of all military activities.

### **Group Influences**

Influence G1: None of the samples are overtly involved with politics and should show similar sets of values to each other as career orientated officers will generally have their sights for achievement set within the boundaries of the armed forces.

Influence G2: All sets of samples will share some of the values with their civilian counterparts but there are influences shaping values that are peculiar to the armed forces.

Influence G3: Officers may not be the truest representatives of the cultures of the sampled armed forces. Long serving soldiers are considered more enculturised with traditional military outlooks and perspectives.

Influence G4: All sets of armed force samples should demonstrate relatively low MAS scores as officers are expected to demonstrate concern for their subordinates and peers.

Influence G5: Values such as professionalism are considered central to all of the samples but are not measurable using the VSM.

#### Group Influences - Australia

Influence G6: Each service in Australia has its own unique brand of officers which implies strong cultures and therefore officers will produce high IDV scores in order to stand out as good leaders.

Influence G7: The Australian military would expect to record low PDI scores due to the egalitarian civilian cultural heritage. However, overall the RAN should have the relatively highest PDI due to its greater hierarchical nature, with the Army in the middle and the RAAF lowest due to the least hierarchical nature of organisation.

Influence G8: The Australian military should have a relatively low UAI compared to national culture due to consistently having to work creatively with limited resources combined with the 'can do' mentality.

Influence G9: Belief in having 'fair go' will lead to reduced group competitiveness and corresponding lower MAS scores. The Australian Army should have a lower MAS score due to a greater sense of community than the other two Australian services.

Influence G10: The Australian military should have a low LTO score due to a sense of tradition based on ‘warrior core’ competency. The Australian Army is least likely to embrace new ways and therefore most likely to have the lowest LTO score of the three services.

#### Group Influences - Britain

Influence G11: All three armed forces should exhibit relatively low MAS scores due to espoused values that relate to concern for others in preference to competitiveness.

Influence G12: All three armed forces should exhibit low LTO scores due to the imperative of fulfilling extensive social obligations.

#### Group Influences - Canada

Influence G13: The CF have shown a greater inclination to protection of the group than the other two international samples and this should be reflected in relatively lower IDV scores.

Influence G14: Although still expecting a reasonably high PDI score it may be relatively lower than those for Australia and Britain as a stated core value is to encourage open discussion and criticism.

Influence G15: Due to the ‘tarnishing’ of the CF reputation higher UAI scores will be recorded than for Canadian society and the Australian and British armed forces. This is likely to be most strongly reflected in the UAI score for the army.

Influence G16: Although there have been considerable historical British and French influences, there is also a more recent US influence on the Canadian Group. Given the cultural diversity and acceptance of difference reflected in Canada’s society and armed

forces (ie two national languages) the MAS scores will be relatively low as this is considered to be a nurturing society.

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## **SITUATION**

In the Australian, British and Canadian armies, 'the regiment' develops a set of group values that is partly rooted in the society from which it draws its members and partly from the situation that has been created with the sole purpose of making it different from other regiments. "For the most part, their (the soldiers) life and loyalty centre on the regiment - not on the army." (Bercuson 1996, p120) quoted from (Capstick 2001, p8) The officer corps, will in general, see much more service outside of this group than will soldiers and it is possible that the two sets of values may differ as a result. These groups, which are also mirrored in their navy and air force counterparts, can often be the cause of a considerable shock to outsiders who are not used to the cultures with which they are attempting to communicate.

Although Jans is speaking specifically of the ADF in the following examples they are also relevant for the armed forces of Britain and Canada (Jans 2000, p10) : (S1)

- The navy is the most hierarchical of the three services, with the captain as the 'nerve centre.' The in-group is the seaman branch from which the captain will be selected. In the navy all ranks aboard ship share the same dangers.
- The army is more diffuse than the navy with army officers and NCOs gaining a much greater chance to command at early stages of their career. The in-groups are the arms (such as infantry, artillery and cavalry). In the army, all personnel learn basic soldiering first and trade skills second, due to likelihood of coming into contact with the enemy. The most junior are likely to be at risk first.
- Members of the air force get very few chances to command until they become a flying squadron commander. The in-group is the General Duties branch (aircrew). In the air force aircrew officers are generally the only personnel likely to be at risk.

## **Australia - Situation**

With its leading role in the International Force in East Timor (INTERFET) Australia has shown that it is committed to supporting regional issues in South East Asia. This includes developing active involvement of the ADF with regional partners. Before Australia committed its military to East Timor, it had not deployed a large force operationally for nearly a generation. Nick Jans comments in *Defence performance and military leadership* that “It wasn’t just *what* was done but that it was done effectively from ‘day One’ ....and it was done despite lack of ‘match practice’.” (Jans 2000, p2) It is potentially of great benefit to Australia that it has focussed on overseas operations and that INTERFET was successful as, “... East Timor, Bougainville, the Solomon Islands and Fiji are a timely reminder that Australia is part of a region that is undergoing radical change, where limited regional conflict may erupt with little or no warning.” (Robinson 2001, p35) However, INTERFET involvement revealed deficiencies within the ADF. The army, for example has severe manpower and equipment problems that are being addressed: (S2)

“In spite of the widely acknowledged success of the Australian-led peace support operation (PSO) in East Timor, the committee found that five of the army's nine brigades are 'hollow' with only 25 to 50 per cent manning levels and inadequate stocks of equipment. The report recommends that these brigades be disbanded and their personnel and equipment be used to increase the number of highly capable brigades from two to four.” (Jane's 2002, Army Organisation) (H11)

## **Britain – Situation**

Britain’s armed forces are generally highly respected for their professionalism and personal values by the British civilian population and internationally. (Beevor 2000, p66) Officially, the British government recognises that the values of its armed forces may differ from civilian society. “The Armed Forces should reflect the society they serve, but there must also be an acknowledgement, by society and by Armed Forces themselves, of

the need to be different and of the emphasis that must be placed on the core values and standards which in some respects diverge from those which obtain in society at large.” (Select Committee on Defence 2001, Chapter 2) In spite of the recognition of the differences, British armed forces have had to evolve to reflect changes in civilian values. The example of formally accepting homosexuals within the military is discussed in the evolution section in Chapter 1; this represents a significant culture change for the armed forces. Other challenges forcing the armed forces to review their central values include loss of crown immunity for personal responsibility, equal opportunities, racial equality and the rights of long term unmarried partners. (Beevor 2000, pp66-73) (S3)

While there is a common core of values for Britain’s three armed forces, there is official understanding that “Each of the Services has a distinct ethos and identity, reflecting many decades of tradition and experience, which we must retain and cherish.” (Select Committee on Defence 2001, Chapter 2) Documented examples of differences between the three services are in the overarching situation section above. (S4)

### **Canada - Situation**

The Canadian government recently increased the defence budget to alleviate some of the immediate challenges facing the Department of National Defence (DND) but not enough for the armed forces to avoid taking some difficult decisions. Lieutenant General Mike Jeffery, Chief of Land Staff (CLS) in 2002 aimed to transform the Canadian armed forces into a ‘strategic instrument’. "This army particularly has always been very tactical in its orientation... really we need to be able to apply military force much more strategically". (Jane's 2000). As CLS General Jeffery recognises that this transformation will take time and wants to start the professional debate on how to change the army's orientation to being able to be used more as a strategic force. While Canada will continue to operate as part of larger coalitions of like-minded nations he does not want to dismiss the possibility of Canada playing a lead role rather than a follower role in some cases. (S5)

## **Situation Influences**

Influence S1: The situational foci of the various samples are different, at the national level the ADF concentrating on civilian refugees and regional crises, British armed forces on medium scale war fighting and CF on shifting from a tactical to strategic orientation. At the organisational level the focus of decision making is affected by the services' respective roles. These differences will influence the relative values of the armed forces.

### **Situation Influences - Australia**

Influence S2: The international and political situation of the Australian armed forces implies a PDI score relatively similar to those of the civilian cohort due to a close and stable relationship with the government.

### **Situation Influences - Britain**

Influence S3: The values of the British armed forces are expected to reflect those of the society they serve. However, there is acknowledgement by both the armed forces and national government that core values will diverge from society in some respects.

Influence S4: Ethos and Identity (discussed in Chapter 1) do not necessarily translate across national or organisational boundaries but cultural values do.

### **Situation Influences - Canada**

Influence S5: Over time the CF can be expected to produce a lower overall UAI score as they move away from the relatively constrained view implied by a tactical focus to the wider perspective required to become a strategic orientated force.



## **TASK**

Cultural values reflect the influence of tasks placed on the group and individual and will directly affect the military decision making process, “Military professionalization involves the indoctrination and internalisation of certain values, outlooks and behaviour elements.” (Abrahamsson 1972, p17) However, simply because a single task is shared by armed forces of different countries does not automatically mean that they share an understanding of how the task should best be undertaken, even if they share a common mission statement and rules of engagement. In *Examining the local impact of 'multinational responses' in multinational peace support operations*, Ann Fitz-Gerald cites the example of Haiti where US Marine Corps (USMC), Pakistani Army and Canadian Force responses were very different under similar circumstances. “When asked what the Pakistanis would have done, a few members in the group laughed and said ‘shoot us’ and in response to the what the Americans would have done, they replied, ‘kill us!’” In contrast the Canadians were cited as being “really, really very nice.” The local population in Haiti admired the Pakistani’s robust approach that was tempered by their willingness to help where possible. The Canadians were admired for their linguistic compatibility and friendliness but were thought to be ineffective in their role. US personnel were considered effective but to have adopted a ‘heavier’ approach than was necessary with little interaction between them and the local population. (Fitz-Gerald 2001, p158-177) (T1)

## **Australia - Task**

Australia is in the situation where one of the most publicised threats to society that the ADF is dealing with is the influx of civilian refugees due to the economic and political instability in neighbouring parts of Asia. This regional instability has required the ADF to increasingly focus on operational overseas deployments. “Beginning in late 1999, the ADF led and sustained the peace enforcement operation to East Timor... the ADF was again gearing up (in July 2003) to play a regional leadership role, this time in the vanguard of an intervention force to the Solomon Islands.” (Bostock 2003, p21)

In spite of a historical preference for single service foci, the ADF has identified that there is a greater need for interoperability when undertaking operational tasks. “Joint and coalition operations are now defining features of the way the Australian Defence Force (ADF) conducts military operations.” (Behm, Allen et al. 2001, p15) This has resulted in a review of how tasks should be approached and the ADF is aligning itself to an integrated USMC style force structure and is therefore moving further away from the traditional British influence. A recent government document has stated that the tasks of the ADF are as follows (Jane's 2002, Command and Control): (T2, T3, S1)

- The first and foremost task for the ADF is the defence of Australia.
- The most immediate threats are gauged to be of a non-military nature, such as illegal immigration, drug smuggling, attacks on information systems and terrorism.
- The ADF should retain the ability to conduct operations within Australia's region of interest, contribute to peacekeeping operations and operate alongside coalition partners.

General Cosgrove who commanded the INTERFET operation is quoted as stating that the most significant lesson to emerge was the affirmation that the Australian armed forces need to continue to train, structure and equip for high-intensity operations. “In other words you learn to war fight and you adapt down for challenges for which outcomes are rendered more credible by your high-end skills.” (Jane's 2002, Current Developments and Recent Operations) (T4)

### **Britain - Task**

Britain's Defence Mission states that ‘The purpose of the Ministry of Defence (MOD), and the Armed Forces, is to (Select Committee on Defence 2001, Accessed 2002 #555, Chapter 2): (S1)

- Defend the United Kingdom and Overseas Territories, our people and interests; and

- Act as a force for good by strengthening international peace and security.

To achieve this the MOD is required to generate modern, battle winning forces and other defence capabilities to help: (T5)

- Prevent conflicts and build stability
- Resolve crises and respond to emergencies
- Protect and further UK interests;
- Meet our commitments and responsibilities;
- Work with allies and partners to strengthen international security relationships.

The MOD mission statement for the armed forces reads as follows, “Defence policy requires the provision of forces with a high degree of military effectiveness, at sufficient readiness and with a clear sense of purpose, for conflict prevention, crisis management and combat operations. Their demonstrable capability, conventional and nuclear, is intended to act as an effective deterrent to a potential aggressor, both in peacetime and during a crisis. They must be able to undertake a range of Military Tasks to fulfil the missions set out below, matched to changing strategic circumstances.” The missions are listed below (Jane's 2002, Command and Control): (T5, T6)

- Peacetime Security:
  - To provide forces needed in peacetime to ensure the protection and security of the United Kingdom.
  - To assist as required with the evacuation of British nationals overseas;
  - To afford Military Aid to the Civil Authorities in the United Kingdom, including Military Aid to the Civil Power, Military Aid to Other Government Departments and Military Aid to the Civil Community;
- Security of the Overseas Territories:
  - To provide forces to meet any challenges to the external security of a British Overseas Territory (including overseas possession and the Sovereign Base Areas) or;

- To assist the civil authorities in meeting a challenge to internal security. (An amendment to legislation in due course will formalise the change of title from 'Department Territories' to 'Overseas Territories');
- Defence Diplomacy: To provide forces to meet the varied activities undertaken by the Ministry of Defence to dispel hostility, build and maintain trust, and assist in the development of democratically accountable armed forces (thereby making a significant contribution to conflict prevention and resolution);
- Support to Wider British Interests: To provide forces to conduct activities to promote British interests, influence and standing abroad;
- Peace Support and Humanitarian Operations: To contribute forces to operations other than war in support of British interests and international order and humanitarian principles, the latter most likely under UN auspices;
- Regional Conflict Outside the NATO Area: To contribute forces for a regional conflict (but on an attack on NATO or one of its members) which, if unchecked, could adversely affect European security, or which could pose a serious threat to British interests elsewhere, or to international security. Operations are usually under UN or Organisation for Security Co-operation in Europe auspices;
- Regional Conflict Inside the NATO Area: To provide forces needed to respond to a regional crisis or conflict involving a NATO ally who calls for assistance under Article 5 of the Washington Treaty;
- Strategic Attack on NATO: To provide, within the expected warning and readiness preparation times, the forces required to counter a strategic attack against NATO.

To support these tasks the British armed forces aim to retain what Christopher Bellamy refers to in *Knights in White Armour* as “A genie, kept in a bottle, to be magicked out in time of dire need.” (Bellamy 1997, p173) For the armed forces, this ‘genie’ is high intensity warfare and is considered the highest form of the military art. The argument used by the British armed forces is that any professional soldier who can operate effectively in this environment will be able to cope with scenarios similar to Northern Ireland, Bosnia and the Gulf War. It is further argued that the inverse is not possible. As Chief of Defence Staff, General Sir Charles Guthrie was quoted in 2001 as saying,

“Capabilities based on warfighting will give us the ability to contribute to other types of operations – the reverse is not true. Peacekeeping can so easily become peace enforcement.” (Guthrie 2001) He also commented on the dangers of focusing too strongly on peace support operations “General Sir Charles Guthrie, warned in early 2001 of a risk that, as the military became increasingly involved in peace keeping or policing actions, their war-fighting capacity would be blunted.” (Dandeker and Freedman 2002) (T6, S1)

There is also recognition that operations now require a coherent combined and joint approach and that increased understanding between services and armed forces is required. The complex joint nature of the majority of current military operations has led to the relatively recent creation of the Permanent Joint Headquarters (PJHQ(UK)). The command structure and organisation of the British armed forces is undergoing a period of significant change, Brigadier Freer of PJHQ(UK) is quoted as saying “We do need to recognise that there is further work to be done before we can confidently say we have the ability to deploy, sustain and command a medium scale war-fighting joint task force at strategic distance for a non-enduring war fighting operation.” (Parker 2001) (T6)

### **Canada - Task**

The likelihood that Canada will deploy forces abroad unilaterally is regarded as extremely remote. Canadian military doctrine focuses on the maintenance of multi-purpose, combat-capable maritime, land, and air forces with the equipment and support necessary to deploy and sustain expeditionary operations in co-operation with Canada's allies. There are three cornerstones for Canadian defence policy with associated primary missions for the Canadian Forces (Jane's 2002, Defence): (T7)

- The protection of Canada, including tasks such as search and rescue, surveillance of Canada's air and maritime approaches, fisheries patrols, national emergency response and disaster relief, counter-terrorist response, and aid of the civil power missions;

- Canada-US defence co-operation, including tasks such as operating effectively on land, sea, and air with US forces, and contributing to the North American Aerospace Defence (NORAD) agreement (Department of National Defence 1997);
- Contributions to international peace and security, including contributions to multilateral operations under UN, NATO, or coalition auspices, peacetime commitments to NATO, international humanitarian operations, arms control verification, global mine action, foreign military training, and defence diplomacy.

### **Task Influences**

Influence T1: The tasks placed on leaders in western armed forces place them at the edge of western society and mark them out as having strong individual values. Compared with three countries that already record high national IDV scores it is reasonable to expect all of the samples to provide very high IDV scores.

#### **Task Influences - Australia**

Influence T2: There may be some differences across the three service of the ADF due to historical preference for single service tasks.

Influence T3: The tasks provided for the ADF are relatively broad and are not prescriptive. This indicates that a relatively low PDI score may be recorded.

Influence T4: There is tension between the immediate stated tasks of the ADF, recent specified operational tasks abroad and General Cosgrove's assertion that the ADF prime focus needs to be war fighting. This task dichotomy be reflected in a greater need for uncertainty avoidance.

### Task Influences - Britain

Influence T5: Although there are a significant number of tasks placed on the British armed forces none of them are prescriptive which implies a relatively low PDI score.

Influence T6: The relatively high number of tasks placed on the British armed forces indicate a high tolerance for uncertainty and therefore a low UAI score. This is supported by the British armed forces view that the task of conducting operations is an art rather than a science. This implies a correspondingly low UAI score.

### Task Influences - Canada

Influence T7: Although the armed forces of Australia and Britain recognise that they are most likely to operate with coalition partners neither preclude the concept of them operating in isolation. This is not the case for the CF which appear to specifically avoid the option of undertaking international military tasks in isolation. This implies a desire to avoid uncertainty with a relatively high UAI score predicted for the CF.

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## ORGANISATION

The armed forces of Australia, Britain and Canada each have different policies concerning recruiting and training. For example: “While a number of countries including ...Canada... already allow women to serve in combat roles, the issue is still being hotly debated in Australia, the UK and the United States.” (Memitschenko 2001, p35). All three armed forces do, however, share a common approach to human resource management that differs from most civilian organisations, in that promotion to fill vacancies is always from within the organisation. This method of managing personnel has an impact on the way that armed forces recruit and train, “However, unlike many civilian businesses which are able to cover shortfalls at most levels of their personnel structures, the services need a long time to recruit and train staff.” (Jane's 2001, p2)

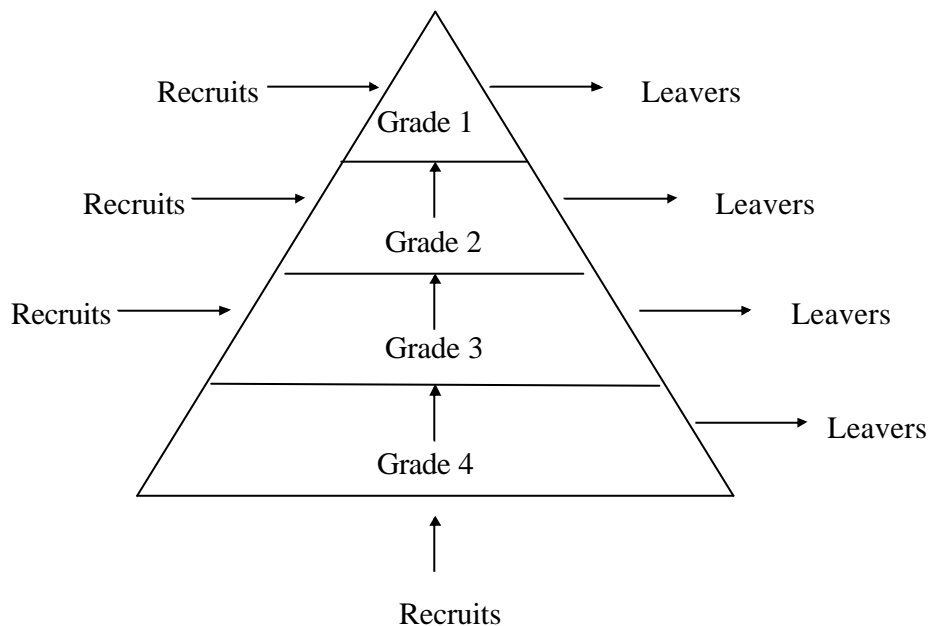


Exhibit 3-4. A Human Resource System.  
Source (Armstrong 1988, P221)

A representation of a human resource system for standard organisations is shown at Exhibit 5-4. Exhibit 5-4 demonstrates how personnel are able to move into and out of a standard civilian organisation and how they progress between various organisational



levels, where grade 1 is the most senior. New recruits may join at any level, as the requirements of the organisation dictate. People can also be promoted from within the organisation to fill vacancies and may leave at any stage of their career. The difference between the standard organisational human resource model and the military model is represented in Exhibit 5-5. This necessitates a heavier reliance on retention and training of personnel and requires all personnel in the upper echelons to work and advance their careers within a single organisation. To achieve this, a strong emphasis is placed on instilling common military values for all personnel. “Training and indoctrination are designed to produce a unified value system. Compared with other institutions, the military establishment seems to have a high capacity for amalgamating new recruits and developing a strong sense of cohesion.” (Janowitz 1964, p70) (O1, O3)

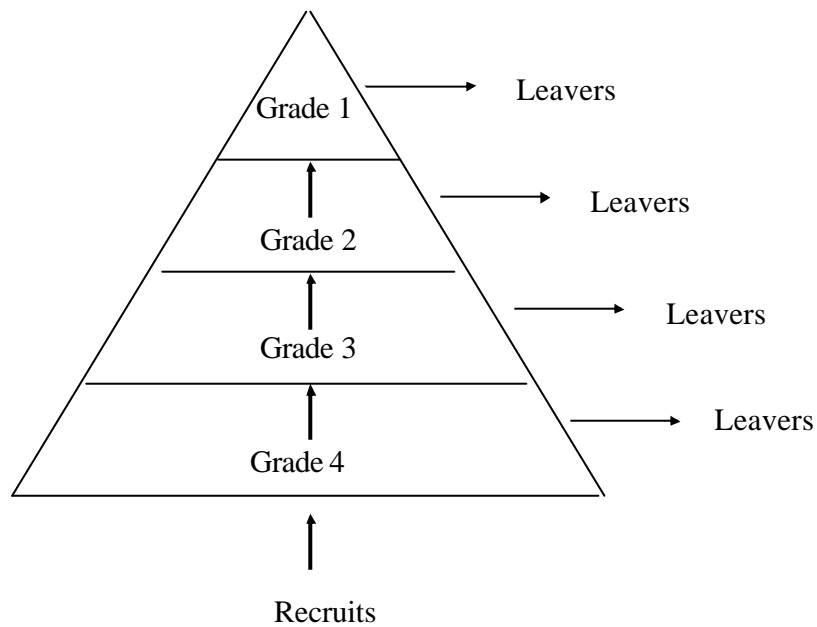


Exhibit 5-5. Military Human Resource Systems.  
(Stocker 1996, Section 5.2)

The approach demonstrated in Exhibit 5-5 tends to lead rigid organisational structures that are clearly defined, “The Services have the most hierarchical cultures among Australian work organisations, but this has much less to do with the carry over of tradition than because they need that kind of culture to perform their primary functions.” (Jans 2000, p10) The armed forces examined in this study have the common constraint

that all recruits, including future leaders, join at the lowest levels and are required to reach the upper echelons of management and leadership from within. This approach to military human resource management within armed forces is not always reflected across the world, "...It is difficult to differentiate the Chinese civilian elite from the Chinese military elite." (Ting 1982, p31) and "Fusion of civilian and military elites existed from the very first moment they assigned several of its top leaders to organise the armed forces...The politico-military doctrine that supported this strategy blurred the distinction between civilian and military responsibilities..." (Turley 1982, p63) (O2, O4)

### **Australia - Organisation**

Although the ADF retains three separate armed services it has moved towards a single organisational approach to defence that emphasises the need for the integration of all personnel employed in policy, administrative and support functions. This has aimed to increase efficiency by eliminating the duplicated effort caused by parallel service and civilian structures. (Jane's 2002, Command and Control) The Chief of the Defence Force (CDF) is the officer responsible to the Government for the co-ordinated effort of all three fighting services. The CDF commands and co-ordinates the activities of the three services through three single service chiefs. The single service chiefs are responsible for raising and training forces. Operationally ready forces are controlled by land, sea and air headquarters, which are, in turn, subordinate to a Headquarters Australian Theatre. (Lee 2004, p2) (O5)

### **Britain - Organisation**

The three services maintained their own ministries until the 1960s when they were integrated into the Ministry of Defence<sup>10</sup>. Even after the ministries were integrated there was intense inter-service rivalry, which in the last decade has reduced with the move towards 'purple' (Joint) organisations. The move towards 'purple' was not only financially driven but for technological, strategic and operational imperatives. (Dandeker and Freedman 2002, p470-471) The Chief of the Defence Staff (CDS) is the officer responsible to the Government for the co-ordinated effort of all three fighting services.

The CDS commands and co-ordinates the activities of the three services through the three single service commanders of the Fleet, Land and Strike Headquarters. The single service commanders in turn exercise command of their services through the respective headquarters. With a few exceptions it is only when armed forces are deployed abroad that they come under the command of the PJHQ(UK) Joint Force Headquarters<sup>11</sup>. (O6)

### **Canada - Organisation**

Canada is one of the few countries in the world and the only member of NATO to have a completely unified military command structure. Although, many countries have studied Canada's force integration and unification none have copied the Canadian model<sup>12</sup>. There are grounds "...for a careful review of the Canadian system to determine whether or not Canada should continue with its present form of military organisation." (Shaw 2001, p165) There is an argument that the unified structure of Canada's armed forces is far from being ideal or effective. "Based on the findings of ... *Review of Unification of the Canadian Forces*, the kindest and most liberal summation one could give to the Hellyer reforms for unification and integration is that as a military/social experiment they were demonstrated to not work." (Shaw 2001, p168)(O7)

The Chief of Defence Staff, based in the National Defence Headquarters, is responsible for overall command of the CF. The major commands of the CF are Maritime Command, Land Force Command, Air Command and Communication Command report directly to the CDS. These commands are responsible for the day-to-day leadership and management of the forces assigned to them, their peacetime training requirements, and their operational readiness. The commands function as force-generators providing operational capability for the tasks that may be assigned to them by the CDS. Having produced the forces, personnel on operational tasks are usually placed under the command of the CDS and controlled from NDHQ (Department of National Defence 1997) (O7)

“Defense arrangements in Canada have been in a state of continual evolution since unification was embarked upon in the mid-1960s, but the last few years have been characterised by increasing stability in the land force, with the regimental system – inherited for historical associations from the British Army – providing the institutional bedrock.” In recent years, the three services have reasserted much of their former individuality. (Cotton 1983, p43) (O7)

### **Organisation Influences**

Influence O1: Although it may seem counterintuitive, the importance of protecting group cohesion through well-developed individuals is central to the armed forces. ‘Self-starters’ are generally encouraged which should result in a higher IDV score than civilian cohorts.

Influence O2: The PDI of the armed forces is tempered by the following organisational influences (organisational influence extracted from group influences in Exhibit 5-2):

- Navy: High PDI due to the absolute authority of the ship’s captain.
- Army: Lowest PDI pressure due to diffuse nature of the battlefield.
- Air Force middle ranking of the services due to the similarity to many civilian organisational structures.

Influence O3: Each of the armed forces appears to be able to amalgamate recruits into their respective cultures relatively easily. This would provide pressures for lower MAS scores, as people appear to be generally able to deal with the ambiguity of changing from civilian to military life.

Influence O4: The need to develop careers internally over periods of up to thirty to thirty-five years may result in higher LTO scores for the military than the civilian samples.

### Organisation Influences - Australia

Influence O5: The ADF has recently integrated many of the functions previously undertaken by single services. In spite of this, each service retains a unique role and therefore differences between the three cultures can be expected.

### Organisation Influences - Britain

Influence O6: The British armed forces are integrating many of the functions previously undertaken by single services but have traditionally been extremely wary of each other. Parallel organisations and structures continue to exist which are not readily apparent in the armed forces of Australia and Canada. Examples are the light infantry role of the Royal Marines and the air defence role of the RAF Regiment. Both of these capabilities are also provided by the Army. Each service continues to guard its roles and traditions and therefore differences between the services can be expected.

### Organisation Influences - Canada

Influence O7: The CF are the only armed force of the three countries where full integration has been attempted. Although there are signs that this has not been completely successful, the theory of the evolution, outlined in Chapter 1, of culture leads to the expectation that the cultures of the three services of Canada will be relatively similar.

## **CHAPTER SUMMARY**

This Chapter has identified a framework of factors that influence cultural values relevant to the armed forces of Australia, Britain and Canada. The framework has been applied to the armed forces in order to identify influences for the values examined in the Values Survey Module in subsequent chapters. Much of the evidence is based on approaches and methodologies that are less formal than that used for this study. Although the comparisons have been carefully structured and defined, the reviewed literature does not always provide evidence that exactly corresponds to this structure and several of the influences have overlapped the artificial framework created to help this Chapter structure the results. Five of the Influences cannot be tested within the framework of this study and will be considered under the future work section in Chapter 10.

The requirement to separate national culture from organisational culture was identified in Chapter 1. Throughout this Chapter national, intra-national organisational and international organisational influences were highlighted at the end of each section. These influences are collated and profiled in Chapter 6, in order to support subsequent discussion in Chapters 9 and 10.

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## **CHAPTER NOTES**

<sup>1</sup> Previously quoted in Chapter 1 Hofstede states, "Using the word *culture* in reference to both nations and organizations suggests that the two kinds of culture are identical phenomena. This is incorrect: A nation is not an organization, and the two types of culture are different kinds." Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. Thousand Oaks, Sage.

<sup>2</sup> This factor should not be confused with IDV in the VSM. IDV is described in detail in Chapter 4.

<sup>3</sup> This factor should not be confused with the Collectivism concept embedded in the IDV index of the VSM.

<sup>4</sup> 'Culture shock' is a state of confusion and uncertainty that affects people exposed to an alien culture. Feelings of anxiety and inadequacy frequently accompany culture shock. Many, but not all, people experience culture shock when exposed to a new environment. Culture Shock can be broken down into four phases. These phases are not mutually exclusive and many people skip or remain in one of the phases. The purpose of the model is that it serves as a useful guide to recognising the sensations an international student may be experiencing: (1) Honeymoon Period: represents the initial euphoria or the 'tourist' reaction to all of the new and interesting experiences and sensations offered by a new culture; (2) Hostility: a period of hostility and irritation is a phase in which the unpleasant and jarring aspects of a new culture become pronounced. One example is the different way cultures view time. In Latin America and the Middle East, punctuality is less important than in the United Kingdom, whereas in Germany and other middle-European countries, punctuality is even more rigidly observed; (3) Adjustment: a period of gradual adjustment comes with patience and application of lessons learned and increased language proficiency; and (4) Adaptation: successful adaptation leaves the person with the ability to smoothly function in both their native culture and the new culture. "It is a myth that experiencing culture shock is a weakness or a negative indication of future success. Culture shock in all its diverse forms is completely normal and is a part of a successful process of adaptation." Marx, E. (1999). Breaking Through Culture Shock. London, Nicholas Brealey. Accepting that culture shock may occur in cross-cultural situations and understanding how this is caused by a clash of values is central to successfully overcoming the cross-cultural communication challenge.

<sup>5</sup> In 1919 Chauvel "...was appointed Inspector General, the Army's most senior post, which he held until 1930. In February 1920, he was promoted to the substantive rank of lieutenant general, back dated to 31 December 1919. In January 1920, Chauvel chaired a committee to examine the future structure of the army. This proved next to impossible in the face of defence cuts that were imposed in 1920 and 1922. On Lieutenant General C. B. B. White's retirement in 1923, Chauvel also assumed the post of Chief of Staff as well. In November 1929, he was promoted to the rank of full general, becoming the first Australian to reach that rank. Chauvel attempted to maintain an increasingly hollow structure in place. As Chief of the General Staff, Chauvel had tried to keep standards up by arranging for regular officers to be posted to British staff colleges at Camberley and Quetta, and the Imperial Defence College. When conscription was abolished by the Scullin government in 1929, it was left up to Chauvel to make the new volunteer system work. He retired in April 1930." Mallett, R. (2002). General Sir Harry Chauvel. <http://www.unsw.adfa.edu.au/~rmallett/Generals/chauvel.htm>, Australian Defence Force Academy. 2002.

<sup>6</sup> As of 2000 the remnants of the British Empire (over which the sun still never sets) are: Anguilla, Bermuda, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands, Gibraltar, Montserrat, Pitcairn Islands, St. Helena and Dependencies, South Georgia and South Sandwich Islands, Turks and Caicos Islands Mills, T. F. (1996). Land Forces of Britain, the Empire and Commonwealth, <http://www.regiments.org>. 2002.

<sup>7</sup> Class 'A' drugs are "...considered the most harmful when misused..." West Midlands Police (2001). Dealing With Drugs. [http://www.west-midlands.police.uk/our\\_policies/drugs.htm](http://www.west-midlands.police.uk/our_policies/drugs.htm), West Midlands Police. 2002.

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<sup>8</sup> “After a three-month review, former Canadian Minister of National Defence, Douglas Young announced in April 1997 that the leadership and morale problems in Canada's armed forces can be solved without an overhaul of the military system. In the past few years, the Canadian military's reputation has been tarnished by brutal behaviour, allegations of racism and other improper conduct, and the falsifying of documents requested under the Access to Information Act. In conjunction with those investigations, the leadership of the forces and the military justice system have come under severe criticism. Young's report to Prime Minister Jean Chretien contained 100 recommendations, covering: military discipline; values and ethics; leadership; the command and rank structure; operational missions; terms and conditions of service; defence headquarters; relations with the public; and the military justice system.” Jane's (2002). "World Armies - Canada." Jane's World Armies - electronic edition 8.

<sup>9</sup> Britain is widely accepted as having the following indigenous languages: Gaelic (Scots, Irish and Manx), Welsh and Cornish.

<sup>10</sup> The three ministries were the Admiralty, the Air Ministry and the War Office, "...with the MOD playing an unsatisfactory coordinating role.” Dandeker, C. and L. Freedman (2002). "The British Armed Services." Political Quarterly 73(4): 465-475.

<sup>11</sup> Three examples of Joint deployable organisations are the Joint Helicopter Command, Joint Harrier Force and Joint Nuclear Biological and Chemical Regiment. Each combines elements of more than one service in its day-to-day business.

<sup>12</sup> Although Australia has recently instigated a single organisational approach that emphasises integration and Britain has, for example, created a Joint Force Headquarters for overseas deployments, both countries have retained the individual services of their armed forces.

## **INTRODUCTION TO CHAPTER 6 - EXAMINING THE INFLUENCES**

The previous Chapter identified a framework of factors that influence cultural values relevant to the armed forces of Australia, Britain and Canada. The framework was applied on these armed forces in order to identify influences for discussion in subsequent chapters. This Chapter is intended to demonstrate the application of the approach in precise detail. The influences identified in Chapter 5 are collated here to create value profiles for the comparisons in Exhibits 2-4b, 2-4c and 2-4d from Chapter 2. The application of each influence is identified and its specific use in Exhibits 6-1 through 6-9 annotated for ease of reference. This will enable replication of this study by clearly tracing the influences from the text in Chapter 5. The following nine sets of exhibits are produced from this process:

- Australian national culture - Exhibit 6-1.
- British national culture – Exhibit 6-2.
- Canadian national culture – Exhibit 6-3.
- Australian intra-national armed forces organisational culture – Exhibit 6-4.
- British intra-national armed forces organisational culture – Exhibit 6-5.
- Canadian intra-national armed forces organisational culture – Exhibit 6-6.
- Navy international organisational culture – Exhibit 6-7.
- Army international organisational culture – Exhibit 6-8.
- Air force international organisational culture – Exhibit 6-9.

## **Historical Influences**

Influence H1: The armed forces of Australia Britain and Canada recruit and train their officers in accordance with the Prussian model. This implies that the armed forces of all three countries will have similar values to the national level culture and that this will be mirrored at both the international and intra-national organisational levels. **National. Exhibits 6-1, 6-2 and 6-3.**

Influence H2: The mutual history shared between Australia, Britain and Canada should continue to be reflected in the respective national and armed forces cultural values. This is supported by evidence that in the past Britain has heavily influenced the armed forces of Australia and Canada. There should be strong international links between the armed forces. **National. Exhibits 6-1, 6-2 and 6-3.**

Influence H3: The Royal Navy has had a significant influence on the Royal Australian Navy and the Canadian Navy. The historical influence of the Royal Navy can be expected to remain in the cultures of the other two navies. **International. Exhibit 6-7.**

Influence H4: The Armies of all three countries have traditionally maintained extremely close links many of which continue today. The historical influences can be expected to remain in the cultures of the three armies. **International. Exhibit 6-8.**

Influence H5: The relative lack of political attention to the internally perceived requirements of the armed forces of all three countries may lead to a divergence in some cultural values from the national values. **International. Exhibits 6-1, 6-2 and 6-3.**

Influence H6: Although British influences and ties remain, Australia and Canada and perhaps to a lesser degree Britain have all looked to the United States to help them develop their armed forces in recent decades. This may have an impact on cultural values at both the national and international organisational level. **International. Exhibits 6-7, 6-8 and 6-9.**



## Australia

Influence H7: The Australian military tradition has had a deep effect on the national culture. It is reasonable to expect similarities between civilian values and those of the ADF. **Australia national. Exhibit 6-1.**

Influence H8: The historical links of the RAN to the RN may lead to organisational values that are more closely related between the services of the two countries than within Australia's armed forces. **International Navy. Exhibit 6-7.**

Influence H9: Before WWII the senior leadership of the Australian Army chose to closely shadow British staff officer training, rather than develop a national system. This would lead to the expectation that the Australian Army and the British Army would continue to share a similar set of core values. **International Army. Exhibit 6-8.**

Influence H10: The historical links of the RAAF to the RAF may lead to organisational values that are more closely related between the services of the two countries than within Australia's armed forces. **International Air Force. Exhibit 6-9.**

Influence H11: The lack of political support for the Australian armed forces over several generations may lead to an increased LTO by all three services as they cannot afford to rest on tradition and need to look to the future in order to survive as credible forces. **Australia national. Exhibit 6-1.**

## Britain

Influence H12: British armed forces have evolved over several centuries with a variety of influences affecting their cultural values. In the last five decades, Britain's armed forces have adapted to meet the change of political imperatives. It follows that the Uncertainty Avoidance Index (UAI) should be relatively low in comparison to Australia

and Canada where the armed forces have had to deal with relatively less change in their historical roles. **International. Exhibits 6-7, 6-8 and 6-9.**

Influence H13: The military history of Britain extends back several centuries before Australia and Canada became independent states. Additionally, the British armed forces are more closely linked to the ruling establishment than in Australia and Canada. It is expected that the British armed forces will have relatively low LTO scores compared to those of Australia and Canada, due to a respect for the long standing traditions and the political support they enjoy. **International and intra-national. Exhibits 6-5, 6-7, 6-8 and 6-9.**

#### Canada

Influence H14: Canadian society has a significant French influence which should be reflected in the culture of its armed forces. This influence is particularly strong for the Canadian army whose roots stem from the French militia. This may have an influence that is reflected when compared to the values of the British and Australian armed forces. **International. Exhibits 6-7, 6-8 and 6-9.**

Influence H15: Physical proximity to US and basing doctrine on their neighbour will lead to a drift away from both the French and British forming influences on the CF. **International. Exhibits 6-7, 6-8 and 6-9.**

Influence H16: Organisations need to practise their core skills in order to deal effectively with uncertain environments. Canada has only deployed a significant war fighting force once since WWII and it is likely that this will lead to a higher UAI score in the CF than in the ADF and British Armed Forces. **International. Exhibits 6-7, 6-8 and 6-9.**

Influence H17: As the Canadian military has not received unreserved political support during operational deployments in the past it is likely that it will have a relatively high LTO score. **National. Exhibit 6-3.**

### **Individual Influence**

Influence I1: As mentioned in the introduction to this Chapter, examination of the Individual does not sit comfortably with study. One individual influence that is relevant for officer's of the three countries' armed forces is that can all be expected to provide a high IDV score relative to the national scores. This is due to two factors identified in this section. First, the act of legitimately bearing arms places the individual sailor, soldier and airman at the extreme edge of most western society. Second, in comparison to most civilian managers, officers are trained to make rapid decisions under pressure and 'lead from the front' as individuals rather than to make group decisions. **National, international and intra-national organisational. Figures 6-1 to 6-9.**

### **Group Influences**

Influence G1: None of the samples are overtly involved with politics and should show similar sets of values to each other as career orientated officers will generally have their sights for achievement set within the boundaries of the armed forces. **International. Figures 6-7, 6-8 and 6-9.**

Influence G2: All sets of samples will share some of the values with their civilian counterparts but there are influences shaping values that are peculiar to the armed forces. **National. Figures 6-1, 6-2 and 6-3.**

Influence G3: Officers may not be the truest representatives of the cultures of the sampled armed forces. Long serving soldiers are considered more enculturised with traditional military outlooks and perspectives. **Not testable in this study.**

Influence G4: All sets of armed force samples should demonstrate relatively low MAS scores as officers are expected to demonstrate concern for their subordinates and peers.

**National. Figures 6-1, 6-2 and 6-3.**

Influence G5: Values such as professionalism are considered central to all of the samples but are not measurable using the VSM. **Not testable in this study.**

Group Influences - Australia

Influence G6: Each service in Australia has its own unique brand of officers which implies strong cultures and therefore officers will produce high IDV scores in order to stand out as good leaders. **National. Figure 6-1.**

Influence G7: The Australian military would expect to record low PDI scores due to the egalitarian civilian cultural heritage. However, overall the RAN should have the relatively highest PDI due to its greater hierarchical nature, with the Army in the middle and the RAAF lowest due to the least hierarchical nature of organisation. **National and intra-national. Figures 6-1 and 6-4.**

Influence G8: The Australian military should have a relatively low UAI compared to national culture due to consistently having to work creatively with limited resources combined with the 'can do' mentality. **National and intra-national. Figures 6-1 and 6-4.**

Influence G9: Belief in having 'fair go' will lead to reduced group competitiveness and corresponding lower MAS scores. The Australian Army should have a lower MAS score due to a greater sense of community than the other two Australian services. **National and intra-national. Figures 6-1 and 6-4.**

Influence G10: The Australian military should have a low LTO score due to a sense of tradition based on 'warrior core' competency. The Australian Army is least likely to

embrace new ways and therefore most likely to have the lowest LTO score of the three services. **National and intra-national. Figures 6-1 and 6-4.**

#### Group Influences - Britain

Influence G11: All three armed forces should exhibit relatively low MAS scores due to espoused values that relate to concern for others in preference to competitiveness.

**National and intra-national. Figures 6-2 and 6-5.**

Influence G12: All three armed forces should exhibit low LTO scores due to the imperative of fulfilling extensive social obligations. **National and intra-national.**

**Figures 6-2 and 6-5.**

#### Group Influences - Canada

Influence G13: The CF have shown a greater inclination to protection of the group than the other two international samples and this should be reflected in relatively lower IDV scores. **International. Figures 6-7, 6-8 and 6-9.**

Influence G14: Although still expecting a reasonably high PDI score it may be relatively lower than those for Australia and Britain as a stated core value is to encourage open discussion and criticism. **International. Figures 6-7, 6-8 and 6-9.**

Influence G15: Due to the ‘tarnishing’ of the CF reputation higher UAI scores will be recorded than for Canadian society and the Australian and British armed forces. This is likely to be most strongly reflected in the UAI score for the army. **National, international and intra-national. Figures 6-3, 6-6, 6-7, 6-8 and 6-9.**

Influence G16: Although there have been considerable historical British and French influences, there is also a more recent US influence on the Canadian Group. Given the cultural diversity and acceptance of difference reflected in Canada’s society and armed

forces (ie two national languages) the MAS scores will be relatively low as this is considered to be a nurturing society. **International. Figures 6-7, 6-8 and 6-9.**

### **Situation Influences**

Influence S1: The situational foci of the various samples are different, at the national level the ADF concentrating on civilian refugees and regional crises, British armed forces on medium scale war fighting and CF on shifting from a tactical to strategic orientation. At the organisational level the focus of decision making is affected by the services' respective roles. These differences will influence the relative values of the armed forces. **International and intra -national. Not testable in this study.**

#### **Situation Influences - Australia**

Influence S2: The international and political situation of the Australian armed forces implies a PDI score relatively similar to those of the civilian cohort due to a close and stable relationship with the government. **National. Figure 6-1.**

#### **Situation Influences - Britain**

Influence S3: The values of the British armed forces are expected to reflect those of the society they serve. However, there is acknowledgement by both the armed forces and national government that core values will diverge from society in some respects. **National. Figure 6-2.**

Influence S4: Ethos and Identity (discussed in Chapter 1) do not necessarily translate across national or organisational boundaries but cultural values do. **Academic evidence provided to prove this but not tested in this study.**

### Situation Influences - Canada

Influence S5: Over time the CF can be expected to produce a lower overall UAI score as they move away from the relatively constrained view implied by a tactical focus to the wider perspective required to become a strategic orientated force. **Not tested in this study.**

### Task Influences

Influence T1: The tasks placed on leaders in western armed forces place them at the edge of western society and mark them out as having strong individual values. Compared with three countries that already record high national IDV scores it is reasonable to expect all of the samples to provide very high IDV scores. **National, international and intra-national. Figures 6-1 to 6-9.**

### Task Influences - Australia

Influence T2: There may be some differences across the three service of the ADF due to historical preference for single service tasks. **Intra-national. Figure 6-4.**

Influence T3: The tasks provided for the ADF are relatively broad and are not prescriptive. This indicates that a relatively low PDI score may be recorded. **National. Figure 6-1.**

Influence T4: There is tension between the immediate stated tasks of the ADF, recent specified operational tasks abroad and General Cosgrove's assertion that the ADF prime focus needs to be war fighting. This task dichotomy be reflected in a greater need for uncertainty avoidance. **International. Figures 6-7, 6-8 and 6-9.**

### Task Influences - Britain

Influence T5: Although there are a significant number of tasks placed on the British armed forces none of them are prescriptive which implies a relatively low PDI score. **National. Figure 6-2.**

Influence T6: The relatively high number of tasks placed on the British armed forces indicate a high tolerance for uncertainty and therefore a low UAI score. This is supported by the British armed forces view that the task of conducting operations is an art rather than a science. This implies a correspondingly low UAI score. **National, intra-national and international. Figures 6-2, 6-5, 6-7, 6-8 and 6-9.**

### Task Influences - Canada

Influence T7: Although the armed forces of Australia and Britain recognise that they are most likely to operate with coalition partners neither preclude the concept of them operating in isolation. This is not the case for the CF which appear to specifically avoid the option of undertaking international military tasks in isolation. This implies a desire to avoid uncertainty with a relatively high UAI score predicted for the CF. **International. Figures 6-7, 6-8 and 6-9**

### Organisation Influences

Influence O1: Although it may seem counterintuitive, the importance of protecting group cohesion through well-developed individuals is central the armed forces. 'Self-starters' are generally encouraged which should result in a higher IDV score than civilian cohorts. **National, intra-national and international. Figures 6-1 to 6-9.**

Influence O2: The PDI of the armed forces is tempered by the following organisational influences (organisational influence extracted from group influences in Exhibit 3-2):



- Navy: High PDI due to the absolute authority of the ship's captain.
- Army: Lowest PDI pressure due to diffuse nature of the battlefield.
- Air Force middle ranking of the services due to the similarity to many civilian organisational structures. **Intra -national. Figures 6-4, 6-5 and 6-6.**

Influence O3: Each of the armed forces appears to be able to amalgamate recruits into their respective cultures relatively easily. This would provide pressures for lower MAS scores, as people appear to be generally able to deal with the ambiguity of changing from civilian to military life. **National and intra-national. Figures 6-1 to 6-6.**

Influence O4: The need to develop careers internally over periods of up to thirty to thirty-five years may result in higher LTO scores for the military than the civilian samples. **National. Figures 6-1, 6-2 and 6-3.**

#### Organisation Influences - Australia

Influence O5: The ADF has recently integrated many of the functions previously undertaken by single services. In spite of this, each service retains a unique role and therefore differences between the three cultures can be expected. **Intra -national. Figure 6-4.**

#### Organisation Influences - Britain

Influence O6: The British armed forces are integrating many of the functions previously undertaken by single services but have traditionally been extremely wary of each other. Parallel organisations and structures continue to exist which are not readily apparent in the armed forces of Australia and Canada. Examples are the light infantry role of the Royal Marines and the air defence role of the RAF Regiment. Both of these capabilities are also provided by the Army. Each service continues to guard its roles and traditions and therefore differences between the services can be expected. **Intra -national. Figure 6-5.**

## Organisation Influences - Canada

Influence O7: The CF are the only armed force of the three countries where full integration has been attempted. Although there are signs that this has not been completely successful, the theory of the evolution, outlined in Chapter 1, of culture leads to the expectation that the cultures of the three services of Canada will be relatively similar. **Intra-national. Figure 6-6.**

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**Australian national culture**

This section identifies the influences that will affect the cultural distance between Australian national society and the armed forces. Exhibit 6-1 shows the expected divergence between the two cultures where the straight line left to right represents the relative position of the Australian national culture and the arrows the expected stabilising and destabilising influences and negative or positive divergence.

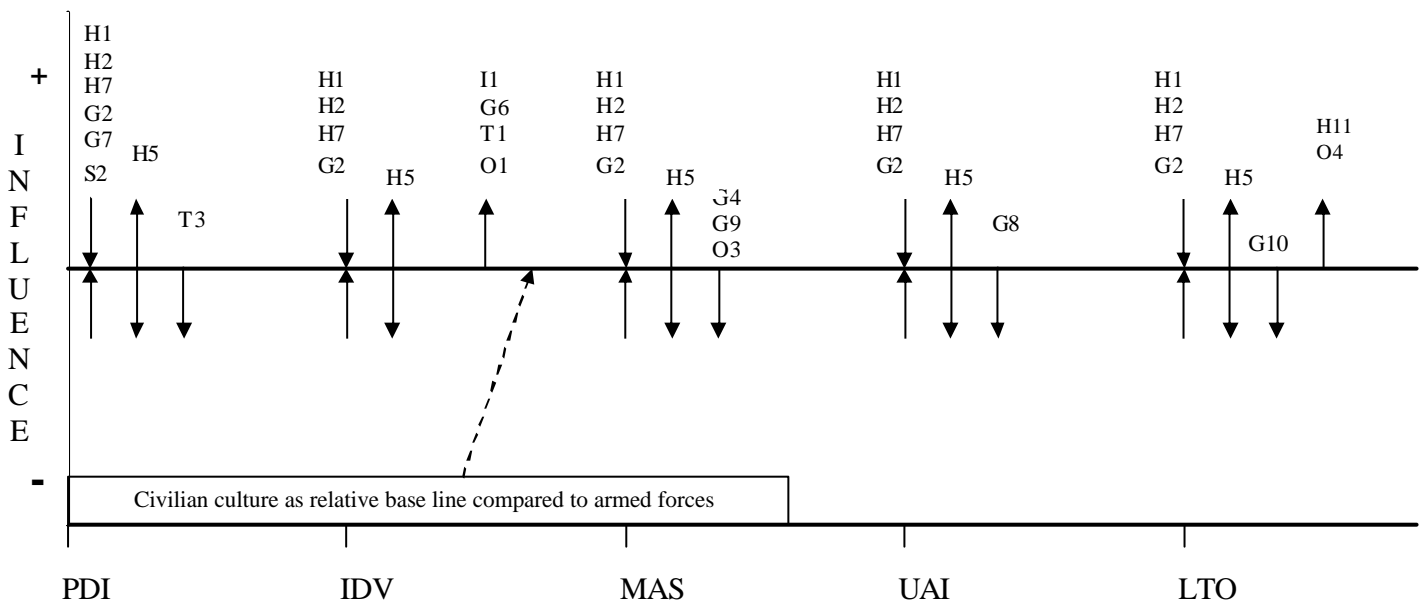
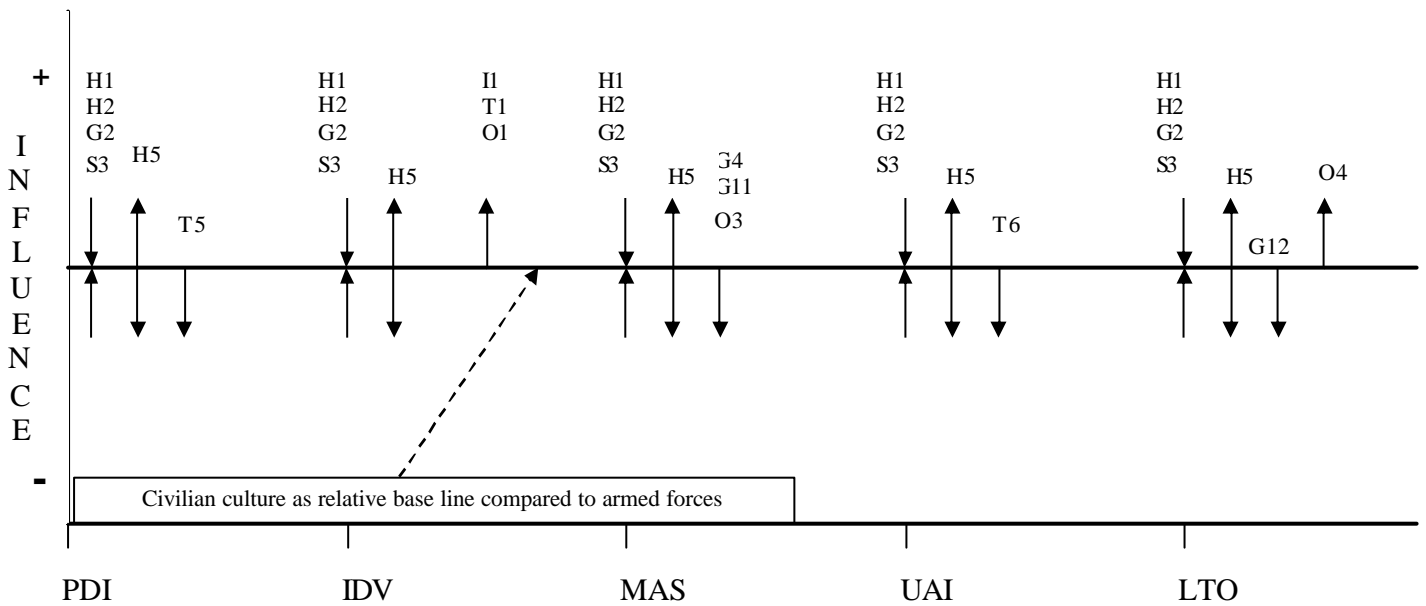


Exhibit 6-1. Australian national influences  
Summarised from Influences in this chapter

Exhibit 6-1 shows that there are more stabilising influences than destabilising influences by a factor of six to one for PDI and four to one for the remaining values. This shows that although there are differences the overall links between Australian civilian and military cultures are expected to be strong. The negative and positive arrows show where the differences are expected to occur.

**British national culture**

This section identifies the influences that will affect the cultural distance between British national society and the armed forces. Exhibit 6-2 shows the expected divergence between the two cultures where the straight line left to right represents the relative position of the British national culture and the arrows the expected stabilising and destabilising influences and negative or positive divergence.

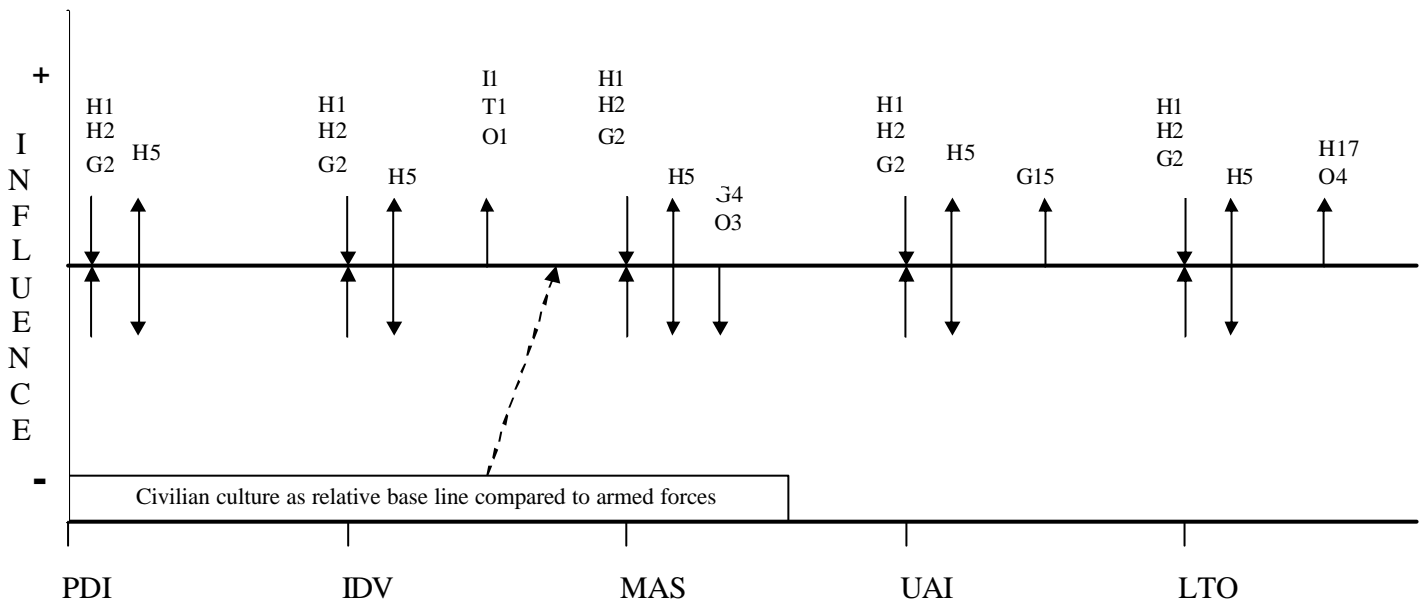


**Exhibit 6-2. British national influences**  
Summarised from Influences in this chapter

Exhibit 6-2 shows that there are more stabilising influences than destabilising influences by a factor of four to one. This shows that although there are differences the overall links between British civilian and military culture are expected to be strong. This in on a par with the Australian samples. The negative and positive arrows show where the differences are expected to occur.

**Canadian national culture**

This section identifies the influences that will affect the cultural distance between Canadian national society and the armed forces. Exhibit 6-3 shows the expected divergence between the two cultures where the straight line left to right represents the relative position of the Canadian national culture and the arrows the expected stabilising and destabilising influences and negative or positive divergence.

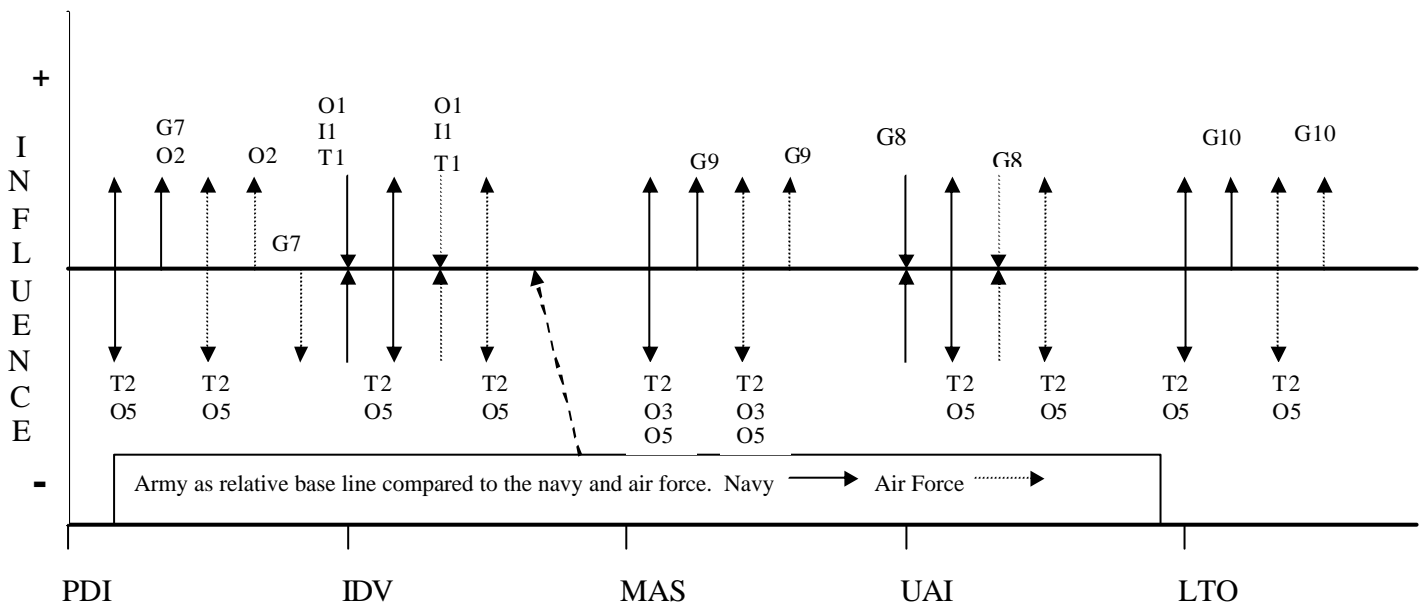


**Exhibit 6-3. Canadian national influences**  
Summarised from Influences in this chapter

Exhibit 6-3 shows that there are more stabilising influences than destabilising influences by a factor of three to one. This shows that although there are differences the overall links between Canadian civilian and military culture are expected to be strong but not as strong as those of Australia and Britain. The negative and positive arrows show where the differences are expected to occur.

**Australian intra-national organisational culture**

This section identifies the influences that will affect the cultural distance between the armed forces of Australia. Exhibit 6-4 shows the expected divergence between the three cultures where the straight line left to right represents the relative position of the Australian Army’s culture in relation to the expected differences to the Royal Australian Navy and Royal Australian Air Force cultures. The arrows show the expected stabilising and destabilising influences and negative or positive divergence.



**Exhibit 6-4. Australian armed forces influences**  
Summarised from Influences in this chapter

Exhibit 6-4 shows the following influences:

- PDI two to zero for both the navy and air force relative to the army.
- IDV three to two for both the navy and air force relative to the army.
- MAS three to zero for both the navy and air force relative to the army.
- UAI one to two for both the navy and air force relative to the army.
- LTO two to zero for both the navy and air force relative to the army.

Exhibit 6-4 shows that there are some strong links between the three services. The negative and positive arrows show where the differences are expected to occur.

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**British intra-national organisational culture**

This section identifies the influences that will affect the cultural distance between the armed forces of Britain. Exhibit 6-5 shows the expected divergence between the three cultures where the straight line left to right represents the relative position of the British Army’s culture in relation to the expected differences to the Royal Navy and Royal Air Force cultures. The arrows show the expected stabilising, destabilising and negative or positive divergence.

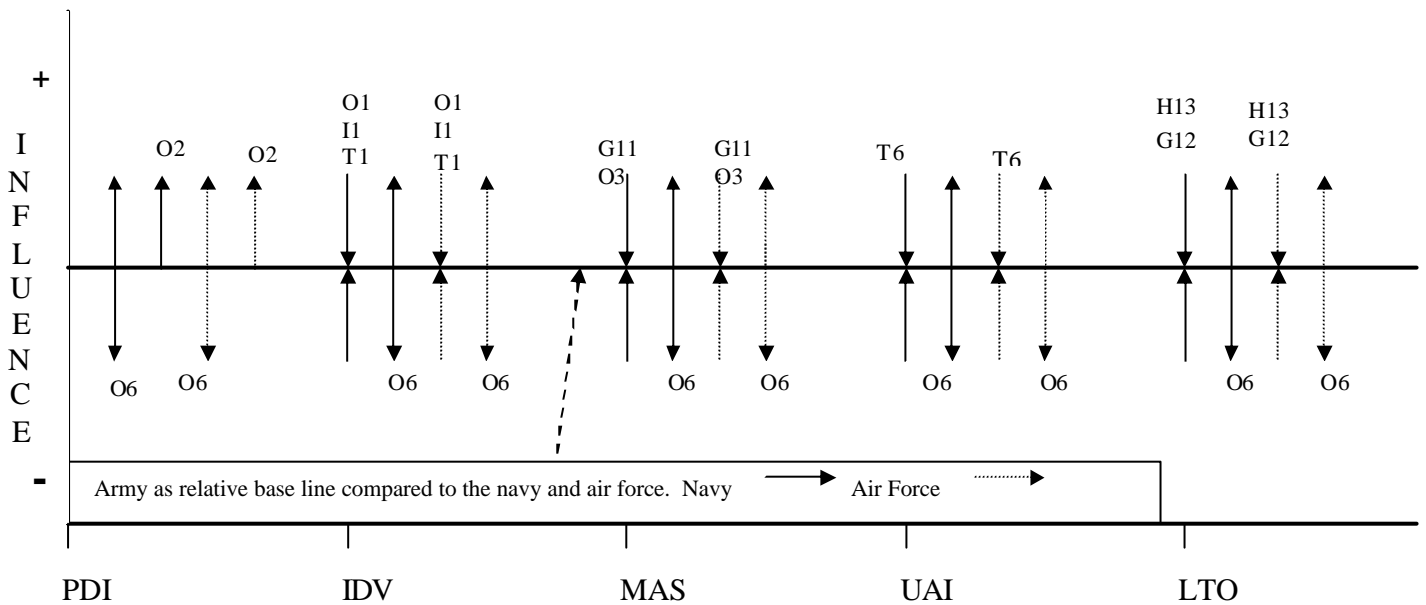


Exhibit 6-5. British armed forces influences  
Summarised from Influences in this chapter

Exhibit 6-5 shows the following influences:

- PDI zero to one for both the navy and air force relative to the army.
- IDV three to one for both the navy and air force relative to the army.
- MAS two to one for both the navy and air force relative to the army.
- UAI one to one for both the navy and air force relative to the army.
- LTO two to one for both the navy and air force relative to the army.

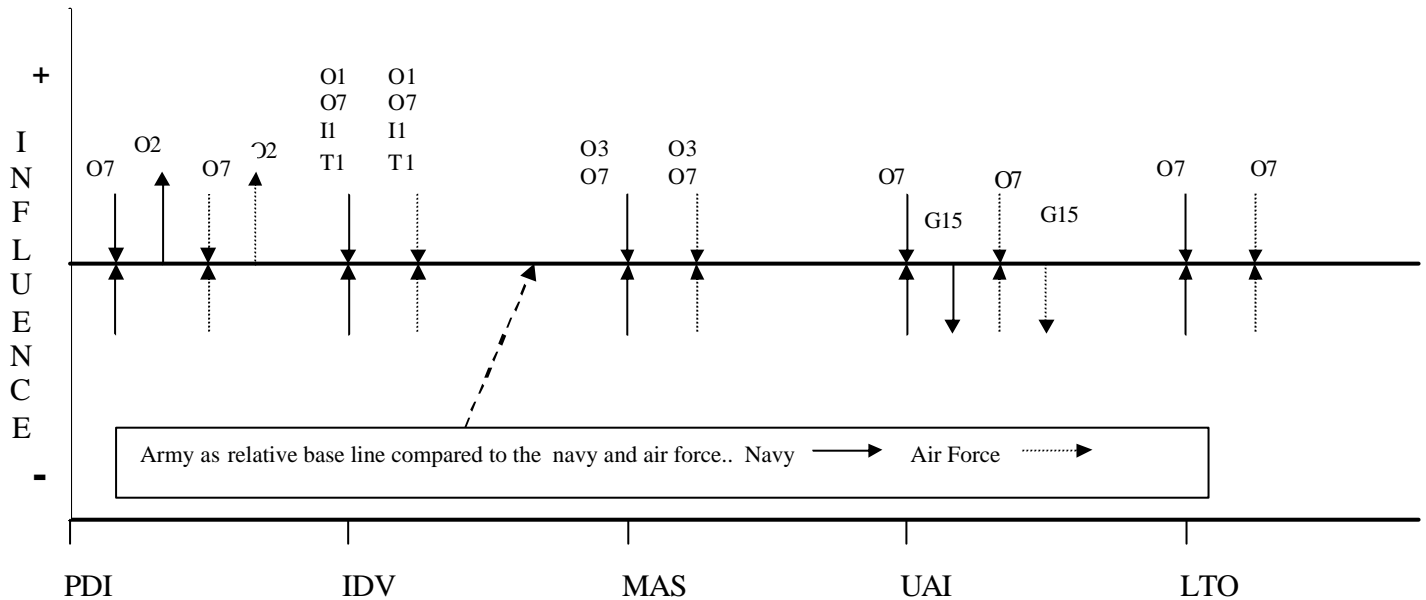


This shows that the overall links between the three services' organisational cultures are closer than those for Australia but cultural divergence is still expected. The negative and positive arrows show where the differences are expected to occur.

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**Canadian intra-national organisational culture**

This section identifies the influences that will affect the cultural distance between the armed forces of Canada. Exhibit 6-6 shows the expected divergence between the three cultures where the straight line left to right represents the relative position of Canada's Army culture in relation to the expected differences to the Navy and Air Force cultures. The arrows show the expected stabilising, destabilising and negative or positive divergence.



**Exhibit 6-6. Canadian armed forces influences**  
Summarised from Influences in this chapter

Exhibit 6-6 shows the following influences:

- PDI one to zero for both the navy and air force relative to the army.
- IDV four to zero for both the navy and air force relative to the army.
- MAS two to zero for both the navy and air force relative to the army.
- UAI one to two for both the navy and air force relative to the army.
- LTO one to zero for both the navy and air force relative to the army.

This demonstrates the expectation that the links between the three services of the Canadian military organisational culture are expected to be strong. The negative and positive arrows show where the differences are expected to occur.

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**Naval international organisational culture**

This section identifies the influences that will affect the cultural distance between the navies of Australia, Britain and Canada. Exhibit 6-7 shows the expected divergence between the three cultures where the straight line left to right represents the relative position of the Royal Navy's culture in relation to the expected differences to the Royal Australian Navy and Canadian Navy cultures. The arrows show the expected stabilising, destabilising and negative or positive divergence.

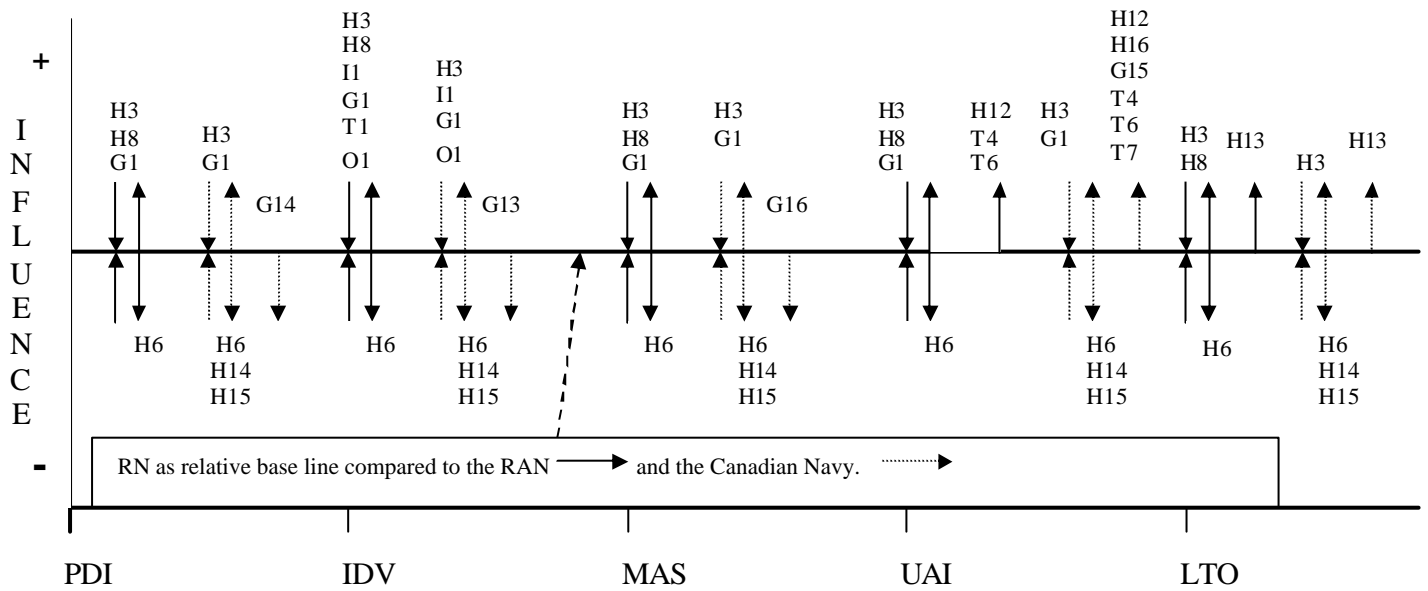


Exhibit 6-7. Naval international influences.  
Summarised from Influences in this chapter

Exhibit 6-7 shows the following influences relative to the RN:

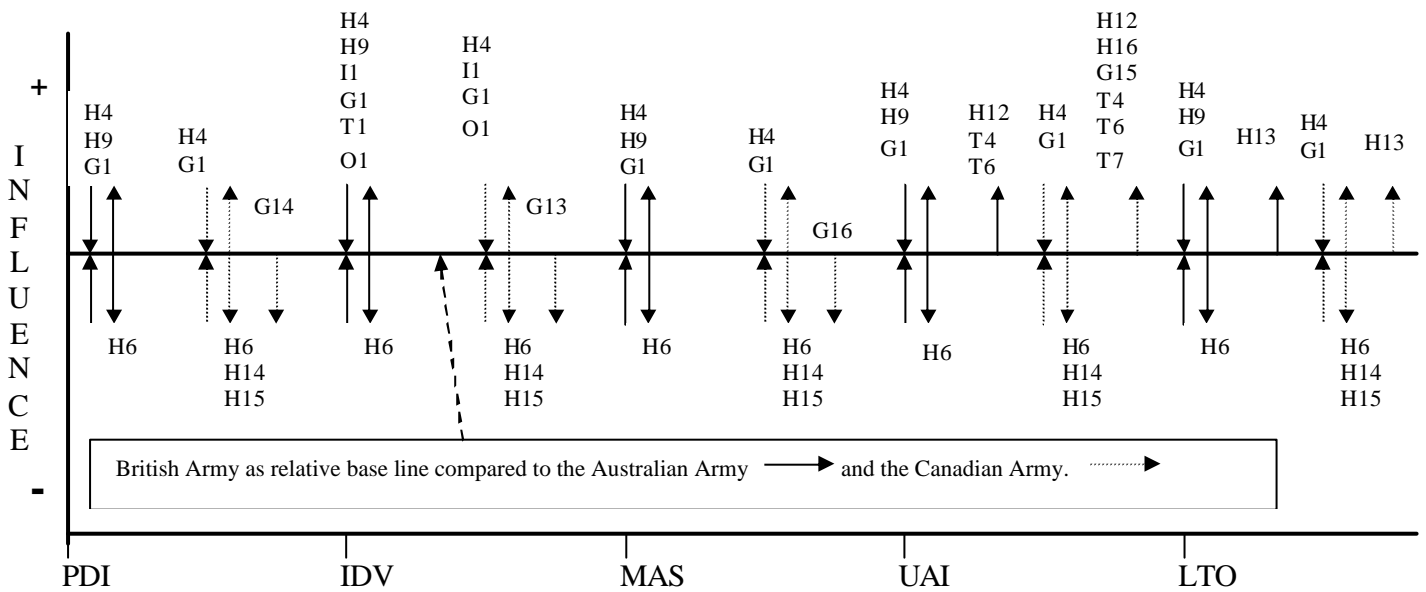
- PDI three to one for the RAN and two to three for the Canadian Navy.
- IDV six to one for the RAN and four to three for the Canadian Navy.
- MAS three to one for the RAN and two to three for the Canadian Navy.
- UAI three to one for the RAN and two to three for the Canadian Navy.
- LTO two to one for the RAN and one to three for the Canadian Navy.

This demonstrates the expectation that in general the links between the RN and the RAN are closer than with the Canadian Navy. There is a particularly strong link between the RN and RAN for IDV with the Canadian Navy expected to score a little lower. Also there is an expectation of significant divergence for the UAI score of the Canadian Navy compared to the RN and RAN. The negative and positive arrows show where the differences are expected to occur.

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**Army international organisational culture**

This section identifies the influences that will affect the cultural distance between the armies of Australia, Britain and Canada. Exhibit 6-8 shows the expected divergence between the three cultures where the straight line left to right represents the relative position of the British Army’s culture in relation to the expected differences to the Australian Army and Canadian Army cultures. The arrows show the expected stabilising, destabilising and negative or positive divergence.



**Exhibit 6-8. Army international influences.**  
Summarised from Influences in this chapter

Exhibit 6-8 shows that the following influences relative to the British Army:

- PDI three to one for the Australian Army and two to three for the Canadian Army.
- IDV six to one for the Australian Army and four to three for the Canadian Army.
- MAS three to one for the Australian Army and two to three for the Canadian Army.
- UAI three to one for the Australian Army and two to three for the Canadian Army.
- LTO three to one for the Australian Army and two to three for the Canadian Army.

This demonstrates the expectation that in general the links between the British Army and the Australian Army are closer than with the Canadian Army. There is a particularly strong link between the Australian Army and British Army for IDV with the Canadian Army expected to score a little lower. Also there is an expectation of significant divergence for the UAI score of the Canadian Army compared to the British and Australian Armies. The negative and positive arrows show where the differences are expected to occur.

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**Air Force international organisational culture**

This section identifies the influences that will affect the cultural distance between the air forces of Australia, Britain and Canada. Exhibit 6-9 shows the expected divergence between the three cultures where the straight line left to right represents the relative position of the Royal Air Force’s culture in relation to the expected differences to the Royal Australian Air Force and Canadian Air Force cultures. The arrows show the expected stabilising, destabilising and negative or positive divergence.

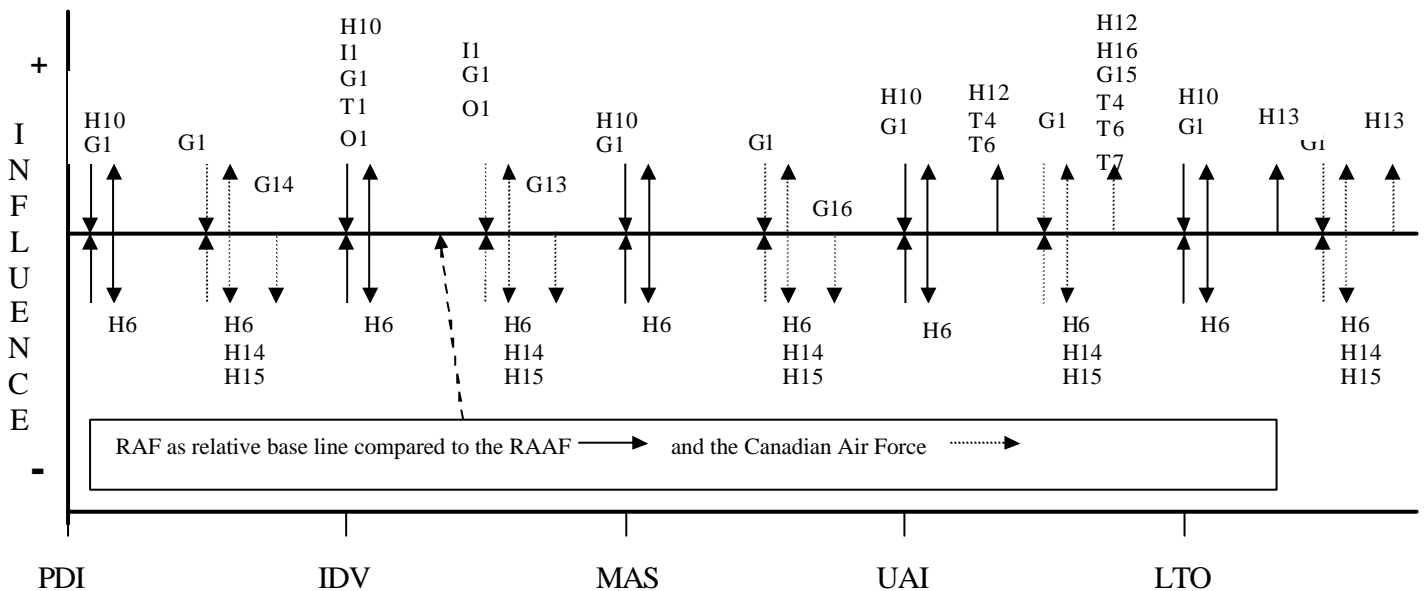


Exhibit 6-9. Air force international influences.  
Summarised from Influences in this chapter

Exhibit 6-9 shows the following influences relative to the RAF:

- PDI two to one for the RAAF and one to three for the Canadian Air Force.
- IDV five to one for the RAAF and three to three for the Canadian Air Force.
- MAS two to one for RAAF and one to three for the Canadian Air Force.
- UAI two to one for the RAAF and one to three for the Canadian Air Force.
- LTO two to one for the RAN and one to three for the Canadian Navy.



This demonstrates the expectation that in general the links between the RAF and the RAAF are closer than with the Canadian Air Force. There is a particularly strong link between the RAF and RAAF for IDV with the Canadian Air Force expected to score a little lower. Also there is an expectation of significant divergence for the UAI score of the Canadian Air Force compared to the RAF and RAAF. The negative and positive arrows show where the differences are expected to occur.

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## **CHAPTER SUMMARY**

This Chapter has collated and profiled the influences identified from the secondary evidence in Chapter 5. The requirement to separate national culture from organisational culture means that the profiles produced in this Chapter are based national, intra-national organisational and international organisational influences. Five of the Influences cannot be tested within the framework of this study and will be considered under the future work section in Chapter 10.

Chapters 7 and 8 examine the primary evidence produced using the Values Survey Module. The primary and secondary evidence is compared in Chapter 9.

## INTRODUCTION TO CHAPTER 7 – PRODUCING THE PRIMARY DATA

Chapter 5 identified a framework of factors that influence cultural values relevant to the armed forces of Australia, Britain and Canada. The framework has been applied to appropriate secondary evidence related to these armed forces in order to identify expected influences on the values examined by the Values Survey Module. Chapter 6 collated and profiled the influences identified from the secondary evidence in Chapter 5. This Chapter moves on to the production of the primary data using the VSM 94. Exhibit 7-1 from *Collecting and Interpreting Qualitative Materials* (Denzin and Lincoln 1998) is used to provide the structure for this Chapter and Chapter 8.

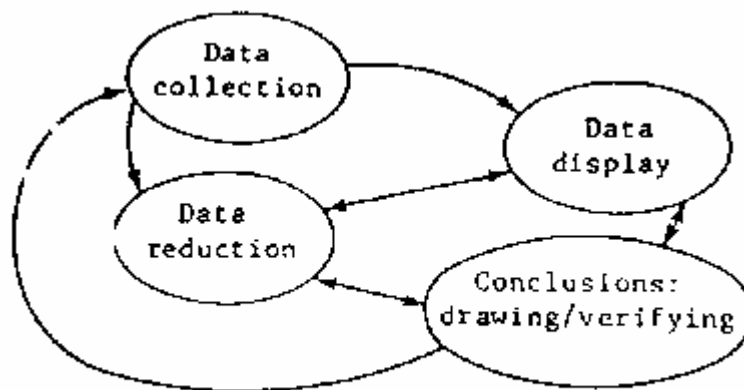


Exhibit 7-1. Components of Data Analysis.  
(Huberman and Miles 1998, p181)

Part 1 of this Chapter outlines the data collection process and identifies the requirement to match data samples and how they were selected for this study. Part 2 details the reduction of the data to calculate the VSM indexes. Part 3 verifies the data through confidence testing and analysis of the demographic data. Chapter 8 presents the data calculations and translates them into graphical form in accordance with the value profiling process identified in the methodology in Chapter 2.

## **DATA COLLECTION**

This section examines the collection and production of the data used for this study to ensure that the process was systematic and coherent.

### **Matching data samples**

“The main criteria responsible for group differences in the survey data and that apply to all data were country, occupation, gender and age of the respondents.” (Hofstede 2001, p50). Occupation and sex are closely related as few occupations have sizeable numbers of both sexes. Hofstede tested the relative contribution for these four criteria using variance analysis on a sub-sample of the data he gathered from IBM. It was found that the country effect is highly significant and that the other three were significant.

In order to compose scores by country Hofstede decided he had to control occupation. The composition of groups by age and sex varied marginally which made it unnecessary to control them once occupation had been dealt with. Country comparisons for the original VSM used data were taken only from marketing and service divisions. Seven categories, shown below, were identified and each carried equal weight regardless of the number of respondents (Hofstede 2001,p51):

- Managers (all levels), country head office.
- Managers (all levels), branch offices, including sales, system engineering, and customer engineering managers.
- Systems engineers.
- Data processing sales representatives.
- Data processing customer engineers.
- Office products customer engineers.
- Administrative personnel, country head office, including clerks and professionals.

In order for a country to be included in the analysis, at least four of these categories had to have eight or more respondents. Based on stability analysis undertaken on data

from two rounds of surveys, Hofstede excluded several of the original VSM questions from further analysis. There was some shift in responses and countries that had been surveyed only once had their scores corrected accordingly. The original country results for the first edition of *Culture's Consequences* can only be considered correct for the year 1970. However, the second edition of *Culture's Consequences* was published in 2001 and demonstrates relatively few shifts in the original results, which allowed Hofstede's published VSM results to be used for national level comparison in this study.

### Eliminating acquiescence

“Acquiescence is the tendency to give a positive answer to any question regardless of its content.” (Hofstede 2001, p56). Hofstede found that in general the lower the educational level of the respondent the stronger their acquiescence. This varied not only across occupations but across countries as well. Hofstede states that results require standardising, through ranking in order of importance, so that meaningful results can be achieved. In *Culture's Consequences* scores are given in a standardised form as a way of controlling acquiescence.

### Selecting the samples for this study

Having identified several countries that were suitable for examination, the next step was to identify a set of representative military samples that would satisfy the requirements of occupation, sex, age group and acquiescence. Good quality data for military personnel was found to be limited. *Value Orientations in Military Academies: A Thirteen Country Study* (Soeters 1997), *Culture and Discipline in Military Academies: An International Comparison* (Soeters and Recht 1998) and *Convergence or divergence in the multinational classroom? The NATO Defence College experience*. (Soeters and Recht 1998) were the only well researched studies that used the VSM on military samples and all involved the same author. “A first step in this direction was already taken by Soeters (1997) and Soeters & Recht (1998), who used the essential culture survey developed by Hofstede for IBM and, for the first time, applied it to the military. They questioned officer candidates from 18 military academies and used the results in order to contribute to the more general discussion of

organisational/theoretical models.” (Hagen 2001, Abstract) At the start of researching for this thesis, Soeters provided guidance on how to select and gather appropriate data samples. The following criteria were identified and applied to ensure that the data samples matched the requirements for this study:

- To achieve a valid ‘Joint’ comparison each armed service of the UK should provide a sample.
- To achieve a valid ‘Combined’ comparison the armed services of at least two other countries should provide a sample.
- Samples should be of a similar age, managerial position and well educated to ensure valid comparison and reduce acquiescence.
- Samples should have spent sufficient time in their organisations and have reached similar leadership positions to ensure they represent the cultural values of their organisations.
- Samples should all be acquired within a finite period to ensure a valid ‘snap shot’.
- There should be sufficient representative samples readily available to ensure sufficient quantities of replies for meaningful analysis.

Staff college students of the various armed forces met all the requirements listed above. Each service and country has staff college students that are selected, amongst other reasons, for their representation of the espoused values of the cultures they represent. Staff college students have spent a significant and similar amount of time immersed in their respective organisational cultures and are required to have achieved an almost identical managerial level across the various colleges and services and have reached similar minimum academic standards. They also provide a sufficient sample quantity to ensure that the quality of the data is acceptable. Finally, the VSM 94 was amended to ensure that the required demographic data was correctly received from the surveys. Annex A to this thesis shows the VSM in its amended form.

## Collecting the samples

The handbook for the VSM94 states: “The minimum number of respondents per country or region to be used in comparisons is 20. Below that the influence of single individuals becomes too strong. The ideal number is 50. Even better is to choose more than one respondent sample per country, such as men and women; or people of higher, middle and lower education. In this case, of course, the numbers 20 and 50 apply to each separate sample.” (Hofstede 1994, p4) Exhibit 7-2 shows the samples that were received for the countries targeted for this study during the period September 2000 to September 2001.

	Australia	Britain	Canada	USA	NZ
Army	73	43	22	Approval not received.	8 Total – not used
Navy	27	20	19		
Air Force	29	26	26		
Civilian MBA	6 Not used	28 Not used	3 Not used	Not Applicable	Not Applicable

Exhibit 7-2. Data samples collected for this study.  
Collated from annex pages H19-H14, I11-I15 and J9-J11

Australian Staff College Students. Access to the Australian Defence Force (ADF) was fortuitously straightforward. A senior Australian officer, who was encountered at a conference, provided the personal contact for access to ADF staff college students. This contact, another officer in the ADF, was well disposed and well placed to help procure the official authorisation required to apply the surveys. He also undertook all the associated work and ensured that the surveys were administered correctly. Initially responses were only received from Australian Army staff college students, as it was difficult to gain access to the other two service colleges. However, during January 2001 Australia established a joint service staff college and the surveys were again applied. This accounts for the large size of the Australian Army samples. This double sample was not considered to be an issue as both were collected within the allocated year for the overall ‘snapshot’.

British Staff College Students. Access to British armed forces staff college students was the most straightforward, due to the geographical proximity of the Joint Services Command and Staff College (JSCSC) to the Royal Military College of Science

(RMCS). As the Deputy Commandant of RMCS authorised this research project on behalf of the Commandant, it took little effort, with the aid of the study supervisor, to gain formal support from the Commandant of JSCSC. Once this support was achieved, permission was obtained to speak directly to the assembled students on the Advance Command and Staff Course (ACSC), to explain the purpose of the research and elicit their support. This public request was deliberately kept short and simple, in order not to lose their interest, and was immediately followed up with an e-mail to all of the students. This focussed e-mail was made possible through the support of the college administration and included a letter of explanation and an electronic copy of the survey.

Obtaining sufficient useable replies was achieved by waiting to address students in the first week of the ACSC course in September 2000 before they became jaded with the demands placed on them. By applying the surveys at the start of the course, the risk of value convergence was greatly reduced as the students were still on the single service elements of their courses. Due to the relatively low numbers of Naval personnel on ACSC it proved impossible to obtain sufficient usable responses. To raise the number of responses required to create a statistically sound sample a number of officers in the rank of Lieutenant Commander and Commander at Portsmouth Naval Base were asked to complete the VSM.

British MBA Students. Obtaining sufficient useable MBA replies proved to be a significant challenge. Cranfield University was approached to ask if the MBA programme students could be surveyed. As this was the academic institution supporting this study, permission was acquired relatively easily. What was not so easy, was obtaining a sufficient quantity of useable replies that matched the required criteria. One problem was that of timing, as the MBA students were mid-way through the academic year and this survey was their fourteenth request for help. Understandably, the initial response rate was very poor. To ensure sufficient replies were achieved for a statistically acceptable sample, the next Cranfield MBA course was also approached, this time at the start of their course.



MBA samples were discarded as a sample option when Hofstede published the second edition of *Culture's Consequences* (Hofstede 2001) in 2001, which provided up to date and more representative civilian samples for comparison.

Canadian Staff College Students. The Canadian armed forces had the advantage that they also have a single staff college. It proved time consuming to obtain permission to survey Canadian staff college students, as the initial approach was unsuccessful. Advice was sought from personal contacts and a second attempt was made, again with the support of the supervisor, through the office of the Canadian Chief of Staff. Although the application process appeared to have stalled for several months, authority was obtained and results were received very quickly thereafter both by e-mail and post. The approach to applying the surveys was slightly different from Australia and the UK, as an individual at the Canadian Defence College was nominated to provide all the support that was required to administer the surveys correctly. One point to note is that only 19 navy responses were used for the samples. Several Naval Directing Staff in the ranks of Lieutenant Commander and Commander were asked to complete the VSM as there were insufficient students to provide an adequate naval sample. Although several more Canadian navy replies were received than the nineteen processed for the study they could not be used as they contained dual nationality, which invalidated the returns.

New Zealand Staff College Students. The approach to New Zealand staff college students was very similar to that used for Australia. However, the number of students was very low and it would have taken approximately six years to receive enough replies to produce a valid set of samples from staff college students. Applying for permission to survey a wider sample, of the same rank, across the New Zealand armed forces, could have circumvented the time limit. This would have taken considerable resources and the coordination burden to ensure that surveys were correctly administered was too great for the individual who had 'volunteered' to support the study.

Pursuit of New Zealand samples was suspended when it became apparent that the Canadian and Australian samples had provided sufficient responses for the purposes of this study.

United States Staff College Students. Due to the relative size of its armed forces the USA posed a different problem from the other four nations, as each service runs a single service staff college. Each of the US services had different procedures and requirements that needed to be completed in order to receive permission to survey their staff college students. What was common across all the staff colleges was a lack of a user-friendly accreditation system. Each college was highly suspicious of the study and it took significant effort to find appropriate points of contact to apply for permission to survey students. It took over a year just to reach the point where formal bids could be submitted for support to the project.

Pursuit of USA staff college students was discontinued when it became apparent that the overseas research requirement would be achieved using Australian and Canadian samples. Any future research project should not waste time going to the colleges directly but should attempt to find a suitable point of contact at the Pentagon and follow a similar approach to that used for Canada. Although this would probably still take considerable time, this approach should ensure accreditation is provided to allow access to the colleges.

Practical issues. Apart from the considerable effort required to obtain sufficient usable returns, there are a number of practical issues surrounding the use of surveys. These are not explicitly covered in the academic literature but are inherent in the process. In simple terms, it is not safe to assume that receiving 20 survey returns will mean that 20 are suitable for use. The following need to be considered when using surveys:

- Spoiled returns. A significant number of returns had to be rejected, as they had been spoiled in some form. Typical electronic problems were that e-mailed responses were either unreadable or not completed. Several printed surveys were returned in the post having not been completed at all, which was beyond any apparent explanation. A common fault was that respondents would spread their answers by highlighting two or more numbers, instead of answering with a single mark.

- Nationality. Nationality was another significant cause of rejected survey returns with a few respondents neglecting to identify their nationality at all. It was expected that there would be replies from international students from other countries attending the colleges and this occurred. What was not expected was the significant number of responses that showed dual nationality or a change of nationality. All such responses were not used.
- Ex-Military. Although the MBA results were not used for this study an unexpected issue was noted on these returns. A significant number of people identified themselves as having served in the armed forces before undertaking a civilian career. All such responses would have had to be rejected on the basis that their cultural values would undoubtedly have been tainted by such exposure to the military.

## **DATA REDUCTION AND TESTING**

This section presents the VSM survey returns collected for this study. The first part details the reduction of the data to produce the VSM index calculations. The second tests the data and the third examines the demographic data.

### **VSM index calculation**

This section describes the processing of the data collected for this study after they had been transcribed onto a statistical software program (SPSS<sup>1</sup>) from the survey returns and had been independently re-checked for accuracy. Transcriptions were triple checked for accuracy, as this was considered one of the areas most susceptible to administrative errors. Apart from saving considerable time, using SPSS further helped to reduce the possibility of administrative error by removing the human factor from the calculations. Tables of transcribed data are provided for reference at the rear of Annexes H, I and J as detailed in column (f) of Exhibit 7-3 below:

<b>Country and Sample</b>	<b>Statistics</b>	<b>Frequency Distribution</b>	<b>Mean Scores</b>	<b>Calculations</b>	<b>Transcribed Responses</b>
<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>	<b>(e)</b>	<b>(f)</b>
Australia Military	H1	N/A	H1	H2	H9-H14
Navy	H3	K1	H3	H4	H9
Army	H5	K4	H5	H6	H10-H12
Air Force	H7	K7	H7	H8	H13-H14
Britain Military	I1	N/A	I1	I2	I9-I12
Navy	I3	L1	I3	I4	I9
Army	I5	L4	I5	I6	I10-I11
Air Force	I7	L7	I7	I8	I12
Canada Military	J1	N/A	J1	J2	J9-I11
Navy	J3	M1	J3	J4	J9
Army	J5	M4	J5	J6	J10
Air Force	J7	M7	J7	J8	J11

**Exhibit 7-3. Summary of data provided at Annexes H, I, J, K, L and M.**

From Annexes H, I, J, K, L and M

Questions one to twenty of the VSM are five-point scales, which are used to calculate the index scores required for the five dimensions<sup>2</sup>. Index scores are calculated from the mean scores of the respondents' replies. Column (d) in Exhibit 7-3 shows where the mean scores for each of the sample groups can be found in Annexes H, I and J. SPSS was used to calculate the mean scores according to the following guidelines:

“Suppose a group of 57 respondents from country C produces the following scores on question 04 (security of employment):

10	x	answer 1
24	x	answer 2
14	x	answer 3
5	x	answer 4
1	x	answer 5
3	x	invalid answer*
-----		
57	x	in total

The calculation now goes as follows:

10	x	1	=	10
24	x	2	=	48
14	x	3	=	42
5	x	4	=	20
1	x	5	=	5
-----				
total	54	125	mean score:	<b>125/54 = 2.31**</b>

\* Invalid answers are blanks (no answer) or multiples (more than one answer). Invalid answers are excluded from the calculation (treated as missing).

\*\* Mean scores on five-point scales should preferably be calculated in two decimals. More accuracy is unrealistic (survey data are imprecise measures) and less accuracy loses valid information.” (Hofstede 1994, p4)

Once the mean scores for questions one to twenty of the VSM had been calculated for each of the samples they were applied to the following formula from the VSM manual to calculate the five VSM indexes. Further detail can be found in the VSM manual (Hofstede 1994, p6-8):

- $PDI = -35m(03) + 35m(06) + 25m(14) - 20m(17) - 20$

- $IDV = -50m(01) + 30m(02) + 20m(04) - 25m(08) + 130$
- $MAS = 60m(05) - 20m(07) + 20m(15) - 70m(20) + 100$
- $UAI = 25m(13) + 20m(16) - 50m(18) - 15m(19) + 120$
- $LTO = +45m(09) - 30m(10) - 35m(11) + 15m(12) + 67$

To ensure accuracy, further reduce administrative error and reduce the production time required for each of the samples, a Microsoft Excel spreadsheet was created that automatically calculated the indexes from the mean scores using the formulae above. The mean scores and calculations undertaken for each of the samples and the graphs based on the primary data detailed in Exhibit 7-3 are presented with the graphical representations in Chapter 8.

### **Confidence Testing**<sup>3</sup>

The mean scores were examined across the samples to see if any responses to the questions showed a tendency to provide the same answer. The potential responses for each question are zero to five and are broken down to two decimal places, which permits up to five hundred possible permutations. Responses within 0.10 across samples are highlighted in bold italics. The logic behind this examination is that if a question consistently provides the same or very similar results it becomes meaningless, as it provides no differentiation across sample responses. Exhibit 7-4 shows that Questions 1, 7, 8, 11, 13, 16, 17 and 20 had responses where the answer range was within 0.10 within national samples. The close responses for these questions are not matched across all three countries and therefore appear to reflect a cultural consensus on the specific questions. Question 18 was the only question where the responses within all three countries were within 0.10 of each other. Overall, though, the spread was from 2.90 to 3.50, which suggests that question 18 provides meaningful data.

	Australia			Britain			Canada		
	Navy	Army	Air Force	Navy	Army	Air Force	Navy	Army	Air Force
<b>Q1</b>	<b>1.67</b>	<b>1.60</b>	<b>1.60</b>	1.85	1.70	1.65	1.53	1.40	1.60
<b>Q2</b>	2.20	2.30	2.10	2.40	2.50	2.15	2.11	2.00	2.00
<b>Q3</b>	1.80	1.80	1.60	1.95	1.90	1.77	2.00	1.80	1.90
<b>Q4</b>	2.30	2.10	2.10	2.30	2.20	2.00	2.20	1.80	2.30
<b>Q5</b>	2.04	1.90	1.70	1.90	2.00	2.08	2.16	1.70	2.10
<b>Q6</b>	2.30	2.10	1.93	2.40	2.40	2.12	2.30	2.50	2.50
<b>Q7</b>	<b>1.74</b>	<b>1.70</b>	<b>1.80</b>	1.55	1.80	1.58	2.21	1.70	2.20
<b>Q8</b>	<b>1.70</b>	<b>1.70</b>	<b>1.70</b>	1.50	1.60	1.65	1.74	1.60	1.60
<b>Q9</b>	2.30	1.90	2.20	2.25	2.40	1.96	2.11	1.70	2.10
<b>Q10</b>	2.50	2.80	2.60	3.10	3.10	2.80	3.11	2.80	2.88
<b>Q11</b>	2.30	2.10	2.40	<b>2.25</b>	<b>2.30</b>	<b>2.23</b>	2.40	1.80	2.20
<b>Q12</b>	2.89	2.80	2.60	2.70	2.70	2.90	2.90	2.20	2.90
<b>Q13</b>	<b>2.70</b>	<b>2.80</b>	<b>2.76</b>	2.75	2.56	2.77	2.42	2.70	2.73
<b>Q14</b>	3.60	3.30	3.20	3.40	3.30	3.00	3.26	3.40	3.30
<b>Q15</b>	2.10	2.30	2.10	2.30	2.30	2.70	2.00	2.50	2.00
<b>Q16</b>	<b>2.60</b>	<b>2.70</b>	<b>2.60</b>	2.60	2.30	2.50	2.80	3.30	2.88
<b>Q17</b>	<b>2.00</b>	<b>2.00</b>	<b>2.10</b>	2.70	2.20	2.30	2.10	1.80	2.10
<b>Q18</b>	<b>3.20</b>	<b>3.20</b>	<b>3.20</b>	<b>3.45</b>	<b>3.40</b>	<b>3.50</b>	<b>2.90</b>	<b>2.95</b>	<b>2.90</b>
<b>Q19</b>	3.80	3.30	3.40	3.30	3.40	3.27	3.20	2.70	2.70
<b>Q20</b>	2.70	2.70	2.90	3.40	2.60	3.20	<b>2.90</b>	<b>2.80</b>	<b>2.80</b>

Exhibit 7-4. Mean scores for responses to questions 1 to 20 of VSM.  
Summarised from Annexes K,L and M – See column (d) of Exhibit 7-3

Exhibit 7-5 provides the standard deviation of scores used to produce the VSM indexes. Standard deviation is useful measure of confidence for the results as, “It measures how values are spread around a mean, in other words, whether they cluster together or are widely dispersed.” (Salant and Dillman 1994, p192). Exhibit 7-5 shows that generally the range of responses for each question was not widely dispersed which gives confidence that the questions posed were valid. Responses highlighted in bold italics are those that were above a standard deviation of one. However, when the histograms for these questions are examined at Annexes K, L and M, all demonstrate acceptable dispersion. Exhibit 7-6 shows different modality for frequency distributions. The histograms at Annexes K, L and M show that there were no bimodal distributions and that negative and positive skewing was relatively minor. This adds to the confidence that the survey questions posed questions that were valid for all of the samples.

	Australia			Britain			Canada		
	Navy	Army	Air Force	Navy	Army	Air Force	Navy	Army	Air Force
Q1	.68	.74	.74	.59	.89	.56	.51	.91	.90
Q2	.74	.73	.79	.68	.96	.46	.81	.79	.96
Q3	.68	.64	.68	.60	.83	.65	.58	.80	.74
Q4	.81	.81	.82	.66	.71	.57	.76	.92	.78
Q5	.52	.68	.66	.64	.69	.56	.50	.83	.98
Q6	.73	.60	.65	.50	.70	.65	.65	.80	.65
Q7	.71	.75	.80	.51	.92	.58	.54	.70	.83
Q8	.72	.65	.75	.51	.93	.56	.45	.95	.80
Q9	.76	.68	.71	.64	.76	.72	.32	.83	.84
Q10	.80	.93	.73	.72	.90	.83	.66	<b>1.05</b>	.71
Q11	.61	.73	.73	.72	.85	.59	.76	.87	.71
Q12	.64	.95	.86	.73	.91	.84	<b>1.11</b>	.73	.77
Q13	.68	.59	.64	.64	.55	.51	.51	.65	.60
Q14	.93	.86	.71	.75	.91	.87	.73	.91	.69
Q15	.47	.71	.72	.72	.81	.85	.33	.91	.63
Q16	.97	<b>1.13</b>	.91	.94	.87	<b>1.03</b>	<b>1.08</b>	<b>1.09</b>	.91
Q17	<b>1.14</b>	<b>1.10</b>	<b>1.10</b>	<b>1.09</b>	.95	<b>1.12</b>	.97	.69	<b>1.14</b>
Q18	.96	.92	.87	.76	.82	.81	<b>1.02</b>	.90	<b>1.02</b>
Q19	.75	<b>1.10</b>	<b>1.09</b>	<b>1.03</b>	<b>1.01</b>	.78	.92	<b>1.08</b>	.87
Q20	.95	.91	<b>1.03</b>	.88	.82	<b>1.02</b>	.85	<b>1.10</b>	.90

Exhibit 7-5. Standard deviation for responses to questions 1 to 20 of VSM.  
Summarised from Annexes K, L and M – See column (b) and (c) of Exhibit 7-3

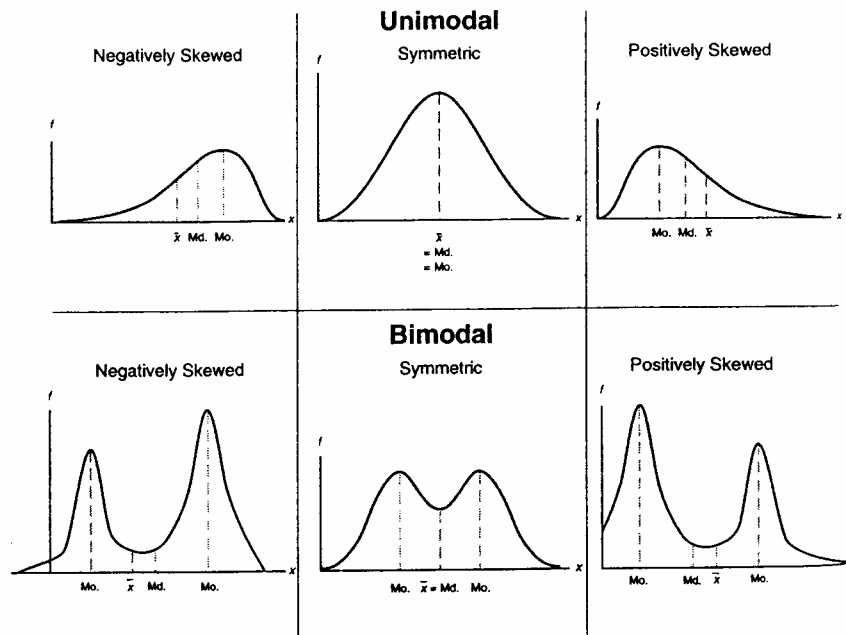


Exhibit 7-6. Modality and Skewness of Frequency Distributions.  
(Sirkin 1995, p100)

**Demographic data**



Exhibit 7-7 summarises the demographic data that was provided in questions twenty-one to twenty seven of the VSM questionnaire (shown at Annex A).

	Australia			Britain			Canada		
	Navy	Army	Air Force	Navy	Army	Air Force	Navy	Army	Air Force
<b>Q21<sup>a</sup></b>	22 M 02 F 03 U	59 M 09 F 05 U	26 M 01 F 02 U	18 M 02 F	41 M 02 F	24 M 02 F	18 M 01 F	22 M 00 F	21 M 05 F
<b>Q22<sup>b</sup></b>	35-39	35-39	35-39	35-39	30-34	35-39	40-49	40-49	40-49
<b>Q23<sup>c</sup></b>	12	12	12	13 <sup>e</sup>	16	13	16 <sup>e</sup>	18+	18+
<b>Q24</b>	Separated during transcription – see Exhibit 7-3 and Annexes H, I and J								
<b>Q25<sup>d</sup></b>	26/27	65/73	27/29	14/20 <sup>f</sup>	42/43	24/26	12/19 <sup>f</sup>	22/22	26/26
<b>Q26</b>	Separated during transcription – see Annexes H, I and J								
<b>Q27</b>	Discarded prior to transcription if different from Q26.								

a. Male, Female or Unidentified. b. Modal age. c. Modal years of formal education. d. Number of staff college students within sample. e. Hides several numerically higher modes and therefore figure not fully representative of formal education attained. f. Reason for this discussed under data collection.

**Exhibit 7-7. Summary of demographic data.**  
Summarised from Annexes H, I and J

**Gender**

Question 21 asked respondents to state whether they were female or male. There was a heavy male influence in all of the samples and all but two of the samples could have had the female responses removed and provided statistically valid results. However, to do this would have been unrepresentative of the overall population samples. Ten of the Australian responses did not identify their gender. These omissions were not reflected in the British and Canadian responses. No analysis on the implications of this apparent uncertainty by the Australian Defence Force was undertaken.

**Age**

Question 22 asked respondents to identify their ages within the following age ranges:

1. Under 20

2. 20-24
3. 25-29
4. 30-34
5. 35-39
6. 40-49
7. 50-59
8. 60 or over

Exhibit 7-7 shows that the modal age for all Australian samples and for the British Navy and Air Force Samples were in the age range 35-39. The British Army sample's modal age was one age group lower at 30-34. The Canadian samples' modal age were consistently higher than all the other samples at 40-49. It should be noted that this age group covers ten years whereas the other two cover only five years. The spread of ages for each sample is shown in more detail in Annex N and shows there is considerable overlap in ages between the samples, with only the British Army sample being consistently younger than the rest.

### Formal Education

Question 23 asked respondents to identify how many years of formal school education (or their equivalent) they had completed to date (starting with primary school):

1. 10 or less
2. 11
3. 12
4. 13
5. 14
6. 15
7. 16
8. 17
9. 18 or more

The modal years of education presented in Exhibit 7-7 are slightly misleading, as they do not show the full spread of the answers provided for Question 23. However, the charts at Annex N support Exhibit 7-7 in that the years of formal education received by all Australian respondents were generally lower than those of Britain and Canada. Also, the level of formal education received by Canadian samples was consistently higher than that of the other military samples. This level of education is reflected in the overall greater age of the Canadian respondents.

### Occupation

Question 24 asked respondents if they were:

1. A civilian?
2. A navy officer?
3. An army officer?
4. An air force officer?
5. A marine officer?

This information was used to separate the data during transcription. The results are shown in Exhibit 7-3 and in full detail in Annexes H, I and J. Responses from marine officers were removed during the transcription process, as there were not enough to provide statistically sound samples and they do not fit naturally within the army or navy samples.

Question 25 asked respondents which type of course they were currently on as follows:

1. An MBA Student
2. An MDA Student
3. A military staff college student
4. Other

The Master of Defence Administration (MDA) and MBA responses were from the initial design of the survey when MDA and MBA students were considered for the research. The MDA option was discounted after the surveys had been sent to Australian and Canada, as there were not enough students on the course to provide valid samples. The MBA issue has been discussed earlier in this section.

The Naval samples for Britain and Canada staff college students were supplemented with responses in the rank of Lieutenant Commander and Commander to ensure that enough usable responses were available. These were chosen, as they are the usual ranks for students at each of the staff colleges. In both the Australian and British samples, a number of non-staff college students were recorded. These were either directing staff at the colleges or had previously graduated from a staff college and therefore fulfilled the requirements for this study. Where this information was not provided responses were discarded before transcription.

### Nationality

Question 26 asked respondents to identify their nationality and question 27 asked what their nationality was at birth if different now. Responses were separated by nationality during transcription and were discarded if dual or a change of nationality was indicated.

## **CHAPTER SUMMARY**

This Chapter presents the data collected using the VSM 94. The data collection process in Part 1 was described in detail and set against the template defined in the methodology in Chapter 2. The requirement to match the selected data samples was identified and discussed. Part 2 described the data reduction process required to produce the VSM indexes to demonstrate how the survey results were calculated and presented in Chapter 8. This also had the benefit of facilitating external testing and use of the results at a later stage if required. In support of the validity and reliability tests, identified in Chapter 2, confidence testing was produced for the cultural data to ensure that they provided meaningful results and on the sociological data to demonstrate that the samples were correctly matched to produce valid comparisons.

Chapter 8 details the VSM data calculations and presents these in both absolute and relative graphical form to aid the subsequent analysis and discussion in Chapters 9 and 10.

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## **CHAPTER NOTES**

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<sup>1</sup> SPSS. The software was originally called - 'Statistical Package for the Social Sciences'. The company is called – 'Statistical Product and Service Solutions.'

<sup>2</sup> See Annex A for a blank copy of the VSM.

<sup>3</sup> It is recommended that anyone wishing to analyse this data for their own purposes reads Chapters 2 through 7 of *Culture's Consequences*, Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. Thousand Oaks, Sage. For an independent analysis of the VSM the following PhD thesis is useful, *A comparative study of country elites* Hoppe, M. H. (1990). A comparative study of country elites: International differences in work-related values and learning and their implications for management training and development. School of Education. Chapel Hill, The University of North Carolina.

## **INTRODUCTION TO CHAPTER 8 – VSM CALCULATION AND DISPLAY**

The previous chapter detailed the data collection, matching, validity and reliability tests for the VSM data. This Chapter shows each of the VSM data calculations and presents the results in both absolute and relative graphical form to aid the subsequent analysis and discussion in Chapters 9 and 10. The following data samples are displayed:

- National level – derived from Hofstede’s published data at Annex E.
- Civil - Military – derived from Hofstede’s published data at Annex E and from the primary data at Annexes H, I and J.
- Intra-national organisational level derived from the primary data at Annexes H, I and J.
- International organisational level derived from the primary data at Annexes H, I and J.

The first chart for each set of results represents the relative profiles of the VSM scores obtained from the data collected for this study. The second chart shows the cultural distance for profiles in relation to a specified baseline. This process to achieve this was detailed in the methodology in Chapter 2.



**NATIONAL LEVEL VSM GRAPHS**

The national level data is presented Exhibit 8-1a for Australia, Britain, Canada, New Zealand and the USA, to demonstrate the similarity in country profiles. Exhibit 8-1b uses Britain as the relative baseline to demonstrate where cultural distance occurs. Chapter 7 discussed why New Zealand and USA data are not considered in detail.

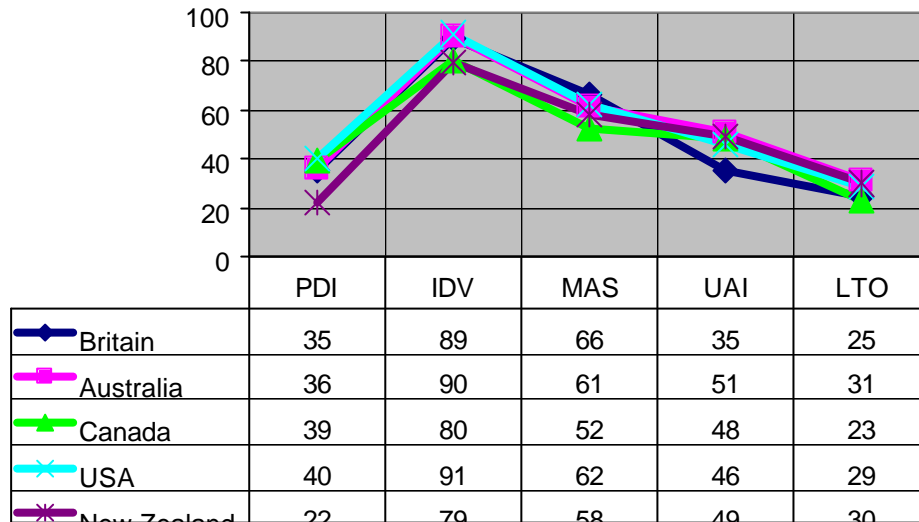


Exhibit 8-1a. VSM country profile.  
Derived from Annex F

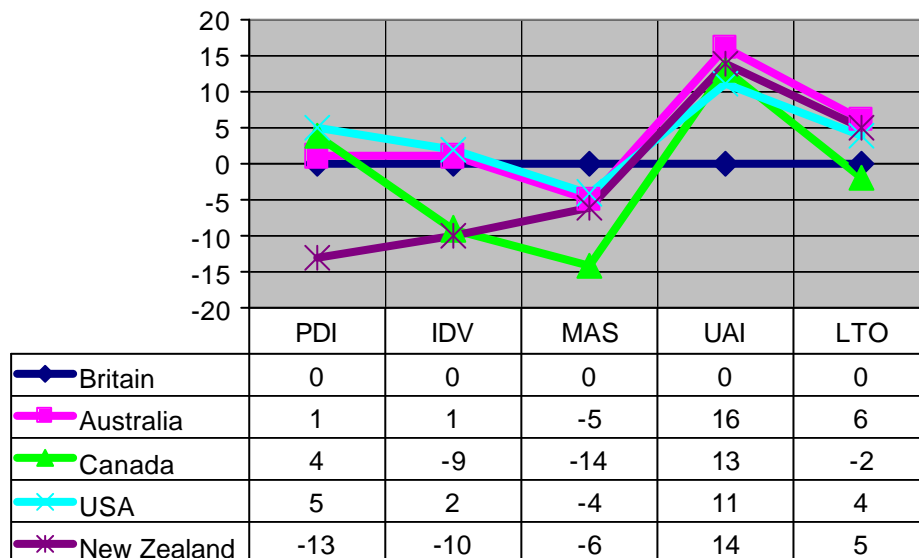


Exhibit 8-1b. VSM relative national cultural distance.  
Derived from Exhibit 8-1a

**NATIONAL LEVEL CIVIL – MILITARY VSM  
CALCULATIONS AND GRAPHS**

The national civil military level data calculations are shown in this section and represented in Exhibits 8-2a, 8-3a and 8-4a for Australia, Britain and Canada respectively in order to demonstrate the similarity in VSM profiles. Exhibits 8-2b, 8-3b and 8-4b use the national civilian cultures as relative baselines to demonstrate where cultural distance occurs.

**VSM mean scores for Australian Armed Forces**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.59</u>	<u>2.22</u>	<u>1.76</u>	<u>2.14</u>	<u>1.9</u>	<u>2.1</u>	<u>1.72</u>	<u>1.72</u>	<u>2.06</u>	<u>2.73</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.22</u>	<u>2.8</u>	<u>2.77</u>	<u>3.34</u>	<u>2.22</u>	<u>2.64</u>	<u>2</u>	<u>3.22</u>	<u>3.45</u>	<u>2.75</u>

**VSM index calculation for Australian Armed Forces**

	Q3	Q6	Q14	Q17	
<b>PDI</b>	-35*( <u>1.76</u> )	35*( <u>2.1</u> )	25*( <u>3.34</u> )	-20*( <u>2</u> )	
	-61.6	+ 73.5	+ 83.5	+ -40	- 20 = <b>35.4</b>
	Q1	Q2	Q4	Q8	
<b>IDV</b>	-50*( <u>1.59</u> )	30*( <u>2.22</u> )	20*( <u>2.14</u> )	-25*( <u>1.72</u> )	
	-79.5	+ 66.6	+ 42.8	+ -43	+ 130 = <b>116.9</b>
	Q5	Q7	Q15	Q20	
<b>MAS</b>	60*( <u>1.9</u> )	-20*( <u>1.72</u> )	20*( <u>2.22</u> )	-70*( <u>2.75</u> )	
	114	+ -34.4	+ 44.4	+ -192.5	+ 100 = <b>31.5</b>
	Q13	Q16	Q18	Q19	
<b>UAI</b>	25*( <u>2.77</u> )	20*( <u>2.64</u> )	-50*( <u>3.22</u> )	-15*( <u>3.45</u> )	
	69.25	+ 52.8	+ -161	+ -51.75	+ 120 = <b>29.3</b>
	Q9	Q10	Q11	Q12	
<b>LTO</b>	45*( <u>2.06</u> )	-30*( <u>2.73</u> )	-35*( <u>2.22</u> )	15*( <u>2.8</u> )	
	92.7	+ -81.9	+ -77.7	+ 42	+ 67 = <b>42.1</b>

Australian national level civil – military VSM graphs

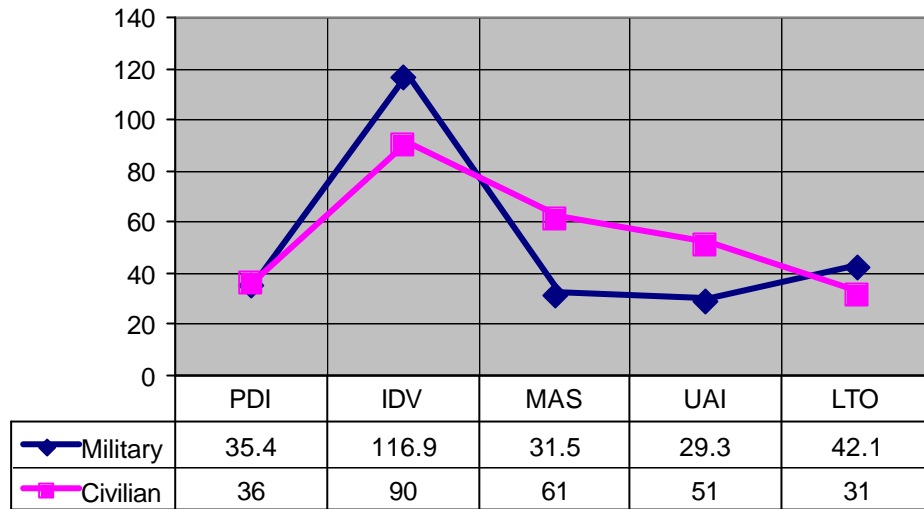


Exhibit 8-2a. Australian VSM civil-military profile.

Derived from Annex F for civilian results and Annex H for military results

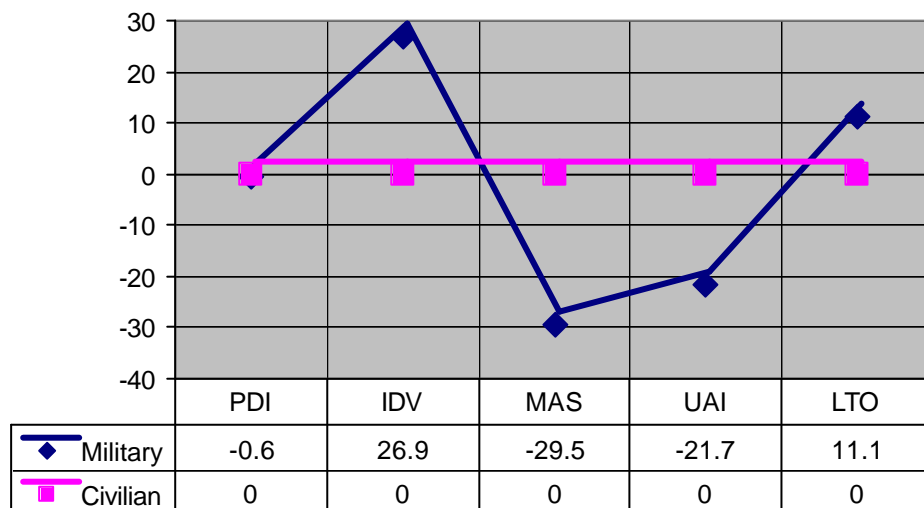


Exhibit 8-2b. Australian VSM relative civil-military cultural distance.

Derived from Exhibit 8-2a

VSM mean scores for British Armed Forces

<b><u>Q1</u></b>	<b><u>Q2</u></b>	<b><u>Q3</u></b>	<b><u>Q4</u></b>	<b><u>Q5</u></b>	<b><u>Q6</u></b>	<b><u>Q7</u></b>	<b><u>Q8</u></b>	<b><u>Q9</u></b>	<b><u>Q10</u></b>
<b><u>1.72</u></b>	<b><u>2.38</u></b>	<b><u>1.88</u></b>	<b><u>2.17</u></b>	<b><u>2</u></b>	<b><u>2.32</u></b>	<b><u>1.69</u></b>	<b><u>1.58</u></b>	<b><u>2.24</u></b>	<b><u>3.03</u></b>
<b><u>Q11</u></b>	<b><u>Q12</u></b>	<b><u>Q13</u></b>	<b><u>Q14</u></b>	<b><u>Q15</u></b>	<b><u>Q16</u></b>	<b><u>Q17</u></b>	<b><u>Q18</u></b>	<b><u>Q19</u></b>	<b><u>Q20</u></b>
<b><u>2.28</u></b>	<b><u>2.77</u></b>	<b><u>2.66</u></b>	<b><u>3.25</u></b>	<b><u>2.42</u></b>	<b><u>2.42</u></b>	<b><u>2.31</u></b>	<b><u>3.44</u></b>	<b><u>3.36</u></b>	<b><u>2.94</u></b>

VSM index calculation for British Armed Forces

$$\begin{array}{r}
 \text{PDI} \quad \begin{array}{cccc}
 \text{Q3} & \text{Q6} & \text{Q14} & \text{Q17} \\
 -35*(\underline{1.88}) & 35*(\underline{2.32}) & 25*(\underline{3.25}) & -20*(\underline{2.31}) \\
 -65.8 & + 81.2 & + 81.25 & + -46.2 - 20 = \mathbf{30.45}
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{IDV} \quad \begin{array}{cccc}
 \text{Q1} & \text{Q2} & \text{Q4} & \text{Q8} \\
 -50*(\underline{1.72}) & 30*(\underline{2.38}) & 20*(\underline{2.17}) & -25*(\underline{1.58}) \\
 -86 & + 71.4 & + 43.4 & + -39.5 + 130 = \mathbf{119.3}
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{MAS} \quad \begin{array}{cccc}
 \text{Q5} & \text{Q7} & \text{Q15} & \text{Q20} \\
 60*(\underline{2}) & -20*(\underline{1.69}) & 20*(\underline{2.42}) & -70*(\underline{2.94}) \\
 120 & + -33.8 & + 48.4 & + -205.8 + 100 = \mathbf{28.8}
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{UAI} \quad \begin{array}{cccc}
 \text{Q13} & \text{Q16} & \text{Q18} & \text{Q19} \\
 25*(\underline{2.66}) & 20*(\underline{2.42}) & -50*(\underline{3.44}) & -15*(\underline{3.36}) \\
 66.5 & + 48.4 & + -172 & + -50.4 + 120 = \mathbf{12.5}
 \end{array}
 \end{array}$$

$$\begin{array}{r}
 \text{LTO} \quad \begin{array}{cccc}
 \text{Q9} & \text{Q10} & \text{Q11} & \text{Q12} \\
 45*(\underline{2.24}) & -30*(\underline{3.03}) & -35*(\underline{2.28}) & 15*(\underline{2.77}) \\
 100.8 & + -90.9 & + -79.8 & + 41.55 + 67 = \mathbf{38.65}
 \end{array}
 \end{array}$$

Britain national level civil – military VSM graphs

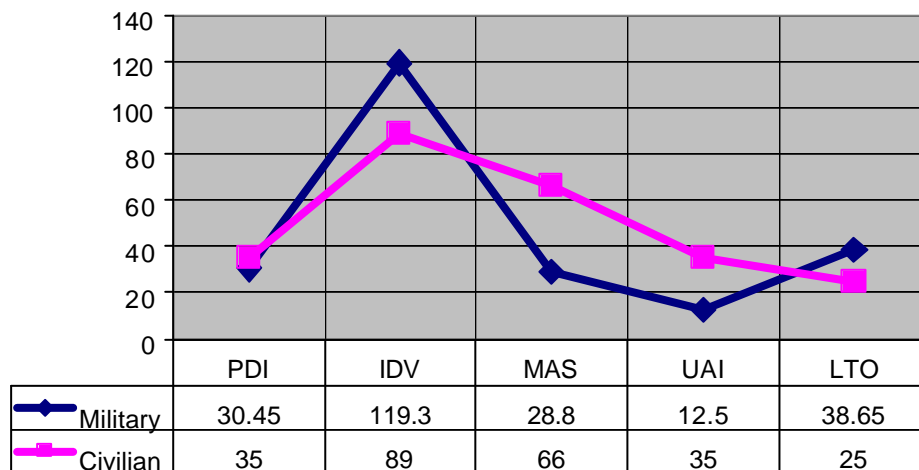


Exhibit 8-3a. British VSM civil-military profile.

Derived from Annex F for civilian results and Annex I for military results

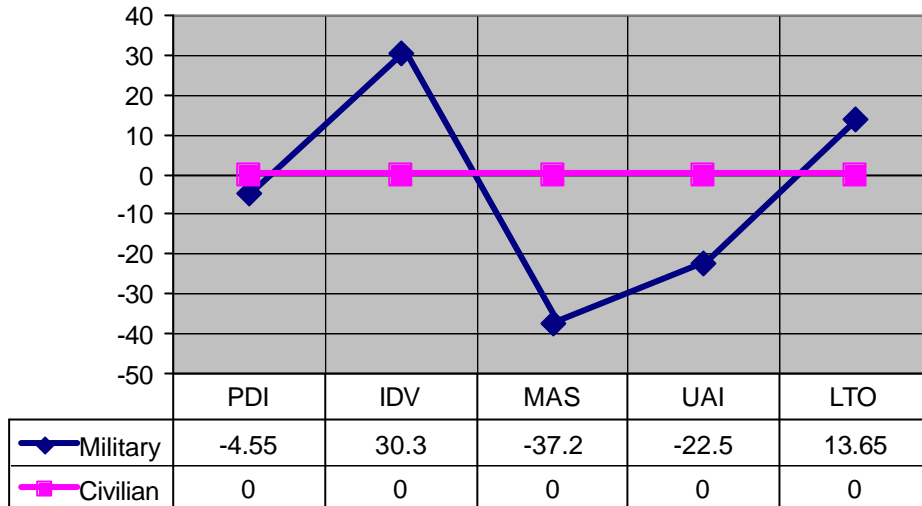


Exhibit 8-3b. British VSM relative civil-military cultural distance.  
Derived from Exhibit 8-3a

VSM mean scores for Canadian Armed Forces

<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q5</u>	<u>Q6</u>	<u>Q7</u>	<u>Q8</u>	<u>Q9</u>	<u>Q10</u>
<u>1.5</u>	<u>2</u>	<u>1.91</u>	<u>2.07</u>	<u>1.98</u>	<u>2.45</u>	<u>2.03</u>	<u>1.64</u>	<u>1.97</u>	<u>2.92</u>
<u>Q11</u>	<u>Q12</u>	<u>Q13</u>	<u>Q14</u>	<u>Q15</u>	<u>Q16</u>	<u>Q17</u>	<u>Q18</u>	<u>Q19</u>	<u>Q20</u>
<u>2.1</u>	<u>2.67</u>	<u>2.63</u>	<u>3.34</u>	<u>2.15</u>	<u>3</u>	<u>1.98</u>	<u>2.92</u>	<u>2.86</u>	<u>2.85</u>

VSM index calculation for Canadian Armed Forces

<b>PDI</b>	Q3	Q6	Q14	Q17	
	-35*( <u>1.91</u> )	35*( <u>2.45</u> )	25*( <u>3.34</u> )	-20*( <u>1.98</u> )	
	-66.85	+ 85.75	+ 83.5	+ -39.6	- 20 = <b>42.8</b>
<b>IDV</b>	Q1	Q2	Q4	Q8	
	-50*( <u>1.5</u> )	30*( <u>2</u> )	20*( <u>2.07</u> )	-25*( <u>1.64</u> )	
	-75	+ 60	+ 41.4	+ -41	+ 130 = <b>115.4</b>
<b>MAS</b>	Q5	Q7	Q15	Q20	
	60*( <u>1.98</u> )	-20*( <u>2.03</u> )	20*( <u>2.15</u> )	-70*( <u>2.85</u> )	
	118.8	+ -40.6	+ 43	+ -199.5	+ 100 = <b>21.7</b>
<b>UAI</b>	Q13	Q16	Q18	Q19	
	25*( <u>2.63</u> )	20*( <u>3</u> )	-50*( <u>2.92</u> )	-15*( <u>2.86</u> )	
	65.75	+ 60	+ -146	+ -42.9	+ 120 = <b>56.85</b>

$$\begin{array}{cccc}
 & \text{Q9} & \text{Q10} & \text{Q11} & \text{Q12} \\
 \text{LTO} & 45^*( \underline{1.97} ) & -30^*( \underline{2.92} ) & -35^*( \underline{2.1} ) & 15^*( \underline{2.67} ) \\
 & 88.65 & + & -87.6 & + & -73.5 & + & 40.05 & + & 67 = & \mathbf{34.6}
 \end{array}$$

Canada national level civil – military VSM graphs

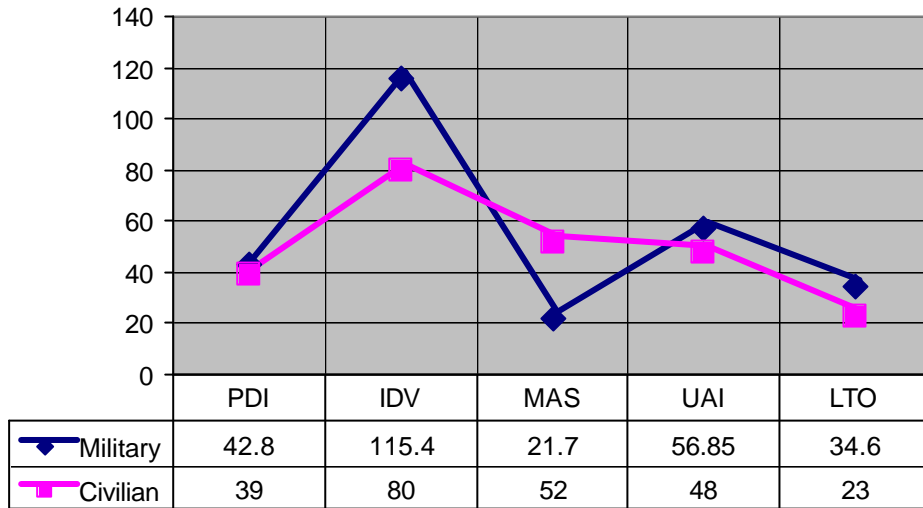


Exhibit 8-4a. Canadian VSM civil-military profile.

Derived from Annex F for civilian results and Annex J for military results

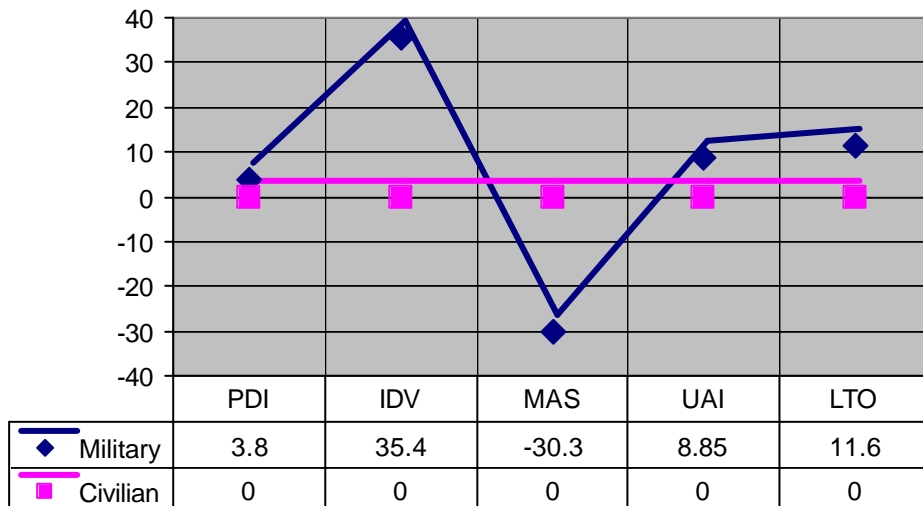


Exhibit 8-4b. Canadian VSM relative civil-military cultural distance.

Derived from Exhibit 8-4a

**INTRA-NATIONAL ARMED FORCES AT ORGANISATIONAL LEVEL VSM CALCULATIONS AND GRAPHS**

The intra-national organisational level calculations are shown and the data is presented in graphical form in Exhibits 8-5a, 8-6a and 8-7a for Australia, Britain and Canada respectively in order to demonstrate the similarity in absolute VSM profiles. Exhibits 8-5b, 8-6b and 8-7b use the army cultures as the relative baselines to demonstrate where cultural distance occurs.

**VSM mean scores for Australian Navy**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.66</u>	<u>2.18</u>	<u>1.81</u>	<u>2.26</u>	<u>2.04</u>	<u>2.33</u>	<u>1.74</u>	<u>1.7</u>	<u>2.26</u>	<u>2.52</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.3</u>	<u>2.89</u>	<u>2.69</u>	<u>3.63</u>	<u>2.07</u>	<u>2.59</u>	<u>2</u>	<u>3.18</u>	<u>3.78</u>	<u>2.7</u>

**VSM index calculation for Australian Navy**

	Q3	Q6	Q14	Q17	
<b>PDI</b>	-35*( <u>1.81</u> )	35*( <u>2.33</u> )	25*( <u>3.63</u> )	-20*( <u>2</u> )	
	-63.35	+ 81.55	+ 90.75	+ -40	- 20 = <b>48.95</b>
	Q1	Q2	Q4	Q8	
<b>IDV</b>	-50*( <u>1.66</u> )	30*( <u>2.18</u> )	20*( <u>2.26</u> )	-25*( <u>1.7</u> )	
	-83	+ 65.4	+ 45.2	+ -42.5	+ 130 = <b>115.1</b>
	Q5	Q7	Q15	Q20	
<b>MAS</b>	60*( <u>2.04</u> )	-20*( <u>1.74</u> )	20*( <u>2.07</u> )	-70*( <u>2.7</u> )	
	122.4	+ -34.8	+ 41.4	+ -189	+ 100 = <b>40</b>
	Q13	Q16	Q18	Q19	
<b>UAI</b>	25*( <u>2.69</u> )	20*( <u>2.59</u> )	-50*( <u>3.18</u> )	-15*( <u>3.78</u> )	
	67.25	+ 51.8	+ -159	+ -56.7	+ 120 = <b>23.35</b>
	Q9	Q10	Q11	Q12	
<b>LTO</b>	45*( <u>2.26</u> )	-30*( <u>2.52</u> )	-35*( <u>2.3</u> )	15*( <u>2.89</u> )	
	101.7	+ -75.6	+ -80.5	+ 43.35	+ 67 = <b>55.95</b>

VSM mean scores for Australian Army

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.57</u>	<u>2.27</u>	<u>1.79</u>	<u>2.11</u>	<u>1.93</u>	<u>2.08</u>	<u>1.67</u>	<u>1.73</u>	<u>1.94</u>	<u>2.85</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.14</u>	<u>2.83</u>	<u>2.81</u>	<u>3.3</u>	<u>2.33</u>	<u>2.68</u>	<u>1.99</u>	<u>3.23</u>	<u>3.35</u>	<u>2.69</u>

VSM index calculation for Australian Army

	Q3	Q6	Q14	Q17	
<b>PDI</b>	-35*( <u>1.79</u> )	35*( <u>2.08</u> )	25*( <u>3.3</u> )	-20*( <u>1.99</u> )	
	-62.65	+ 72.8	+ 82.5	+ -39.8	- 20 = <b>32.85</b>
	Q1	Q2	Q4	Q8	
<b>IDV</b>	-50*( <u>1.57</u> )	30*( <u>2.27</u> )	20*( <u>2.11</u> )	-25*( <u>1.73</u> )	
	-78.5	+ 68.1	+ 42.2	+ -43.25	+ 130 = <b>118.55</b>
	Q5	Q7	Q15	Q20	
<b>MAS</b>	60*( <u>1.93</u> )	-20*( <u>1.67</u> )	20*( <u>2.33</u> )	-70*( <u>2.69</u> )	
	115.8	+ -33.4	+ 46.6	+ -188.3	+ 100 = <b>40.7</b>
	Q13	Q16	Q18	Q19	
<b>UAI</b>	25*( <u>2.81</u> )	20*( <u>2.68</u> )	-50*( <u>3.23</u> )	-15*( <u>3.35</u> )	
	70.25	+ 53.6	+ -161.5	+ -50.25	+ 120 = <b>32.1</b>
	Q9	Q10	Q11	Q12	
<b>LTO</b>	45*( <u>1.94</u> )	-30*( <u>2.85</u> )	-35*( <u>2.14</u> )	15*( <u>2.83</u> )	
	87.3	+ -85.5	+ -74.9	+ 42.45	+ 67 = <b>36.35</b>

VSM mean scores for Australian Air Force

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.55</u>	<u>2.14</u>	<u>1.62</u>	<u>2.1</u>	<u>1.69</u>	<u>1.93</u>	<u>1.83</u>	<u>1.72</u>	<u>2.17</u>	<u>2.62</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.38</u>	<u>2.62</u>	<u>2.76</u>	<u>3.17</u>	<u>2.1</u>	<u>2.55</u>	<u>2.07</u>	<u>3.24</u>	<u>3.41</u>	<u>2.93</u>

VSM index calculation for Australian Air Force

	Q3	Q6	Q14	Q17	
<b>PDI</b>	-35*( <u>1.62</u> )	35*( <u>1.93</u> )	25*( <u>3.17</u> )	-20*( <u>2.07</u> )	
	-56.7	+ 67.55	+ 79.25	+ -41.4	- 20 = <b>28.7</b>



	Q1	Q2	Q4	Q8	
<b>IDV</b>	-50*( <u>1.55</u> )	30*( <u>2.14</u> )	20*( <u>2.1</u> )	-25*( <u>1.72</u> )	
	-77.5	+ 64.2	+ 42	+ -43	+ 130 = <b>115.7</b>
	Q5	Q7	Q15	Q20	
<b>MAS</b>	60*( <u>1.69</u> )	-20*( <u>1.83</u> )	20*( <u>2.1</u> )	-70*( <u>2.93</u> )	
	101.4	+ -36.6	+ 42	+ -205.1	+ 100 = <b>1.7</b>
	Q13	Q16	Q18	Q19	
<b>UAI</b>	25*( <u>2.76</u> )	20*( <u>2.55</u> )	-50*( <u>3.24</u> )	-15*( <u>3.41</u> )	
	69	+ 51	+ -162	+ -51.15	+ 120 = <b>26.85</b>
	Q9	Q10	Q11	Q12	
<b>LTO</b>	45*( <u>2.17</u> )	-30*( <u>2.62</u> )	-35*( <u>2.38</u> )	15*( <u>2.62</u> )	
	97.65	+ -78.6	+ -83.3	+ 39.3	+ 67 = <b>42.05</b>

Australian intra-national armed forces at organisational level VSM graphs

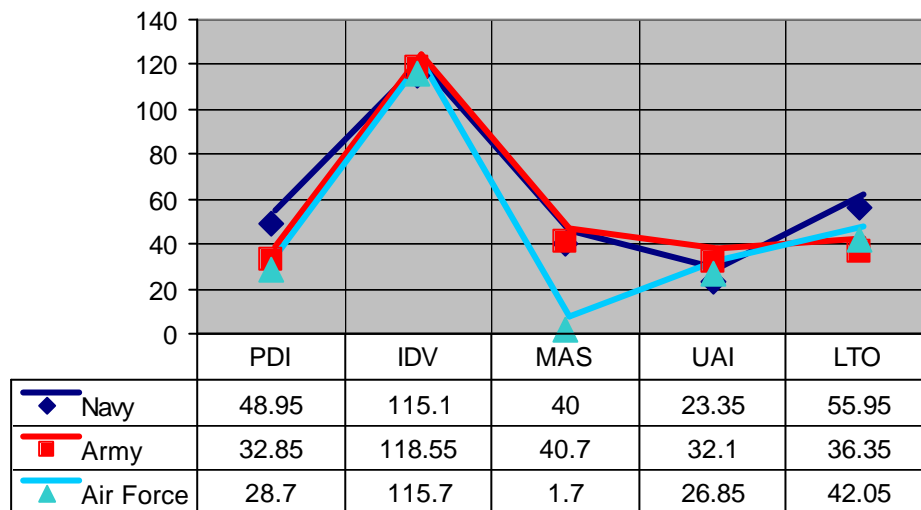


Exhibit 8-5a. Australian intra-national organisation VSM profile.  
Derived from Annex H

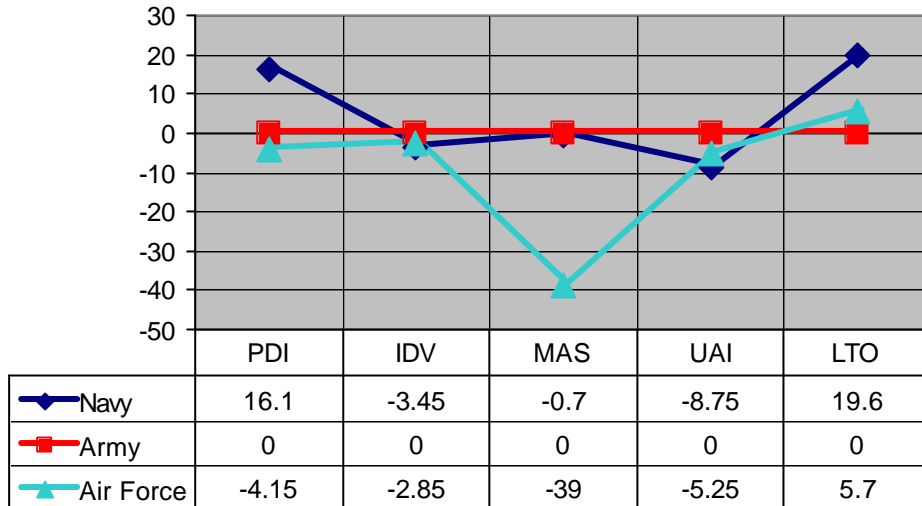


Exhibit 8-5b. Australian VSM relative intra-national organisation cultural distance.  
Derived from Exhibit 8-5a

VSM mean scores for British Navy

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.85</u>	<u>2.4</u>	<u>1.95</u>	<u>2.3</u>	<u>1.9</u>	<u>2.4</u>	<u>1.55</u>	<u>1.5</u>	<u>2.25</u>	<u>3.1</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.25</u>	<u>2.7</u>	<u>2.75</u>	<u>3.4</u>	<u>2.25</u>	<u>2.55</u>	<u>2.65</u>	<u>3.45</u>	<u>3.3</u>	<u>3.35</u>

VSM index calculation for British Navy

<b>PDI</b>	Q3	Q6	Q14	Q17	
	-35*( <u>1.95</u> )	35*( <u>2.4</u> )	25*( <u>3.4</u> )	-20*( <u>2.65</u> )	
	-68.25	+ 84	+ 85	+ -53	- 20 = <b>27.75</b>
<b>IDV</b>	Q1	Q2	Q4	Q8	
	-50*( <u>1.85</u> )	30*( <u>2.4</u> )	20*( <u>2.3</u> )	-25*( <u>1.5</u> )	
	-92.5	+ 72	+ 46	+ -37.5	+ 130 = <b>118</b>
<b>MAS</b>	Q5	Q7	Q15	Q20	
	60*( <u>1.9</u> )	-20*( <u>1.55</u> )	20*( <u>2.25</u> )	-70*( <u>3.35</u> )	
	114	+ -31	+ 45	+ -234.5	+ 100 = <b>-6.5</b>
<b>UAI</b>	Q13	Q16	Q18	Q19	
	25*( <u>2.75</u> )	20*( <u>2.55</u> )	-50*( <u>3.45</u> )	-15*( <u>3.3</u> )	
	68.75	+ 51	+ -172.5	+ -49.5	+ 120 = <b>17.75</b>

$$\begin{array}{rcccc}
 & \text{Q9} & \text{Q10} & \text{Q11} & \text{Q12} \\
 \text{LTO} & 45*( \underline{2.25} ) & -30*( \underline{3.1} ) & -35*( \underline{2.25} ) & 15*( \underline{2.7} ) \\
 & 101.25 & + & -93 & + & -78.75 & + & 40.5 & + & 67 = & \mathbf{37}
 \end{array}$$

VSM mean scores for British Army

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.69</u>	<u>2.49</u>	<u>1.93</u>	<u>2.2</u>	<u>2</u>	<u>2.4</u>	<u>1.84</u>	<u>1.58</u>	<u>2.39</u>	<u>3.14</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.33</u>	<u>2.72</u>	<u>2.56</u>	<u>3.3</u>	<u>2.35</u>	<u>2.32</u>	<u>2.16</u>	<u>3.37</u>	<u>3.44</u>	<u>2.6</u>

VSM index calculation for British Army

$$\begin{array}{rcccc}
 & \text{Q3} & \text{Q6} & \text{Q14} & \text{Q17} \\
 \text{PDI} & -35*( \underline{1.93} ) & 35*( \underline{2.4} ) & 25*( \underline{3.3} ) & -20*( \underline{2.16} ) \\
 & -67.55 & + & 84 & + & 82.5 & + & -43.2 & - & 20 = & \mathbf{35.75}
 \end{array}$$

$$\begin{array}{rcccc}
 & \text{Q1} & \text{Q2} & \text{Q4} & \text{Q8} \\
 \text{IDV} & -50*( \underline{1.69} ) & 30*( \underline{2.49} ) & 20*( \underline{2.2} ) & -25*( \underline{1.58} ) \\
 & -84.5 & + & 74.7 & + & 44 & + & -39.5 & + & 130 = & \mathbf{124.7}
 \end{array}$$

$$\begin{array}{rcccc}
 & \text{Q5} & \text{Q7} & \text{Q15} & \text{Q20} \\
 \text{MAS} & 60*( \underline{2} ) & -20*( \underline{1.84} ) & 20*( \underline{2.35} ) & -70*( \underline{2.6} ) \\
 & 120 & + & -36.8 & + & 47 & + & -182 & + & 100 = & \mathbf{48.2}
 \end{array}$$

$$\begin{array}{rcccc}
 & \text{Q13} & \text{Q16} & \text{Q18} & \text{Q19} \\
 \text{UAI} & 25*( \underline{2.56} ) & 20*( \underline{2.32} ) & -50*( \underline{3.37} ) & -15*( \underline{3.44} ) \\
 & 64 & + & 46.4 & + & -168.5 & + & -51.6 & + & 120 = & \mathbf{10.3}
 \end{array}$$

$$\begin{array}{rcccc}
 & \text{Q9} & \text{Q10} & \text{Q11} & \text{Q12} \\
 \text{LTO} & 45*( \underline{2.39} ) & -30*( \underline{3.14} ) & -35*( \underline{2.33} ) & 15*( \underline{2.72} ) \\
 & 107.55 & + & -94.2 & + & -81.55 & + & 40.8 & + & 67 = & \mathbf{39.6}
 \end{array}$$

VSM mean scores for British Air Force

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.65</u>	<u>2.15</u>	<u>1.77</u>	<u>2</u>	<u>2.08</u>	<u>2.11</u>	<u>1.58</u>	<u>1.65</u>	<u>1.96</u>	<u>2.79</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.23</u>	<u>2.92</u>	<u>2.77</u>	<u>3.04</u>	<u>2.65</u>	<u>2.46</u>	<u>2.3</u>	<u>3.54</u>	<u>3.27</u>	<u>3.19</u>

VSM index calculation for British Air Force

$$\begin{array}{r}
 \text{PDI} \quad -35*(\underline{1.77}) \quad 35*(\underline{2.11}) \quad 25*(\underline{3.04}) \quad -20*(\underline{2.3}) \\
 \quad \quad \quad -61.95 \quad + \quad 73.85 \quad + \quad 76 \quad + \quad -46 \quad - 20 = \mathbf{21.9}
 \end{array}$$

$$\begin{array}{r}
 \text{IDV} \quad -50*(\underline{1.65}) \quad 30*(\underline{2.15}) \quad 20*(\underline{2}) \quad -25*(\underline{1.65}) \\
 \quad \quad \quad -82.5 \quad + \quad 64.5 \quad + \quad 40 \quad + \quad -41.25 + 130 = \mathbf{110.75}
 \end{array}$$

$$\begin{array}{r}
 \text{MAS} \quad 60*(\underline{2.08}) \quad -20*(\underline{1.58}) \quad 20*(\underline{2.65}) \quad -70*(\underline{3.19}) \\
 \quad \quad \quad 124.8 \quad + \quad -31.6 \quad + \quad 53 \quad + \quad -223.3 + 100 = \mathbf{22.9}
 \end{array}$$

$$\begin{array}{r}
 \text{UAI} \quad 25*(\underline{2.77}) \quad 20*(\underline{2.46}) \quad -50*(\underline{3.54}) \quad -15*(\underline{3.27}) \\
 \quad \quad \quad 69.25 \quad + \quad 49.2 \quad + \quad -177 \quad + \quad -49.05 + 120 = \mathbf{12.4}
 \end{array}$$

$$\begin{array}{r}
 \text{LTO} \quad 45*(\underline{1.96}) \quad -30*(\underline{2.79}) \quad -35*(\underline{2.23}) \quad 15*(\underline{2.92}) \\
 \quad \quad \quad 88.2 \quad + \quad -83.7 \quad + \quad -78.05 \quad + \quad 43.8 + 67 = \mathbf{37.25}
 \end{array}$$

British intra-national armed forces at organisational level VSM graphs

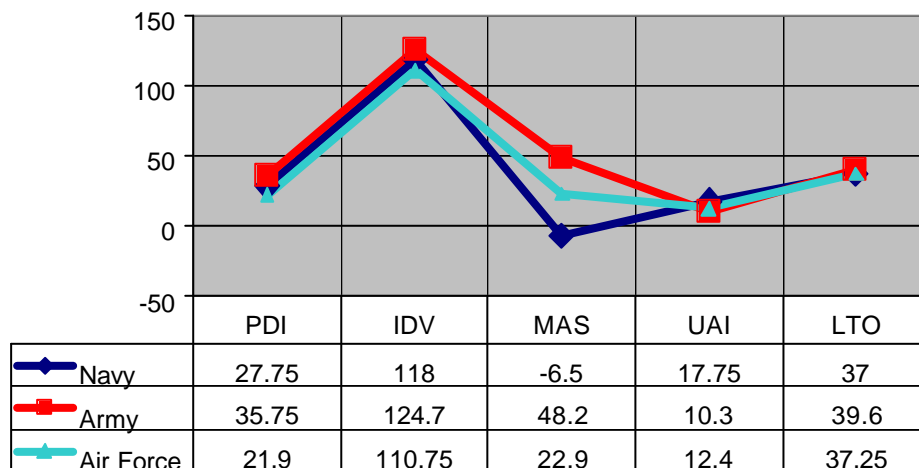


Exhibit 8-6a. British intra-national organisation VSM profile.

Derived from Annex I

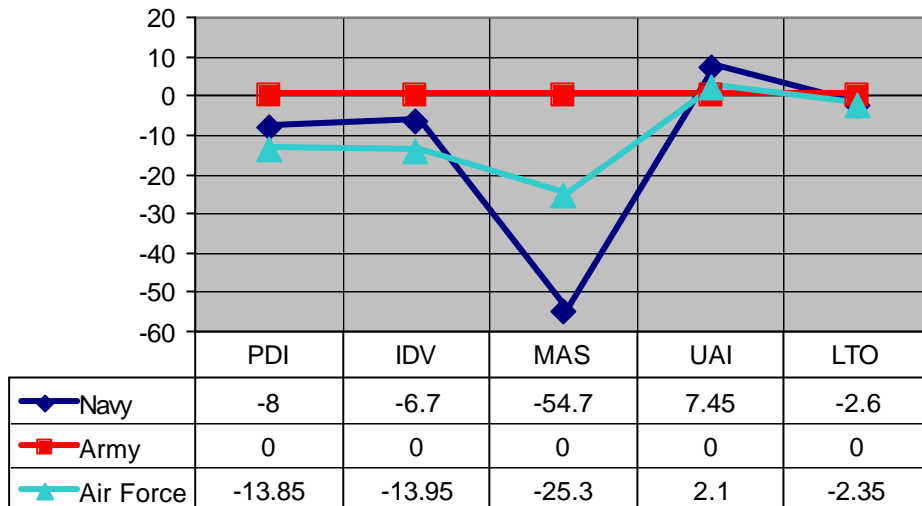


Exhibit 8-6b. British VSM relative intra-national organisation cultural distance.  
Derived from Exhibit 8-6a

VSM mean scores for Canadian Navy

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.53</u>	<u>2.1</u>	<u>2</u>	<u>2.16</u>	<u>2.16</u>	<u>2.26</u>	<u>2.21</u>	<u>1.74</u>	<u>2.1</u>	<u>3.1</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.37</u>	<u>2.94</u>	<u>2.42</u>	<u>3.26</u>	<u>2</u>	<u>2.79</u>	<u>2.05</u>	<u>2.89</u>	<u>3.21</u>	<u>2.95</u>

VSM index calculation for Canadian Navy

<b>PDI</b>	Q3	Q6	Q14	Q17	
	-35*( <u>2</u> )	35*( <u>2.26</u> )	25*( <u>3.26</u> )	-20*( <u>2.05</u> )	
	-70	+ 79.1	+ 81.5	+ -41	- 20 = <b>29.6</b>
<b>IDV</b>	Q1	Q2	Q4	Q8	
	-50*( <u>1.53</u> )	30*( <u>2.1</u> )	20*( <u>2.16</u> )	-25*( <u>1.74</u> )	
	-76.5	+ 63	+ 43.2	+ -43.5	+ 130 = <b>116.2</b>
<b>MAS</b>	Q5	Q7	Q15	Q20	
	60*( <u>2.16</u> )	-20*( <u>2.21</u> )	20*( <u>2</u> )	-70*( <u>2.95</u> )	
	129.6	+ -44.2	+ 40	+ -206.5	+ 100 = <b>18.9</b>
<b>UAI</b>	Q13	Q16	Q18	Q19	
	25*( <u>2.42</u> )	20*( <u>2.79</u> )	-50*( <u>2.89</u> )	-15*( <u>3.21</u> )	
	60.5	+ 55.8	+ -144.5	+ -48.15	+ 120 = <b>43.65</b>

$$\begin{array}{r}
 \text{LTO} \quad 45*(\underline{2.1}) \quad -30*(\underline{3.1}) \quad -35*(\underline{2.37}) \quad 15*(\underline{2.94}) \\
 94.5 \quad + \quad -93 \quad + \quad -82.95 \quad + \quad 44.1 \quad + \quad 67 = \mathbf{29.65}
 \end{array}$$

VSM mean scores for Canadian Army

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.4</u>	<u>1.95</u>	<u>1.82</u>	<u>1.77</u>	<u>1.73</u>	<u>2.54</u>	<u>1.73</u>	<u>1.59</u>	<u>1.73</u>	<u>2.82</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>1.77</u>	<u>2.18</u>	<u>2.68</u>	<u>3.41</u>	<u>2.45</u>	<u>3.32</u>	<u>1.77</u>	<u>2.95</u>	<u>2.73</u>	<u>2.82</u>

VSM index calculation for Canadian Army

$$\begin{array}{r}
 \text{PDI} \quad -35*(\underline{1.82}) \quad 35*(\underline{2.54}) \quad 25*(\underline{3.41}) \quad -20*(\underline{1.77}) \\
 -63.7 \quad + \quad 88.9 \quad + \quad 85.25 \quad + \quad -35.4 \quad - \quad 20 = \mathbf{55.05}
 \end{array}$$

$$\begin{array}{r}
 \text{IDV} \quad -50*(\underline{1.4}) \quad 30*(\underline{1.95}) \quad 20*(\underline{1.77}) \quad -25*(\underline{1.59}) \\
 -70 \quad + \quad 58.5 \quad + \quad 35.4 \quad + \quad -39.75 \quad + \quad 130 = \mathbf{114.15}
 \end{array}$$

$$\begin{array}{r}
 \text{MAS} \quad 60*(\underline{1.73}) \quad -20*(\underline{1.73}) \quad 20*(\underline{2.45}) \quad -70*(\underline{2.82}) \\
 103.8 \quad + \quad -34.6 \quad + \quad 49 \quad + \quad -197.4 \quad + \quad 100 = \mathbf{20.8}
 \end{array}$$

$$\begin{array}{r}
 \text{UAI} \quad 25*(\underline{2.68}) \quad 20*(\underline{3.32}) \quad -50*(\underline{2.95}) \quad -15*(\underline{2.73}) \\
 67 \quad + \quad 66.4 \quad + \quad -147.5 \quad + \quad -40.95 \quad + \quad 120 = \mathbf{64.95}
 \end{array}$$

$$\begin{array}{r}
 \text{LTO} \quad 45*(\underline{1.73}) \quad -30*(\underline{2.82}) \quad -35*(\underline{1.77}) \quad 15*(\underline{2.18}) \\
 77.85 \quad + \quad -84.6 \quad + \quad -61.95 \quad + \quad 32.7 \quad + \quad 67 = \mathbf{31}
 \end{array}$$

VSM mean scores for Canadian Air Force

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.58</u>	<u>1.96</u>	<u>1.92</u>	<u>2.27</u>	<u>2.08</u>	<u>2.5</u>	<u>2.15</u>	<u>1.61</u>	<u>2.08</u>	<u>2.88</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.2</u>	<u>2.88</u>	<u>2.73</u>	<u>3.35</u>	<u>2</u>	<u>2.88</u>	<u>2.11</u>	<u>2.92</u>	<u>2.73</u>	<u>2.8</u>

VSM index calculation for Canadian Air Force

$$\begin{array}{r}
 \text{PDI} \quad -35*(\underline{1.92}) \quad 35*(\underline{2.5}) \quad 25*(\underline{3.35}) \quad -20*(\underline{2.11}) \\
 -67.2 \quad + \quad 87.5 \quad + \quad 83.75 \quad + \quad -42.2 \quad - 20 = \mathbf{41.85}
 \end{array}$$

$$\begin{array}{r}
 \text{IDV} \quad -50*(\underline{1.58}) \quad 30*(\underline{1.96}) \quad 20*(\underline{2.27}) \quad -25*(\underline{1.61}) \\
 -79 \quad + \quad 58.8 \quad + \quad 45.4 \quad + \quad -40.25 \quad + 130 = \mathbf{114.95}
 \end{array}$$

$$\begin{array}{r}
 \text{MAS} \quad 60*(\underline{2.08}) \quad -20*(\underline{2.15}) \quad 20*(\underline{2}) \quad -70*(\underline{2.8}) \\
 124.8 \quad + \quad -43 \quad + \quad 40 \quad + \quad -196 \quad + 100 = \mathbf{25.8}
 \end{array}$$

$$\begin{array}{r}
 \text{UAI} \quad 25*(\underline{2.73}) \quad 20*(\underline{2.88}) \quad -50*(\underline{2.92}) \quad -15*(\underline{2.73}) \\
 68.25 \quad + \quad 57.6 \quad + \quad -146 \quad + \quad -40.95 \quad + 120 = \mathbf{58.9}
 \end{array}$$

$$\begin{array}{r}
 \text{LTO} \quad 45*(\underline{2.08}) \quad -30*(\underline{2.88}) \quad -35*(\underline{2.2}) \quad 15*(\underline{2.88}) \\
 93.6 \quad + \quad -86.4 \quad + \quad -77 \quad + \quad 43.2 \quad + 67 = \mathbf{40.4}
 \end{array}$$

Canadian intra-national armed forces at organisational level VSM graphs

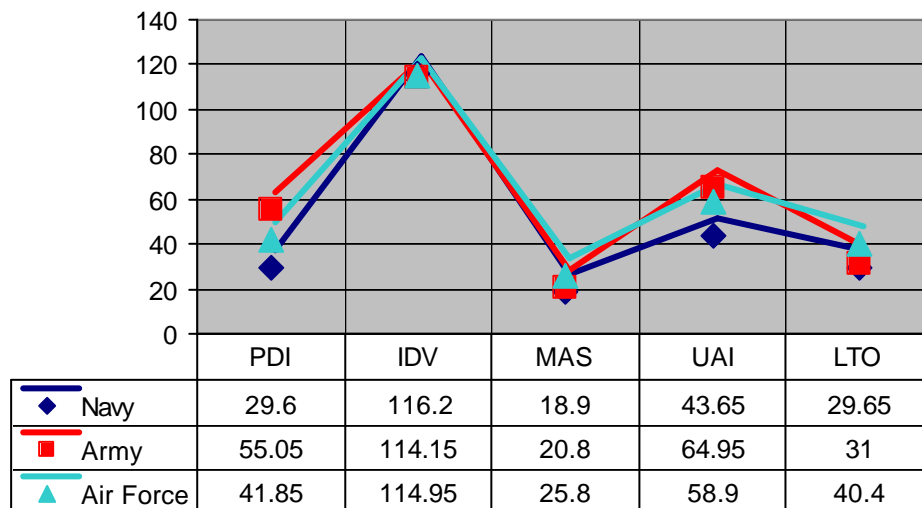


Exhibit 8-7a. Canadian intra-national organisation VSM profile.  
Derived from Annex J

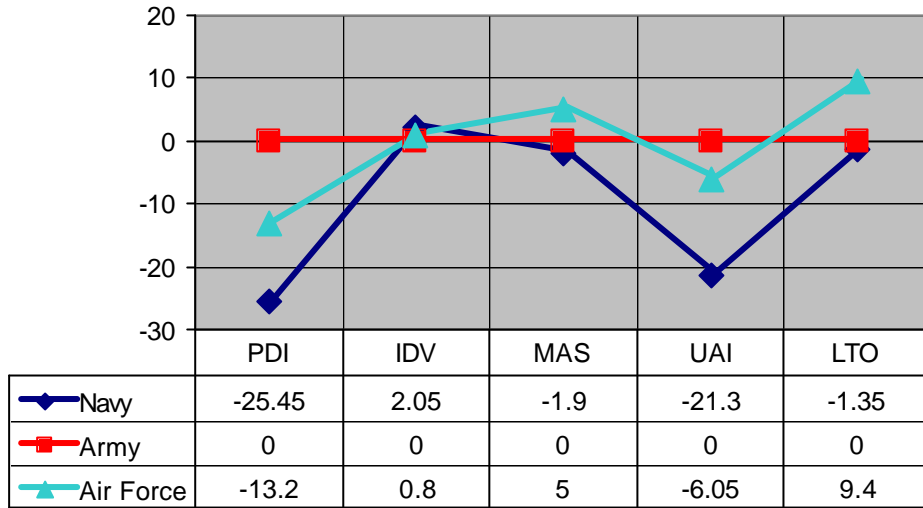


Exhibit 8-7b. Canadian VSM relative intra-national organisation cultural distance.  
 Derived from Exhibit 8-7a



**INTERNATIONAL ARMED FORCES AT ORGANISATIONAL LEVEL VSM GRAPHS**

The international organisational level data is presented in Exhibits 8-8a, 8-9a and 8-10a for the Navies, Armies and Air Forces respectively in order to demonstrate the similarity in absolute VSM profiles. Data for these graphs is extracted for the relevant services from Exhibits 8-5a for Australia, 8-6a for Britain and 8-7a for Canada. Exhibits 8-8b, 8-9b and 8-10b use the Royal Navy, British Army and Royal Air Force cultures respectively as the relative baselines to demonstrate where cultural distance occurs.

Navy international armed forces at organisational level VSM graphs

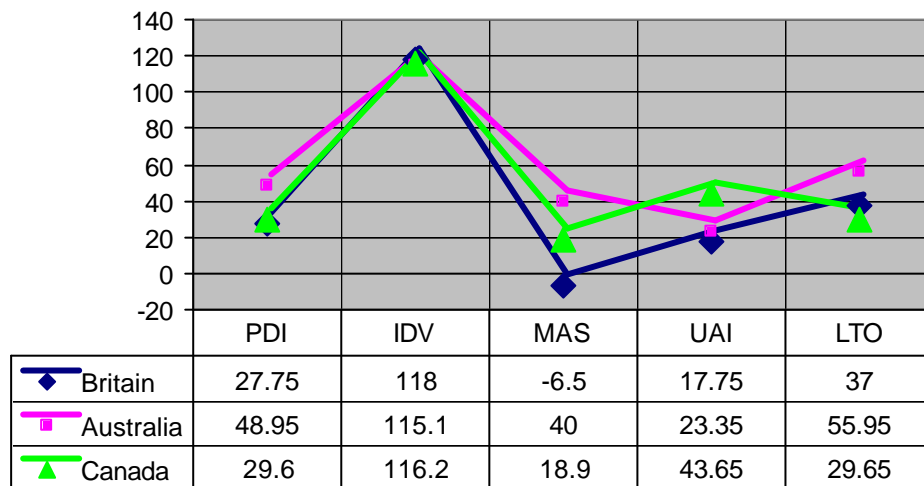


Exhibit 8-8a. Naval international organisation VSM profile.  
Derived from Navy data in Exhibits 8-5a, 8-6a and 8-7a

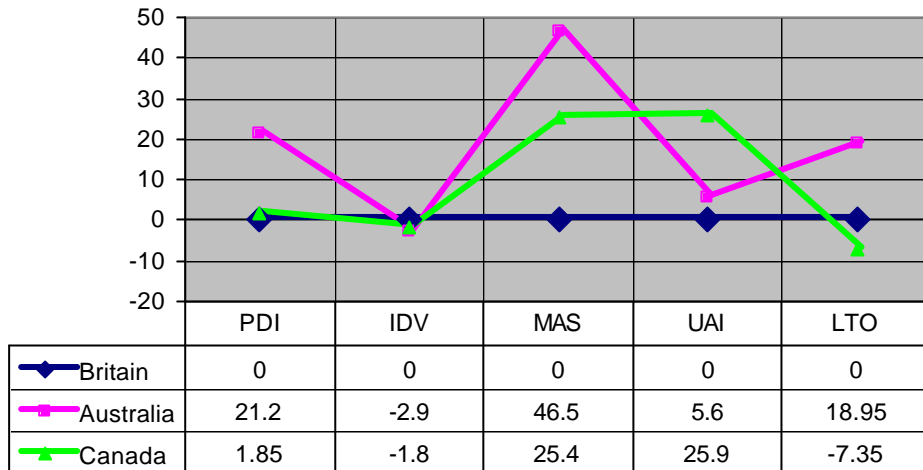


Exhibit 8-8b. Naval VSM relative international organisation cultural distance.  
 Derived from Exhibit 8-8a

Army international armed forces at organisational level VSM graphs

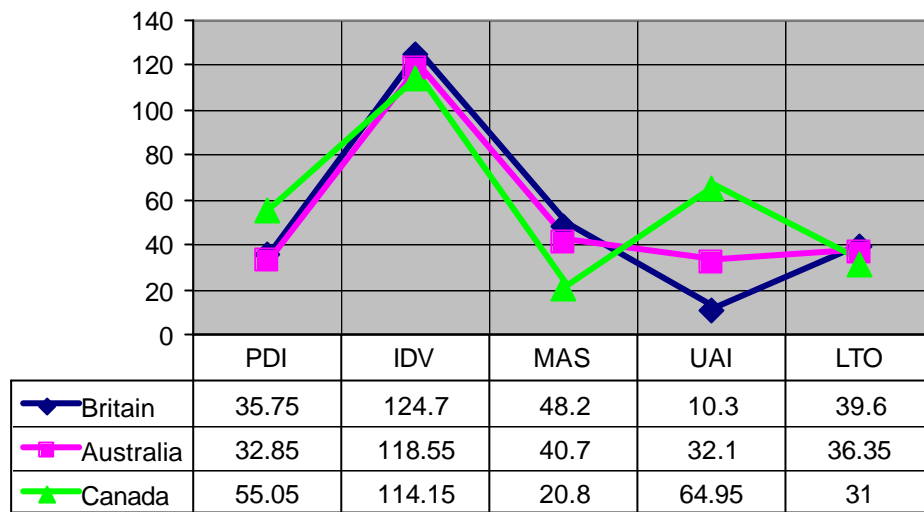


Exhibit 8-9a. Army international organisation VSM profile.

Derived from Army data in Exhibits 8-5a, 8-6a and 8-7a

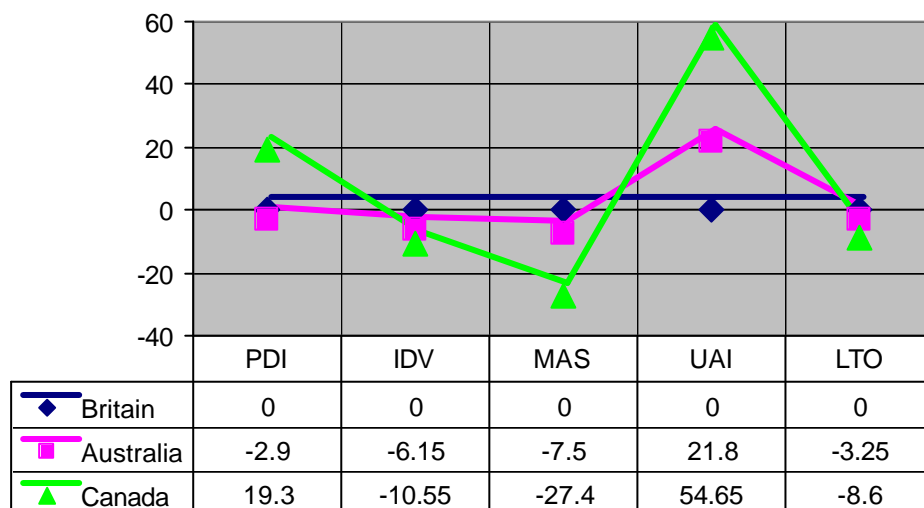


Exhibit 8-9b. Army VSM relative international organisation cultural distance.

Derived from Exhibit 8-9a

Air Force international armed forces at organisational level VSM graphs

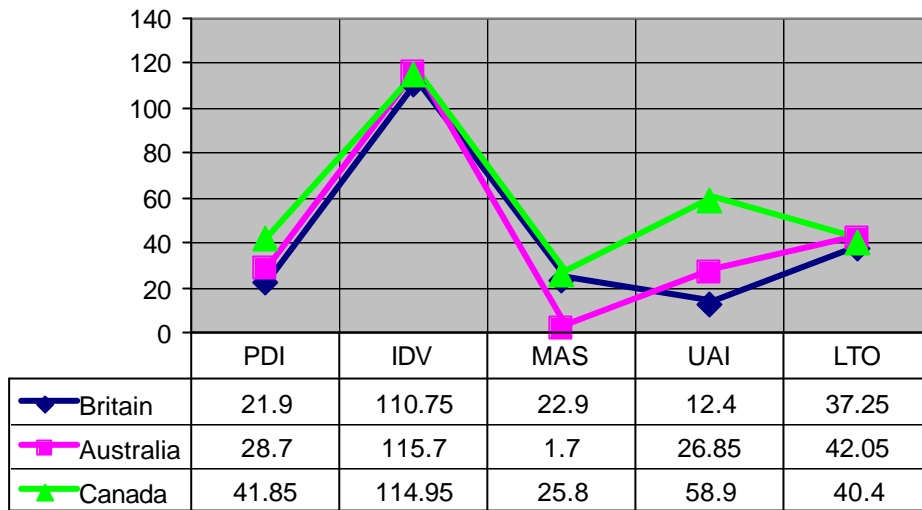


Exhibit 8-10a. Air Forces international organisation VSM profile.  
Derived from Air Force data in Exhibits 8-5a, 8-6a and 8-7a

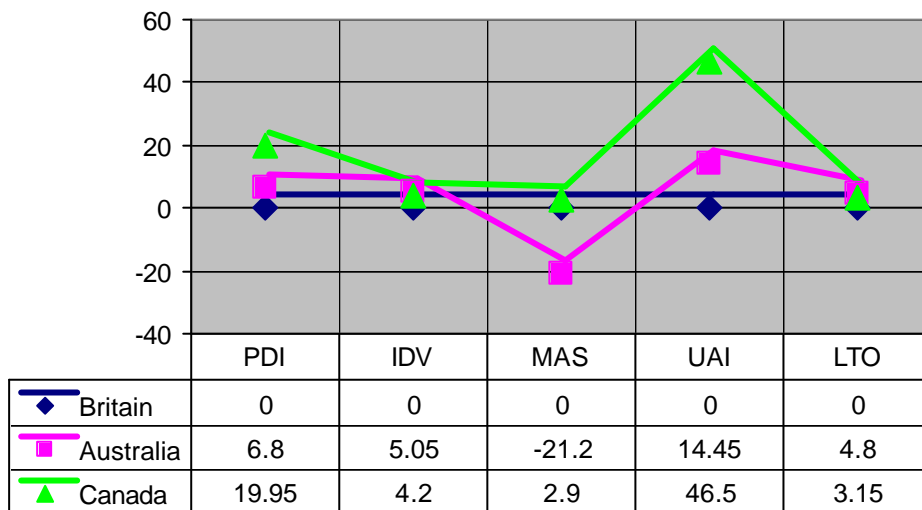


Exhibit 8-10b. Air Force VSM relative international organisation cultural distance.  
Derived from Exhibit 8-10a

## **CHAPTER SUMMARY**

This Chapter presented the calculations on the data collected using the VSM 94 and represents the results graphically in both absolute and relative terms in order to aid the subsequent analysis and discussion in Chapters 9 and 10. Chapter 9 completes the value profile process by bringing together the results of Chapters 6 and 8. Chapter 9 provides the detailed analysis and deductions examining whether national and military organisational values have a significant influence on the cultures of armed forces.

## **INTRODUCTION TO CHAPTER 9 - ANALYSIS AND DEDUCTIONS**

This Chapter completes the value profile process by bringing together the results from Chapters 6 and 8, in order to examine whether national and military organisational values have a significant influence on the cultures of armed forces. The process of value profiling is detailed in the methodology in Chapter 2. This Chapter provides detailed analysis and deductions from the process of comparison as follows:

- National level.
- Intra-national organisational level.
- International organisational level.

Although most observations are produced in these categories, there are several which should not be constrained by this particular structure. For ease of referring to the information from which they stem these observations are recorded in the section in which they appear. The analysis and deduction sections are summarised in the conclusion section that draws highlights the key cultural influences.

## NATIONAL LEVEL ANALYSIS AND DEDUCTIONS

Exhibit 9-1a shows the national scores for Australia, Britain and Canada based upon Hofstede's original findings detailed at Annex E. Exhibits 4-3 and 4-4 from Chapter 4, using Trompenaars and Hampden-Turner's and Hofstede's data respectively, demonstrated that Australia, Britain and Canada have close cultural profiles in comparison to other countries. The purpose of showing the three national profiles here is to demonstrate the variation that can be expected from the various cultural dimension scores at the national level of comparison. The score variation identified in Exhibit 9-1b provides a sound, albeit subjective, baseline to identify acceptable variation across all the index scores produced in this Chapter.

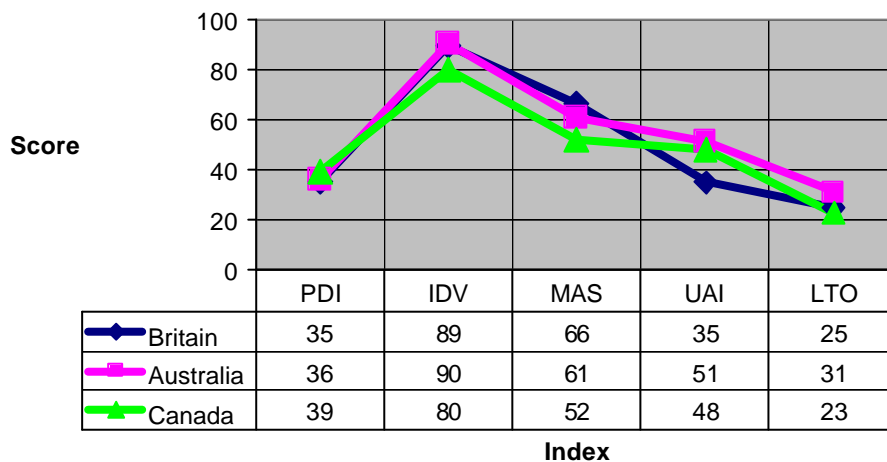


Exhibit 9-1a. VSM country profile.  
Derived from Exhibit 8-1

Exhibit 9-1b is produced from Exhibit 9-1a using the process described in Chapter 2. Whereas Exhibit 9-1a tends to emphasise similarities of cultural profiles, Exhibit 9-1b emphasises the differences. Exhibit 9-1b demonstrates the following spread in the profile scores:

- PDI 4 points (0 to 4)
- IDV 10 points (1 to -9)
- MAS 14 points (0 to -14)
- UAI 16 points (0 to 16)
- LTO 8 points (6 to -2)

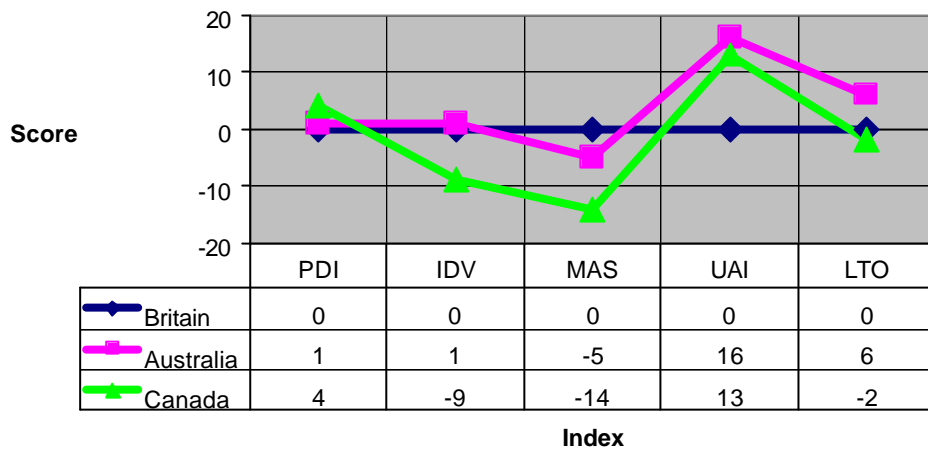


Exhibit 9-1b. VSM relative national cultural distance.  
Derived from Exhibit 9-1a

The score variation in Exhibit 9-1b averages at 10.4. A figure for acceptable variation can therefore be reasonably set at +/-10 points per cultural dimension. The value profiling process becomes important at variations greater than +/-10 as it is reasonable to expect that it should explain cultural differences significant enough to manifest themselves in previous research.



**National level civil – military culture**

This section examines the relationship between the national cultural influences identified in Chapter 6 and the findings of the VSM in Chapter 8.

**Australian national civil-military culture**

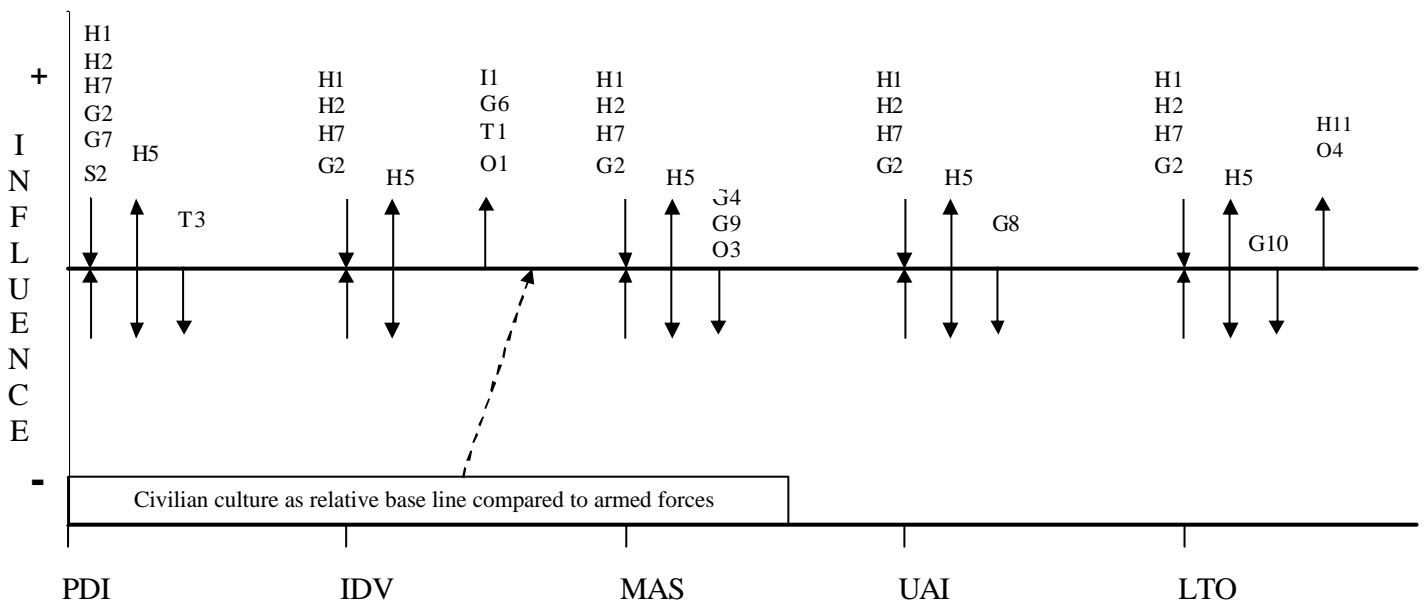


Exhibit 9-2a. Australian national influences.  
Transferred from Exhibit 6-1

Exhibit 9-2a provides the Australian national influences identified in Chapter 6. Exhibit 9-2b summarises the expected impact of the influences so they can be overlaid onto the VSM results comparing the Australian national culture with that of the ADF.

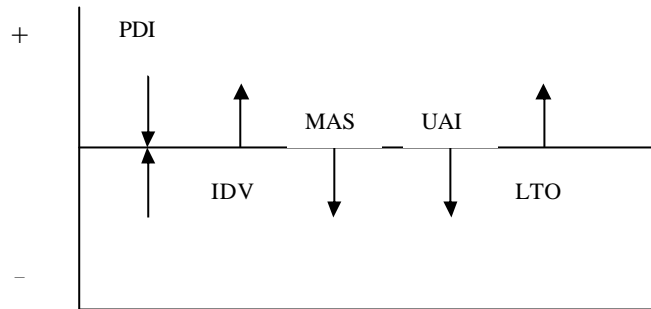


Exhibit 9-2b. Summary of Australian national influences.  
Summarised from Exhibit 9-2a

Exhibit 9-2c provides the Australian civilian national and ADF VSM scores identified in Chapter 8. Exhibit 9-2c shows that the two cultures have distinct variations. Exhibit 9-2d translates the results from Exhibit 9-2c in order to demonstrate the relative position of the ADF culture with that of the Australian civilian culture.

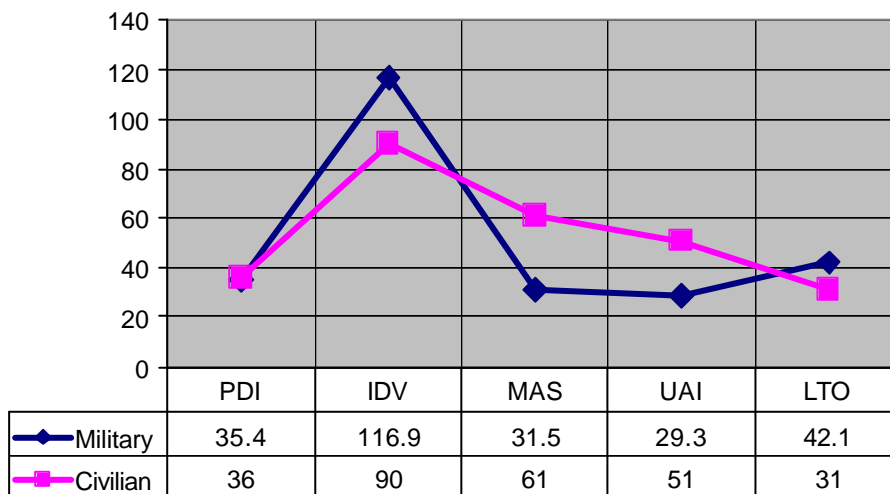


Exhibit 9-2c. Australian VSM civil-military profile.  
Transferred from Exhibit 8-2a

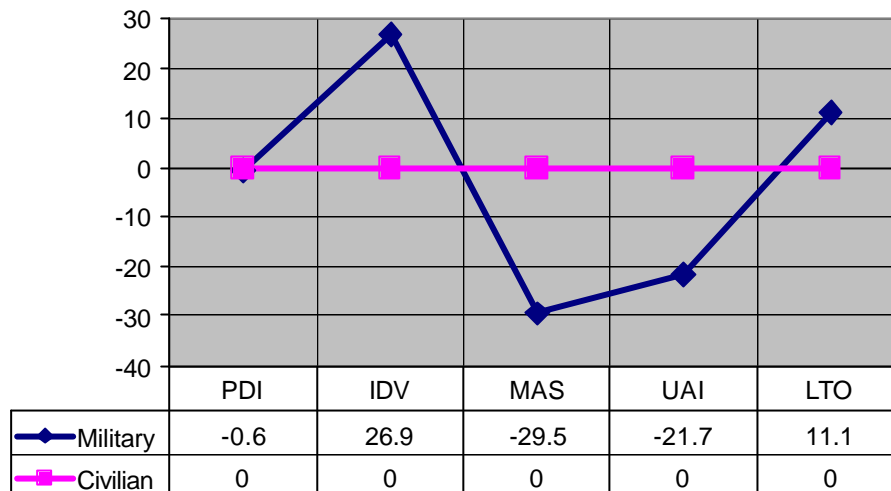


Exhibit 9-2d. Australian VSM relative civil-military cultural distance.  
Transferred from Exhibit 8-2b

Exhibit 9-2e shows the fusion of the value profiling process and the relative VSM results in order to identify where the national culture of Australia might be expected to vary from that of the ADF and where similarities might be expected. Exhibit 9-2e shows that four results are over the threshold of acceptable variation (identified as 10 points at the start of this Chapter). The value profiling in Exhibit 9-2e demonstrates that:

- PDI is expected to be mostly stable between the Australian civilian and ADF cultures. This will have the effect that the two cultures will have very similar superior-subordinate relationships. This is supported by the VSM results.
- IDV is expected to be higher for the ADF than civilians. This is supported by the VSM result. This identifies that there is an exaggerated (score of 116.9 on a theoretical scale of 0 to 100) concern for the individual within the ADF in comparison to civilians.
- MAS was predicted by value profiling to be lower in the armed forces than in civilian culture, this is supported by the VSM results. This result means that the ADF tend to be less interested in earnings and advancement than their civilian counterparts and are more focussed on good working environments and getting along with their peers.

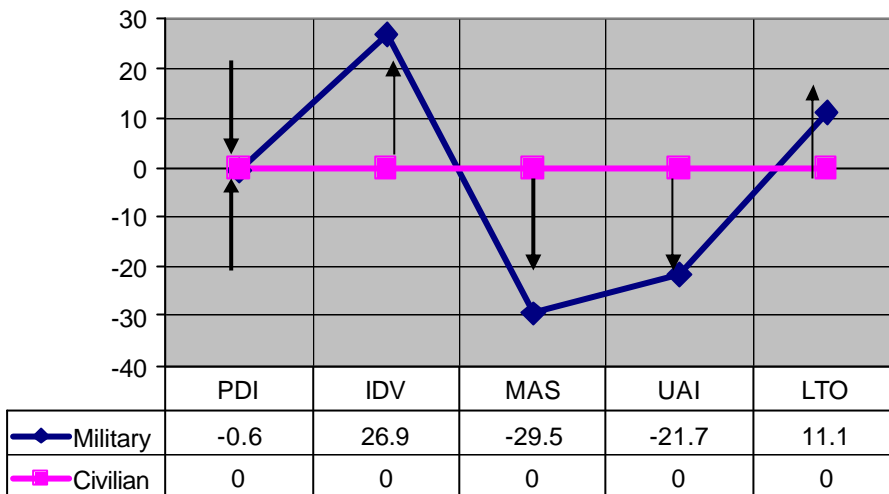


Exhibit 9-2e. Fusion of value profiling and relative VSM results for Australia.  
 Derived from Exhibits 9-2b and 9-2d

- UAI was predicted by the value profiling process to be lower for the ADF than for their civilian counterparts. This is supported by the VSM results. This means that the ADF have a lower need for certainty than their civilian counterparts and are better able to deal with ambiguity.
- LTO was predicted by the value profiling process to be higher in the ADF than in civilian society. This is supported by the VSM results. This means that the ADF tend to favour future reward through perseverance and thrift. Australian civilians will tend to prefer to fulfil social obligations and preserve ‘face’.

**British national level civil-military culture**

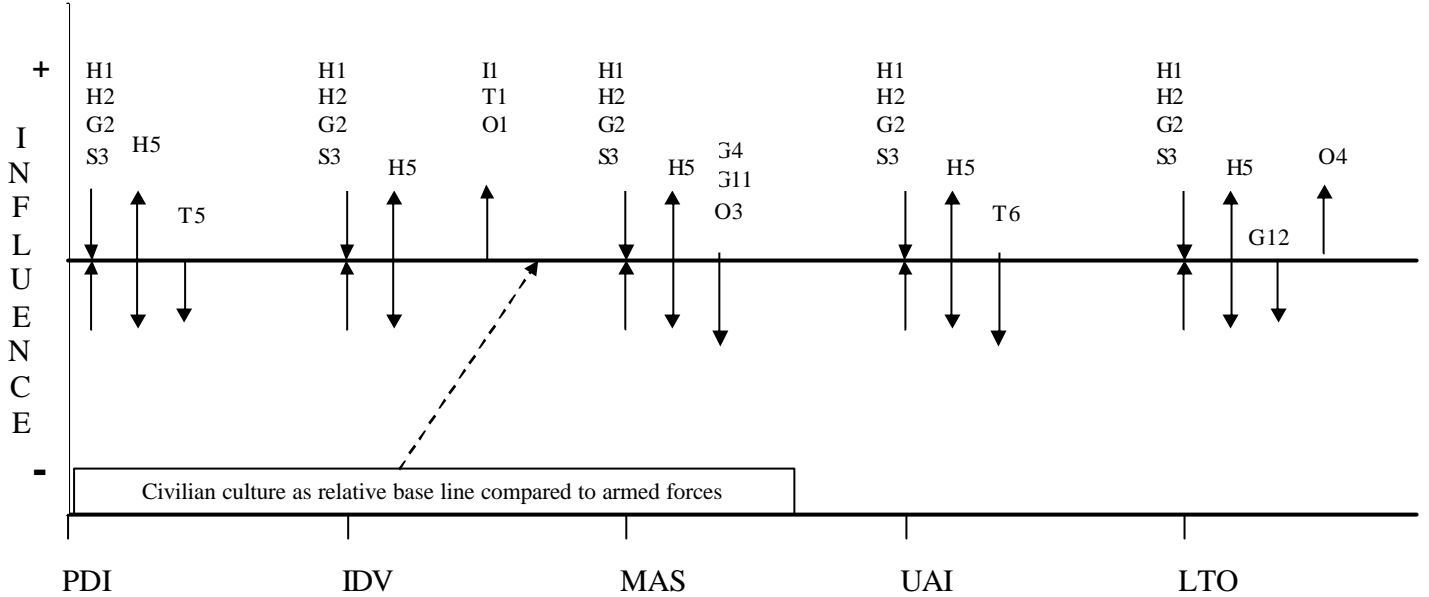


Exhibit 9-3a. British national influences.  
Transferred from Exhibit 6-2

Exhibit 9-3a provides Britain’s national influences identified in Chapter 6. Exhibit 9-3b summarises the expected impact of the influences so they can be overlaid onto the VSM results comparing Britain’s national culture with that of its armed forces.

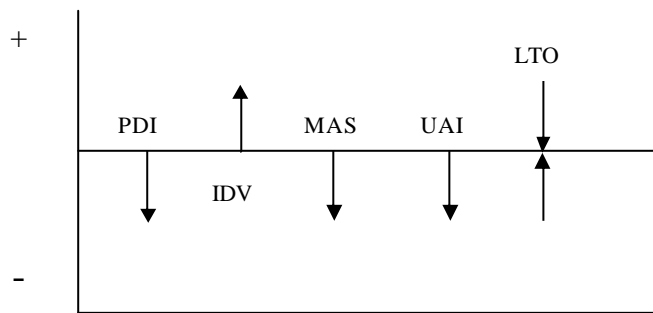


Exhibit 9-3b. Summary of British national influences.  
Summarised from Exhibit 9-3a

Exhibit 9-3c shows Britain's civilian national and armed forces the VSM scores identified in Chapter 8. Exhibit 9-3c shows that the two cultures have distinct variations. Exhibit 9-3d translates the results from Exhibit 9-3c in order to demonstrate the relative position of the armed forces culture with that of Britain's civilian culture.

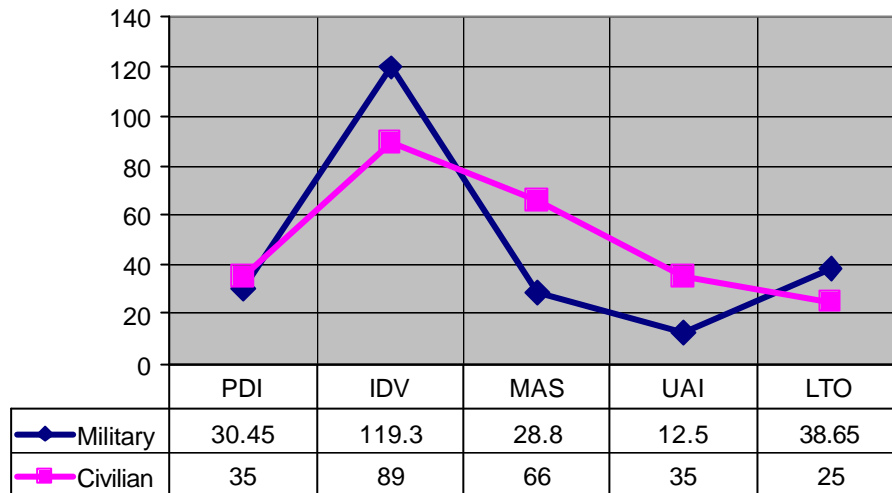


Exhibit 9-3c. British VSM civil-military profile.  
Transferred from Exhibit 8-3a

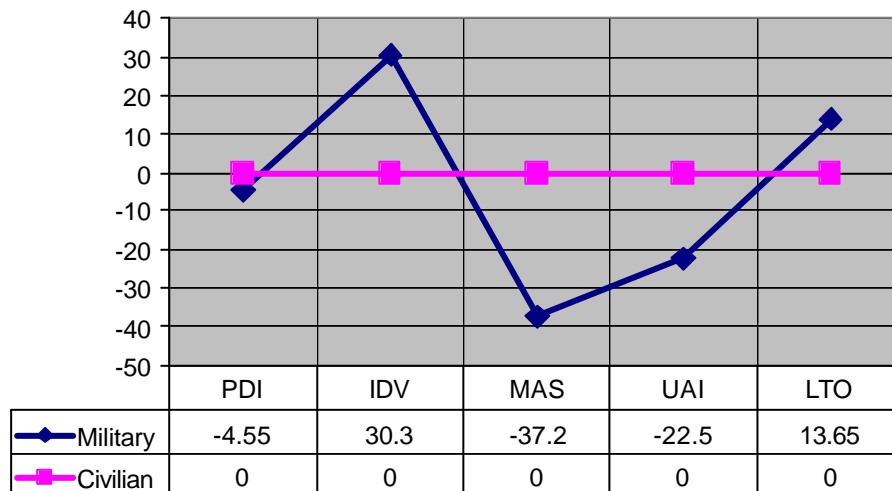


Exhibit 9-3d. British VSM relative civil-military cultural distance.  
Transferred from Exhibit 8-3b

Exhibit 9-3e shows the fusion of the profiling process and the relative VSM results in order to identify where the national culture of Britain might be expected to vary from that of its armed forces and where similarities might be expected. Exhibit 9-3e shows that four results are over the threshold of acceptable variation (identified as 10 points at the start of this Chapter). The value profiling in Exhibit 9-3e demonstrates that:

- PDI is expected to be lower in the British armed forces cultures than civilian society. This is supported by the VSM results. The relative score is under the 10 points threshold at 4.55. By referring to Exhibit 9-3a it can be seen that there are more stabilising than destabilising and negative score influences combined. This supports the relatively low score difference. This will have the effect that the two cultures will have very similar superior-subordinate relationships.
- IDV is expected to be higher for the armed forces than civilians. This is supported by the VSM result. This identifies that there is an exaggerated (score of 119.3 on a theoretical scale of 0 to 100) concern for the individual within the armed forces in comparison to civilians.

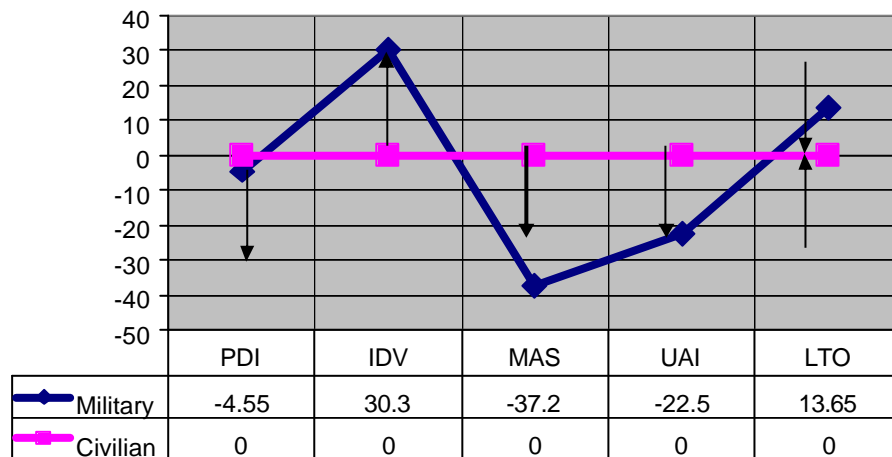
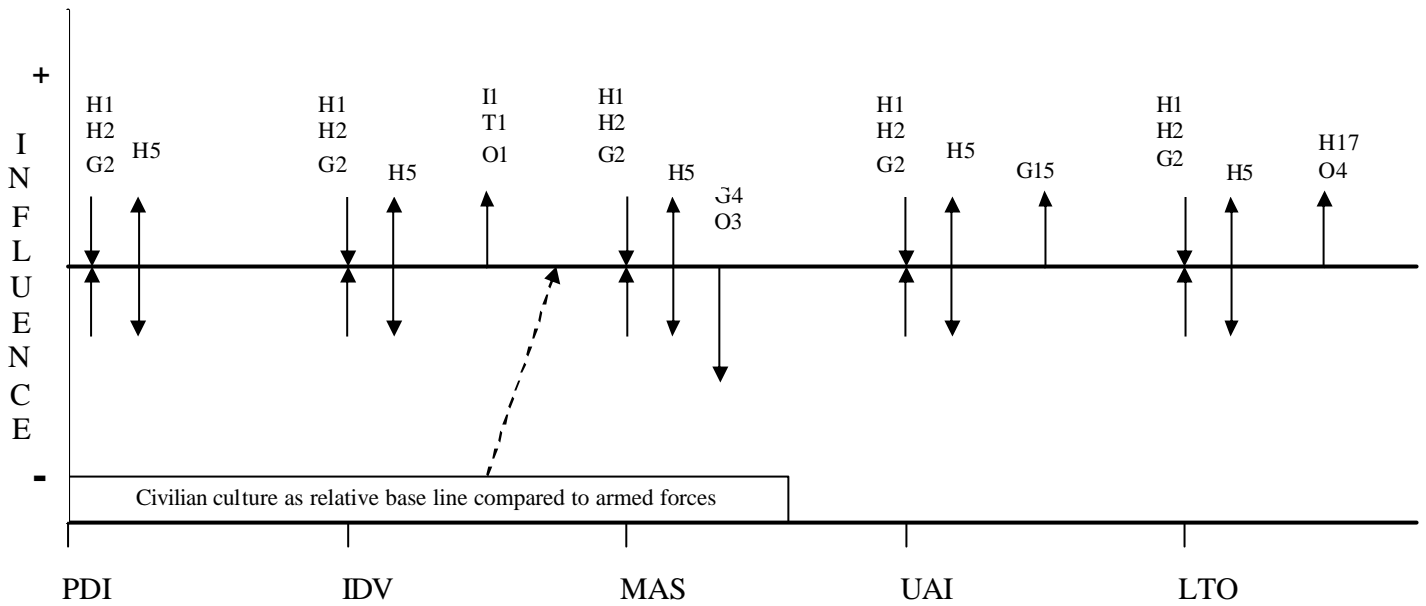


Exhibit 9-3e. Fusion of value profiling and relative VSM results for Britain.  
 Derived from Exhibits 9-3b and 9-3d

- MAS was predicted by value profiling to be lower in the armed forces than in civilian culture. This is supported by the VSM results. This result means that the armed forces tend to be less interested in earnings and advancement than their civilian counterparts and are more focussed on good working environments and getting along with their peers.
- UAI was predicted by the value profiling process to be lower for the armed forces than for their civilian counterparts. This is supported by the VSM result. This means that the armed forces have a lower need for certainty than their civilian counterparts and are better able to deal with ambiguity.
- LTO was predicted by the value profiling process to be stable between the armed forces and civilian society. This is not supported by the VSM results. This means that the armed forces tend to favour social obligations and preservation of 'face'. According to the VSM results British civilians have a preference for future reward through perseverance and thrift. Exhibit 9-3a shows that the influences on British LTO are complex with 7 (4 stabilising, 1 destabilising, 1 negative and 1 positive) influences identified. It is possible that the positive scoring influence 'O4' has significantly more impact than the negative scoring influence 'G12' identified in Exhibit 9-3a. (O4 = The need to develop careers internally over periods of up to thirty to thirty-five years may result in higher LTO scores for the military than the civilian samples. G12 = All three armed forces should exhibit low LTO scores due to the imperative of fulfilling extensive social obligations.)

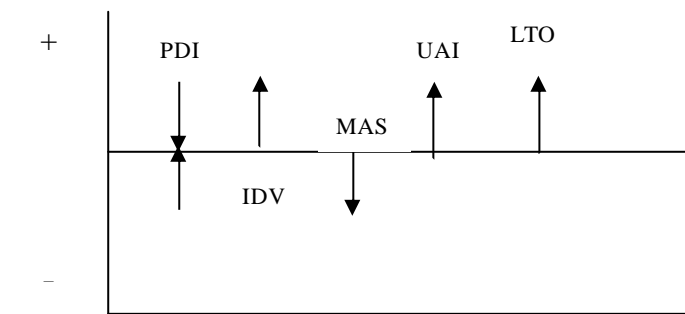


**Canadian national level civil-military culture**



**Exhibit 9-4a. Canadian national influences.**  
Transferred from Exhibit 6-3

Exhibit 9-4a provides Canadian national influences identified in Chapter 6. Exhibit 9-4b summarises the expected impact of the influences so they can be overlaid onto the VSM results comparing Canada’s national culture with that of the CF.



**Exhibit 9-4b. Summary of Canadian national influences.**  
Summarised from Exhibit 9-4a

Exhibit 9-4c provides Canada’s civilian national and CF VSM scores identified in Chapter 4. Exhibit 9-4c shows that the two cultures have distinct variations. Exhibit 9-4d

translates the results from Exhibit 9-4c in order to demonstrate the relative position of the CF culture with that of Canada's civilian culture.

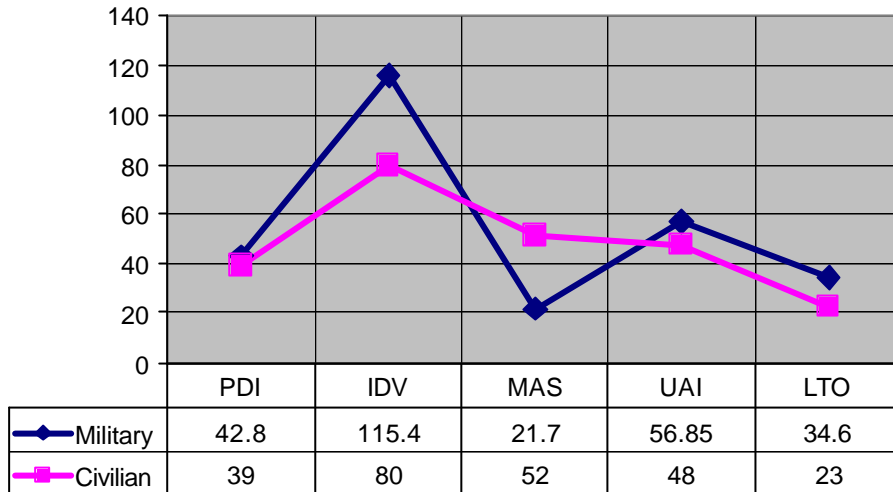


Exhibit 9-4c. Canadian VSM civil-military profile.  
Transferred from Exhibit 8-4a

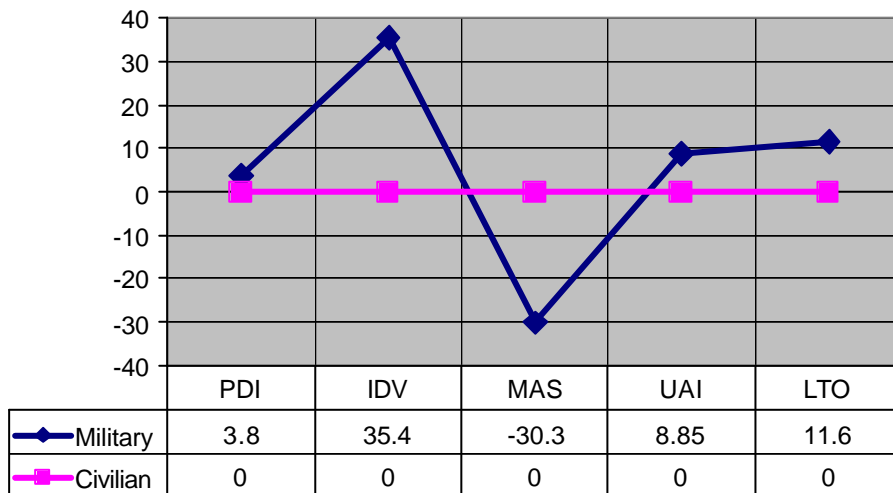


Exhibit 9-4d. Canadian VSM relative civil-military cultural distance.  
Transferred from Exhibit 8-4b

Exhibit 9-4e shows the fusion of the profiling process and the relative VSM results in order to identify where the national culture of Canada might be expected to vary from that of the CF and where similarities might be expected. Exhibit 9-4e shows that three results are over the threshold of acceptable variation (identified as 10 points at the start of this Chapter). The value profiling in Exhibit 9-4e demonstrates that:

- PDI is expected to be stable between the Canadian civilian and CF cultures. This is supported by the VSM result. This will have the effect that the two cultures will have very similar superior-subordinate relationships.
- IDV is expected to be higher for the CF than civilians. This is supported by the VSM result. This identifies that there is an exaggerated (score of 115.4 on a theoretical scale of 0 to 100) concern for the individual within the CF in comparison to civilians.

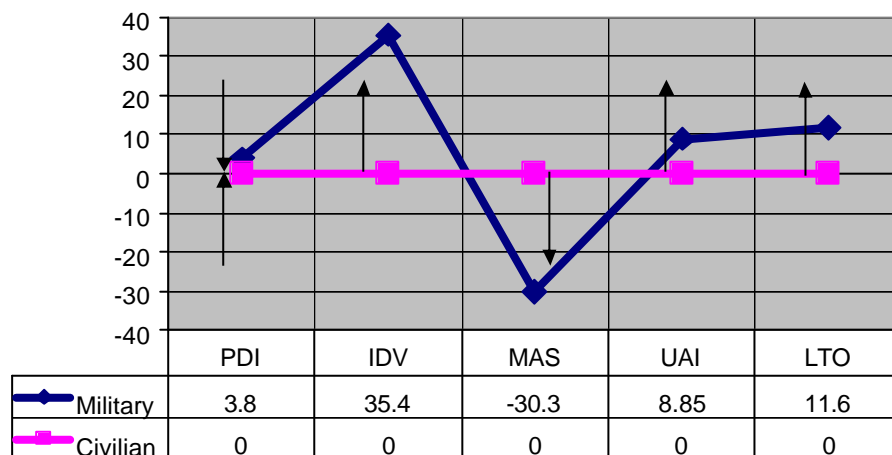


Exhibit 9-4e. Fusion of value profiling and relative VSM results for Canada.  
Derived from Exhibits 9-4b and 9-4d

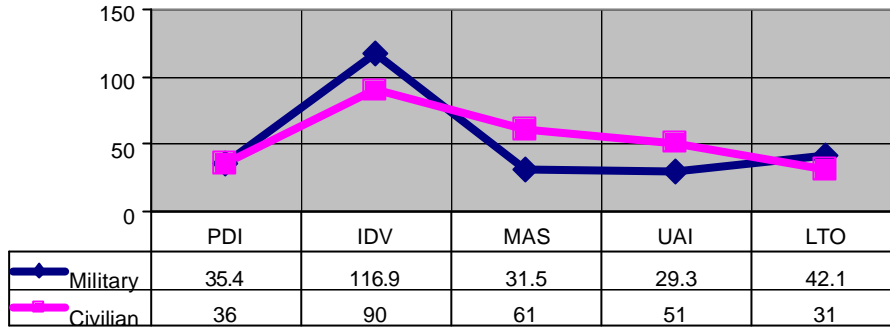
- MAS was predicted by value profiling to be lower in the CF than in civilian culture. This is supported by the VSM results. This result means that the CF tend to be less interested in earnings and advancement than their civilian counterparts and are more focussed on good working environments and getting along with their peers.

- UAI was predicted by the value profiling process to be higher for the CF than for their civilian counterparts. This is supported by the VSM results. This means that the CF have a higher need for certainty than their civilian counterparts and are less able to deal with ambiguity.
- LTO was predicted by the value profiling process to be higher in the CF than in civilian society. This is supported by the VSM results. This means that the armed forces tend to favour a preference future reward through perseverance and thrift. According to the VSM results Canadian civilians have slightly greater preference for social obligations and preservation of 'face'.

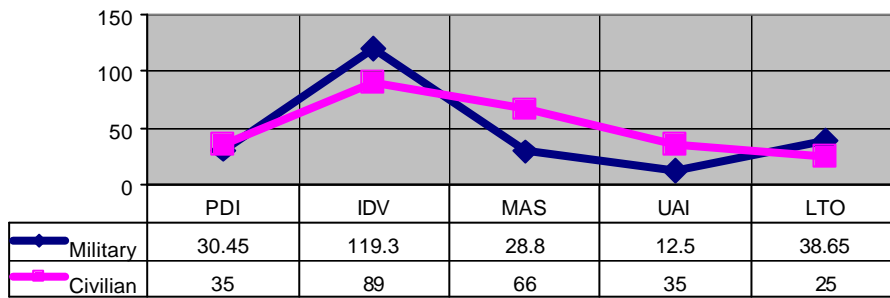
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**International comparison of armed forces culture at national level**

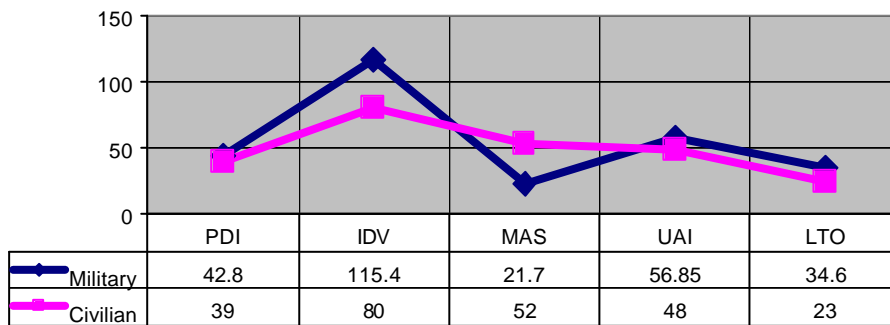
**Australia**



**Britain**

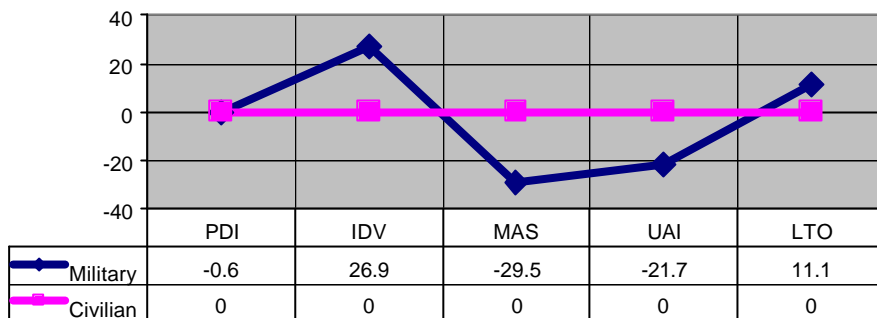


**Canada**

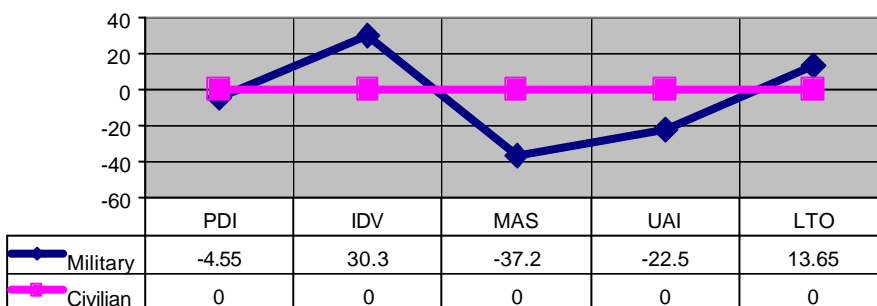


**Exhibit 9-5a. VSM intra-national cultural scores.**  
From Exhibits 9-2c, 9-3c and 9-4c

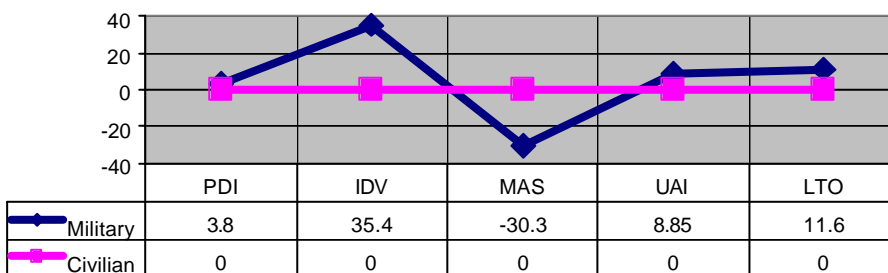
**Australia**



**Britain**



**Canada**



**Exhibit 9-5b. VSM relative civil-military cultural distances.**  
From Exhibits 9-2d, 9-3d and 9-4d

Exhibits 9-5a and 9-5b compare the three national civil-military results. Exhibit 9-5a shows that, although the three military profiles broadly reflect the civilian profiles, there is a distinct military profile that is similar for all three countries. Exhibit 9-5b

demonstrates that with one exception the relative positions on the VSM for the three armed forces at national level are identical.

- PDI is very similar for all three civilian cultures and all three armed forces.
- IDV is much higher for all three armed forces than the civilian cultures.
- MAS is lower for all three armed forces than civilian culture.
- UAI is lower in the ADF and British armed forces than for civilians. UAI is higher in the CF than for civilians. This difference was predicted by the value profiling process shown in Exhibit 9-4a with Influence G15. (G15 = Due to the ‘tarnishing’ of the CF reputation higher UAI scores will be recorded than for Canadian society and the Australian and British armed forces. This is likely to be most strongly reflected in the UAI score for the army).
- LTO is slightly higher in all three armed forces than civilian culture.

<b>Index/ Samples</b>	<b><u>PDI</u></b>	<b>IDV</b>	<b>MAS</b>	<b>UAI</b>	<b>LTO</b>
<b>National Pre-dominant Influences</b>					
ADF	Nation	Organisation	Organisation	Organisation	Organisation
British Armed Forces	Nation	Organisation	Organisation	Organisation	Organisation
CF	Nation	Organisation	Organisation	Organisation	Organisation

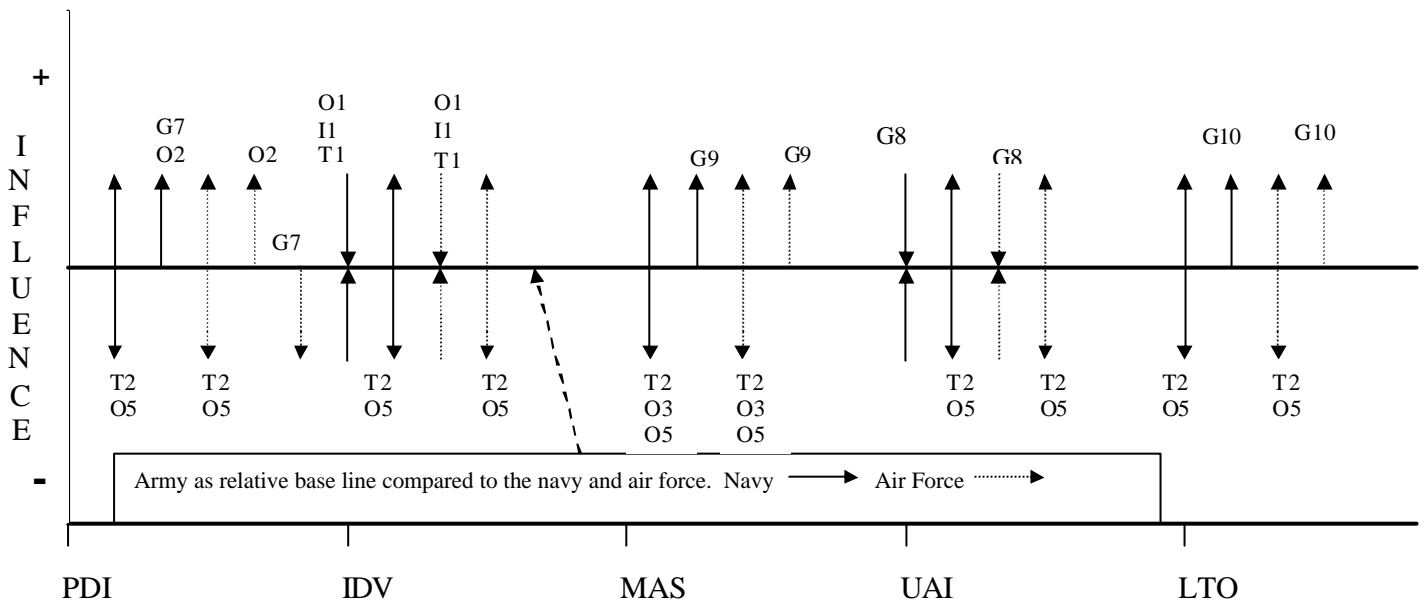
Exhibit 9-5c. VSM civil-military cultural influences.  
Extracted from Exhibits 9-5a and 9-5b

Exhibit 9-5c demonstrates that within the context of the civil-military samples, the results strongly indicate there is an identifiable armed forces culture that transcends national boundaries through IDV, MAS, UAI and LTO. Exhibit 9-5c indicates that, within the same context, national culture transcends organisational culture in its influence of PDI.

**INTRA-NATIONAL ARMED FORCES ORGANISATIONAL LEVEL ANALYSIS AND DEDUCTIONS**

This section examines the relationship between the intra-national cultural influences at organisational level identified in Chapter 6 and the findings of the VSM in Chapter 8.

**Australian armed forces intra-national organisational culture**



**Exhibit 9-6a. Australian armed forces influences.**  
Transferred from Exhibit 6-4

Exhibit 9-6a provides Australian armed forces intra-national influences identified in Chapter 6. Exhibit 9-6b summarises the expected impact of the influences so they can be overlaid onto the VSM results comparing the three services of the ADF with each other.



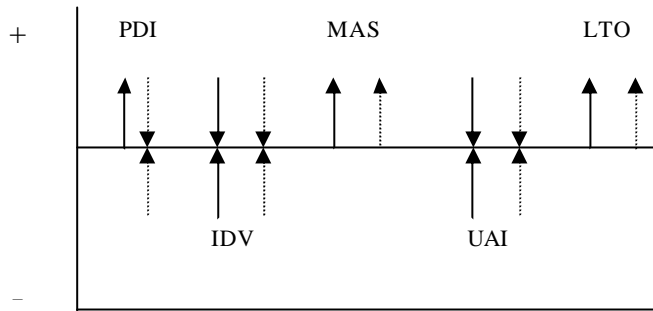


Exhibit 9-6b. Summary of Australian armed forces influences.  
Summarised from Exhibit 9-6a

Exhibit 9-6c provides Australia’s armed forces VSM scores identified in Chapter 8. Exhibit 9-6c shows that the three profiles are generally similar. Exhibit 9-6d translates the results from Exhibit 9-6c in order to demonstrate the relative positions of the Australian Air Force and Navy to the Army.

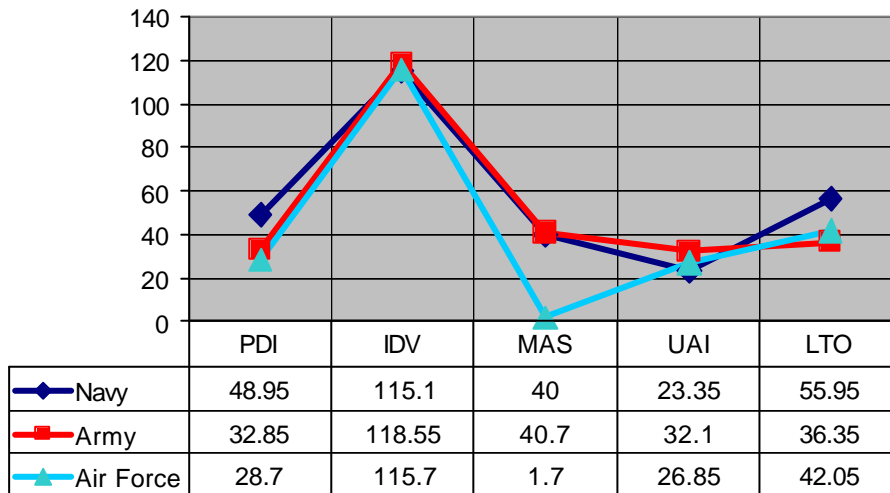


Exhibit 9-6c. Australian intra-national organisation VSM profile.  
Transferred from Exhibit 8-5a

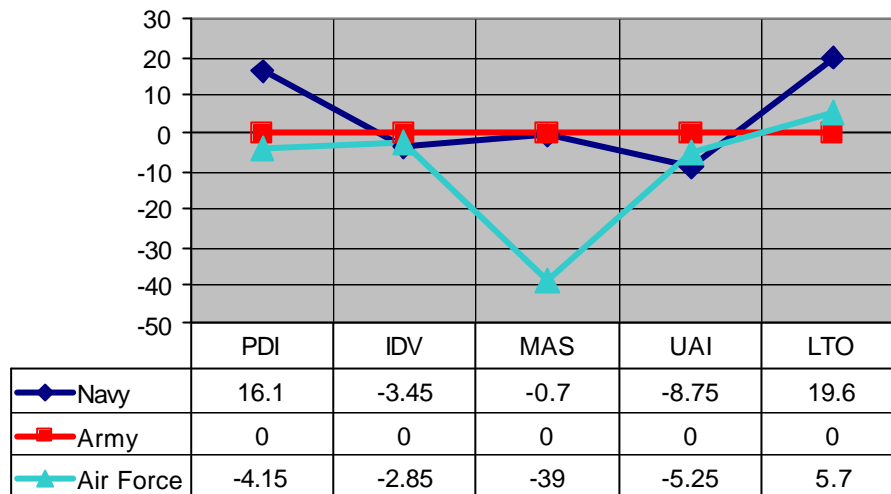


Exhibit 9-6d. Australian VSM relative intra-national organisation cultural distance.  
Transferred from Exhibit 8-5b

Exhibit 9-6e shows the fusion of the profiling process and the relative VSM results in order to identify where the cultures of Australia’s Navy and Air Force might be expected to vary from that of the Army and where similarities might be expected. Exhibit 9-6e shows that three results are over the threshold of acceptable variation (identified as 10 points at the start of this Chapter). The value profiling in Exhibit 9-6e demonstrates that:

- PDI is predicted by value profiling in Exhibit 9-6e to be stable between the Army and Air Force with the Navy having a higher PDI score. These predictions are supported by the VSM results. This will have the effect that the Army and Air Force will have very similar superior-subordinate relationships. The Navy will have a greater superior subordinate power distance than the other two services.
- IDV is expected to be stable across all three Australian services. These predictions are supported by the VSM results. All three services recorded consistently high scores for IDV indicating a general concern for the individual within the armed forces
- MAS was predicted by value profiling to be higher in the Navy and Air Force than in the Army. This is not supported by the VSM results. The assertions made in the academic literature that created influence G9 requires need reviewing to check their validity. (G9= Belief in having ‘fair go’ will lead to reduced group competitiveness

and corresponding lower MAS scores. The Australian Army should have a lower MAS score due to a greater sense of community than the other two Australian services). Influences T2 and O5 indicate that differences in MAS score are to be expected. (T2 = There may be some differences across the three service of the ADF due to historical preference for single service tasks. O5 =The ADF has recently integrated many of the functions previously undertaken by single services. In spite of this, each service retains a unique role and therefore differences between the three cultures can be expected). The difference in score between the Navy and the Army is not significant. The difference between the Air Force and the other two services is significant enough to merit further investigation.

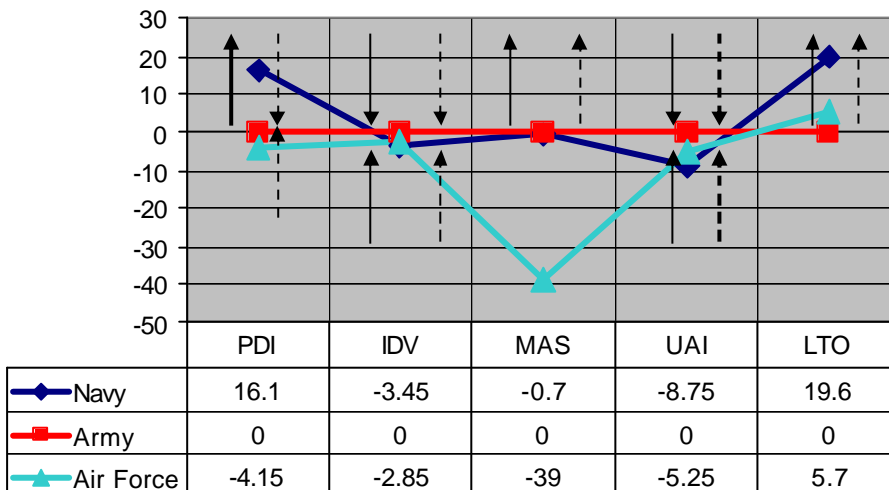


Exhibit 9-6e. Intra-national fusion of value profiling and relative VSM results for Australia.

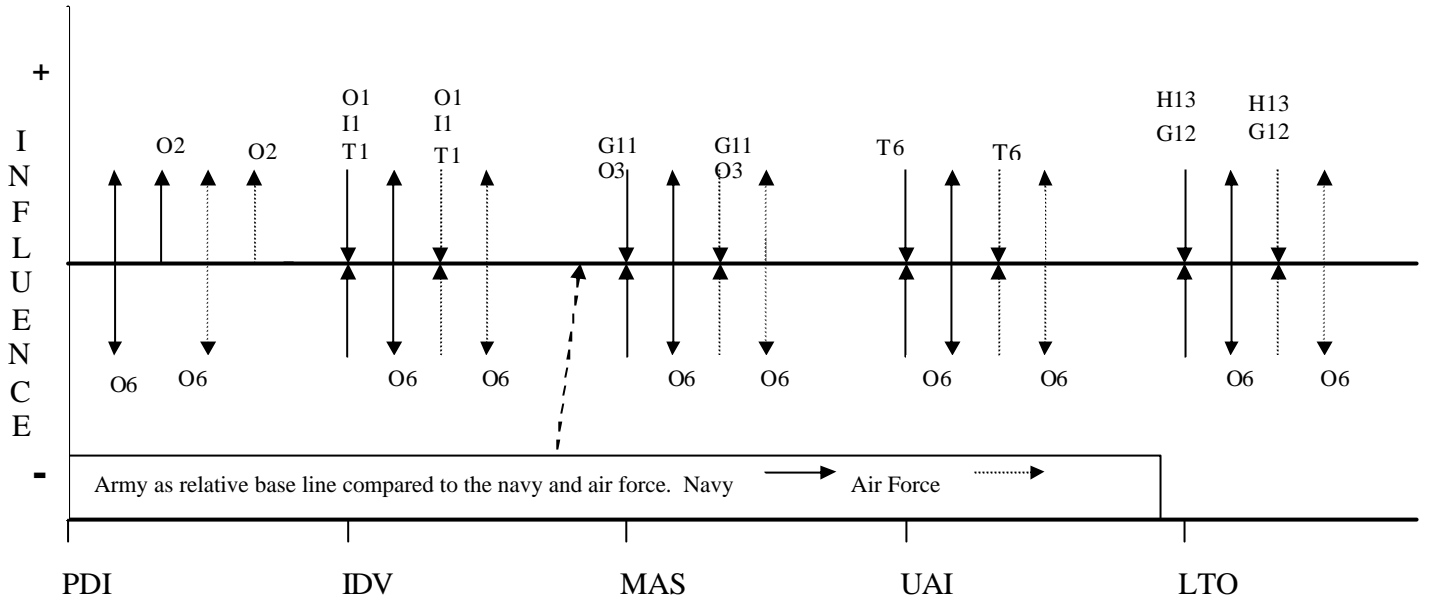
Derived from Exhibits 9-6b and 9-6d

- UAI was predicted by the value profiling process to be stable for all three services. This prediction is supported by the VSM results. This means that the three services have a similar ability to deal with ambiguity and an equally relaxed approach to rule following.
- LTO was predicted by the value profiling process to be higher in the Navy and Air Force than the Army. This is supported by the VSM results. This means that the Army tends to favour a preference for future reward through perseverance and thrift.

According to the VSM results the Australian Navy has a significantly greater preference for social obligations and preservation of 'face' than the Army with the Air Force slightly higher than the Army.

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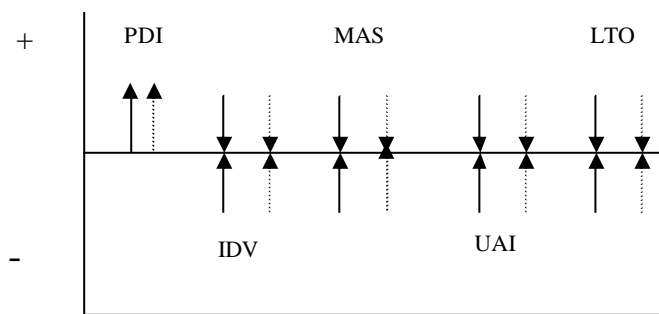
**British armed forces intra-national organisational culture**



**Exhibit 9-7a. British armed forces influences.**

Transferred from Exhibit 6-5

Exhibit 9-7a provides British armed forces intra-national influences identified in Chapter 6. Exhibit 9-7b summarises the expected impact of the influences when they are translated onto the VSM results comparing Britain’s three services with each other.



**Exhibit 9-7b. Summary of British armed forces influences.**

Summarised from Exhibit 9-7a

Exhibit 9-7c provides Britain’s armed forces VSM scores identified in Chapter 8. Exhibit 9-7c shows that the three profiles are generally similar. Exhibit 9-7d translates the results

from Exhibit 9-7c in order to demonstrate the relative positions of Britain’s Air Force and Navy to the Army.

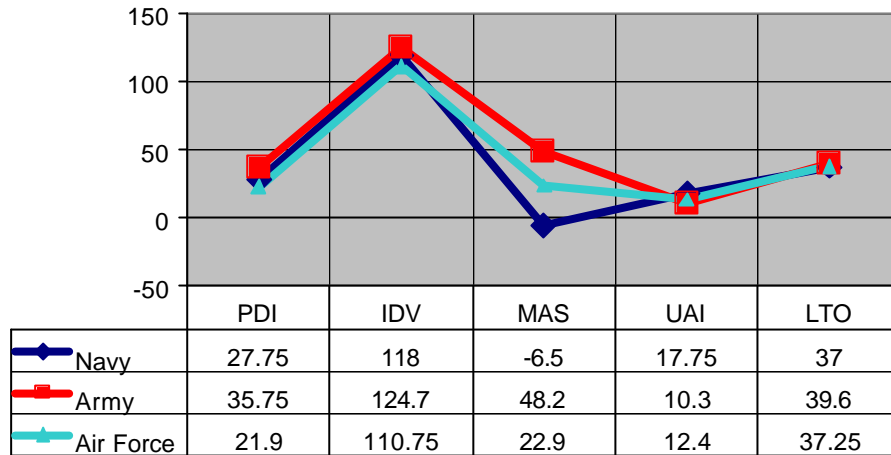


Exhibit 9-7c. British intra-national organisation VSM profile.  
Transferred from Exhibit 8-6a

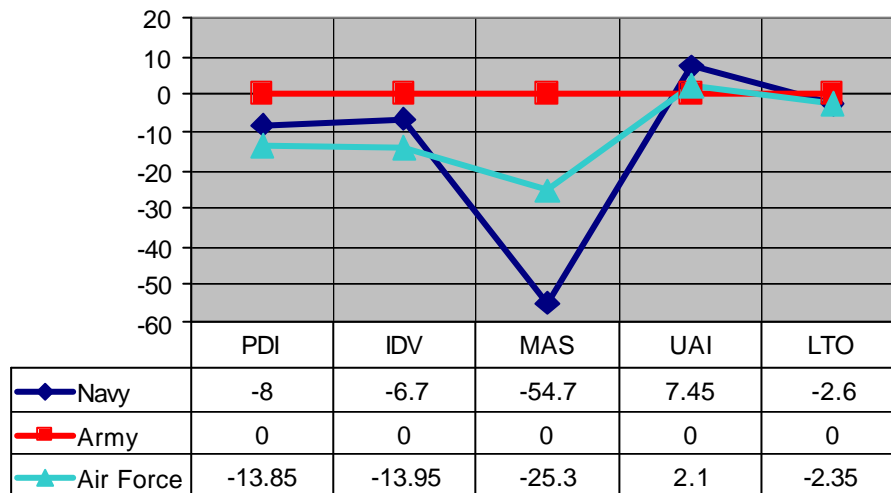


Exhibit 9-7d. British VSM relative intra-national organisation cultural distance.  
Transferred from Exhibit 8-6b

Exhibit 9-7e shows the fusion of the profiling process and the relative VSM results in order to identify where the culture of Britain’s Navy and Air Force might be expected to vary from that of the Army and where similarities might be expected. Exhibit 9-7e shows

that four results are over the threshold of acceptable variation (identified as 10 points at the start of this Chapter). The value profiling in Exhibit 9-7e demonstrates that:

- PDI is predicted by value profiling to be higher for the Navy and Air Force than the Army. This prediction is not supported by the VSM results. The validity of influence O2 requires revisiting, as the VSM evidence does not support this. (O2 = The PDI of the armed forces is tempered by the following organisational influences... Navy: High PDI due to the absolute authority of the ship's captain. Army: Lowest PDI pressure due to diffuse nature of the battlefield. Air Force middle ranking of the services due to the similarity to many civilian organisational structures.) All three services have similar values concerning the power distance between subordinates and superiors.
- IDV is expected to be stable across all three of Britain's services. This is supported by the VSM result. Although the Air Force is slightly out of the 10 point variance allowed, the difference is not significant enough to merit further research. All three services recorded very high scores for IDV indicating a general concern for the individual within the armed forces

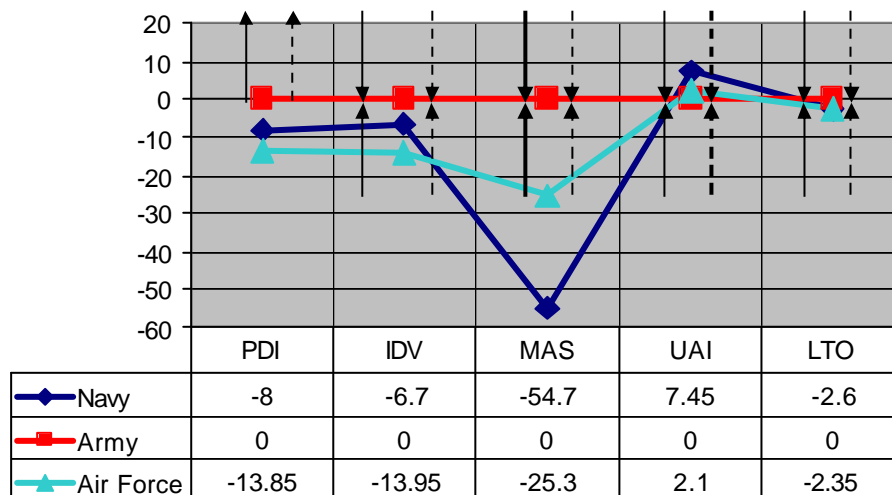


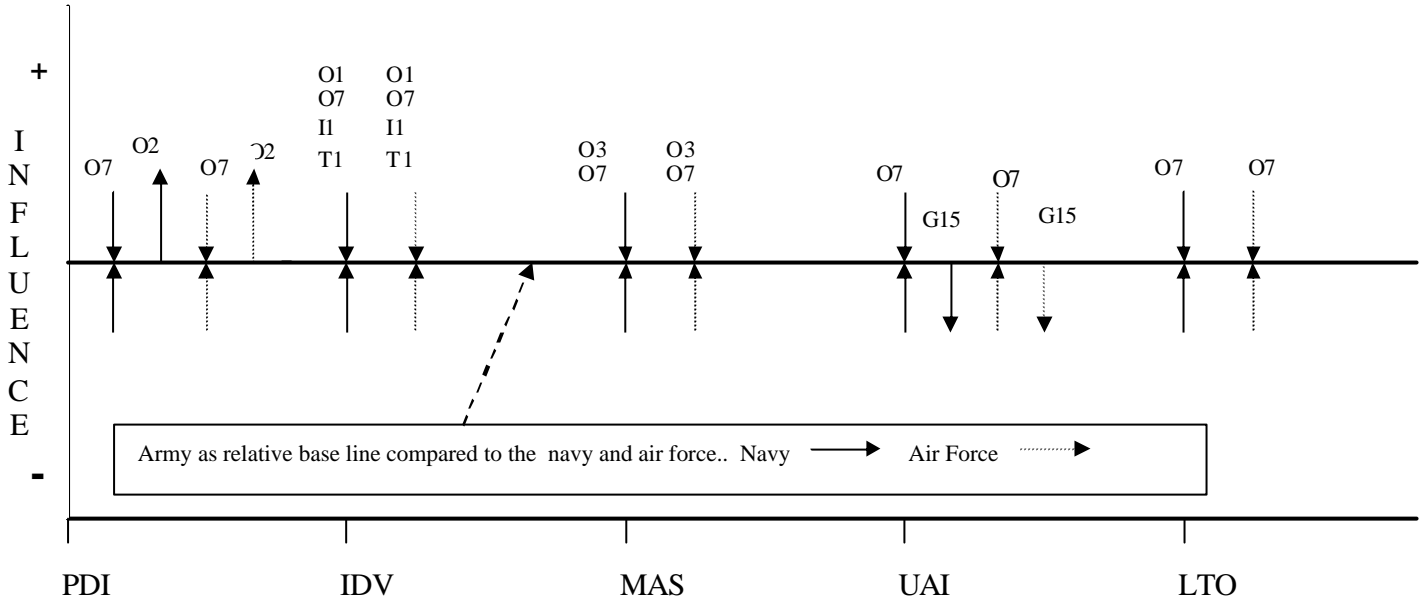
Exhibit 9-7e. Intra-national fusion of value profiling and relative VSM results for Britain.

Derived from Exhibits 9-7b and 9-7d

- MAS was predicted by value profiling to be stable across the three services. This is not supported by the VSM results. Influence O6 may be too generic and the relative importance of this influence may outweigh those identified in G11 and O3. (O6 = The British armed forces are integrating many of the functions previously undertaken by single services but have traditionally been extremely wary of each other. Parallel organisations and structures continue to exist which are not readily apparent in the armed forces of Australia and Canada. Examples are the light infantry role of the Royal Marines and the air defence role of the RAF Regiment. Both of these capabilities are also provided by the Army. Each service continues to guard its roles and traditions and therefore differences between the services can be expected). The differences in score between the three services is significant and merits further research.
- UAI was predicted by the value profiling process to be stable for all three services. This prediction is supported by the VSM results. This means that the three services have a similar ability to deal with ambiguity and an equally relaxed approach to following rules as guidelines.
- LTO was predicted by the value profiling process to be stable for all three services. This prediction is supported by the VSM results. This means that the three services have a similar preference for future reward through perseverance and thrift.

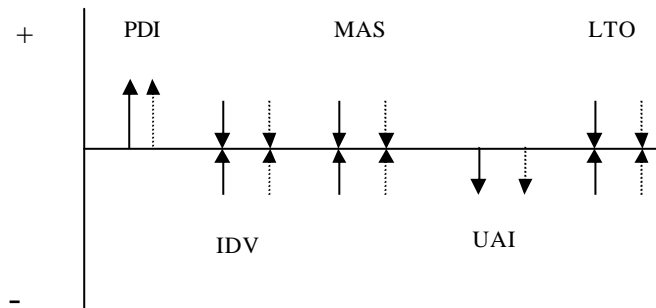


**Canadian armed forces intra-national organisational culture**



**Exhibit 9-8a. Canadian armed forces influences.**  
Transferred from Exhibit 6-6

Exhibit 9-8a provides Canadian CF intra-national influences identified in Chapter 6. Exhibit 9-8b summarises the expected impact of the influences when they are translated onto the VSM results comparing the three branches of the CF with each other.



**Exhibit 9-8b. Summary of Canadian armed forces influences.**  
Summarised from Exhibit 9-8a

Exhibit 9-8c provides the CF VSM scores identified in Chapter 8. Exhibit 9-8c shows that the three profiles are generally similar. Exhibit 9-8d translates the results from Exhibit 9-8c in order to demonstrate the relative positions of Canada’s Air Force and Navy to the Army.

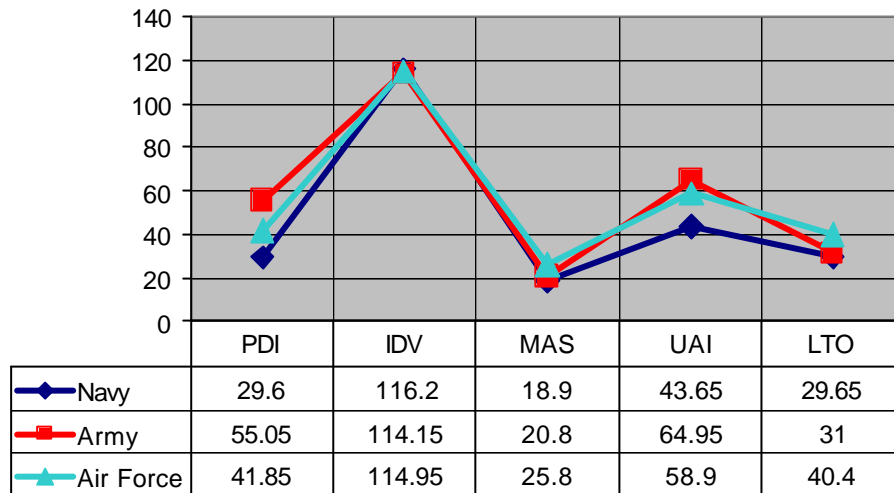


Exhibit 9-8c. Canadian intra-national organisation VSM profile.  
Transferred from Exhibit 8-7a

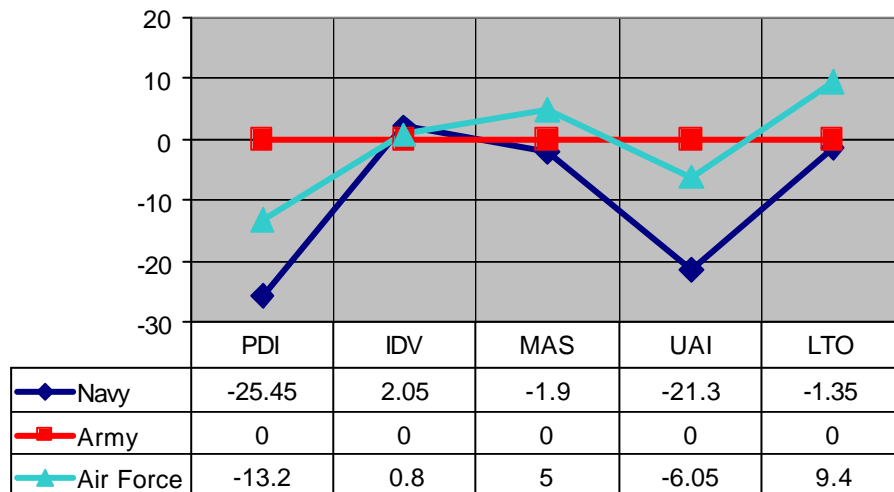


Exhibit 9-8d. Canadian VSM relative intra-national organisation cultural distance.  
Transferred from Exhibit 8-7b

Exhibit 9-8e shows the fusion of the profiling process and the relative VSM results in order to identify where the culture of Canada’s Navy and Air Force might be expected to

vary from that of the Army and where similarities might be expected. Exhibit 9-8e shows that two results are over the threshold of acceptable variation (identified as 10 points at the start of this Chapter). The value profiling in Exhibit 9-8e demonstrates that:

- PDI is predicted by value profiling to be higher between both the Navy and Air Force and the Army. This prediction is not supported by the VSM results and merits further examination. (O2 = The PDI of the armed forces is tempered by the following organisational influences... Navy: High PDI due to the absolute authority of the ship's captain. Army: Lowest PDI pressure due to diffuse nature of the battlefield. Air Force middle ranking of the services due to the similarity to many civilian organisational structures. O7 = The CF are the only armed force of the three countries where full integration has been attempted. Although there are signs that this has not been completely successful, the theory of the evolution, outlined in Chapter 1, of culture leads to the expectation that the cultures of the three services of Canada will be relatively similar.) The VSM results indicate that the Navy will treat each other more as equals than the Army with the Air Force somewhere in the middle.

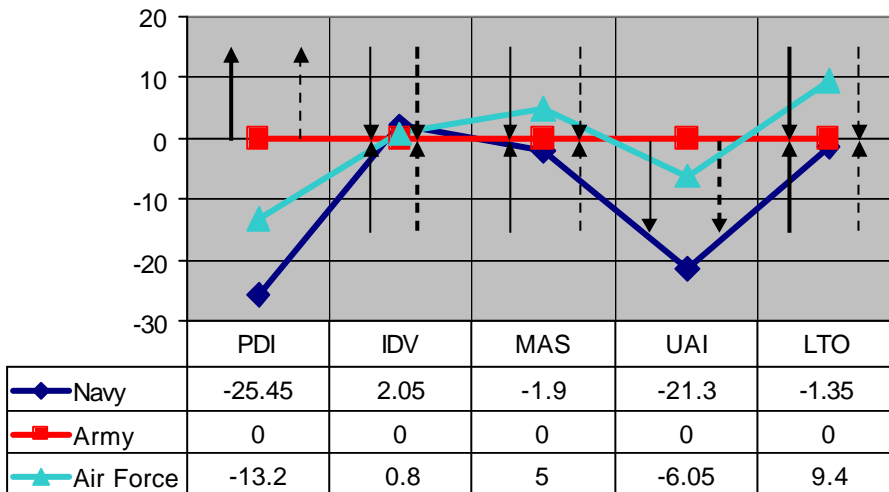


Exhibit 9-8e. Intra-national fusion of value profiling and relative VSM results for Canada.

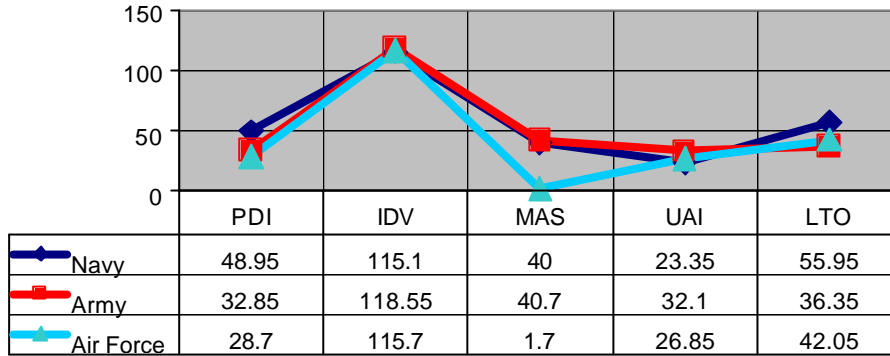
Derived from Exhibits 9-8b and 9-8d

- IDV is expected to be stable across all three of Canada's services. This is supported by the VSM result. All three services recorded consistently high scores for IDV indicating a general concern for the individual within the armed forces
- MAS was predicted by value profiling to be stable across the three services. This is supported by the evidence of the VSM results. This means that all three services will have a similar emphasis on working in a friendly atmosphere and nurturing others.
- UAI was predicted by the value profiling process to be lower in the Air Force and Navy than in the Army. This prediction is supported by the VSM results. This means that the Army is the least able to deal with ambiguity with the Air Force relatively close to this position. The Navy is far better able to deal with ambiguity and has a relatively relaxed attitude to regulations.
- LTO was predicted by the value profiling process to be stable for all three services. This prediction is supported by the VSM results. This means that the three services have a similar preference for future reward through perseverance and thrift.

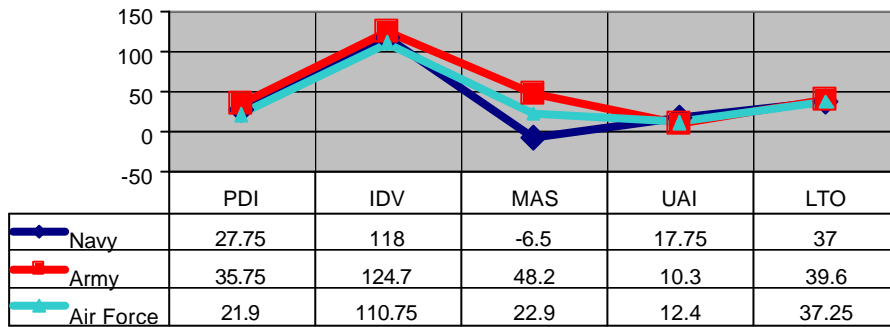
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**International comparison by intra-national service samples**

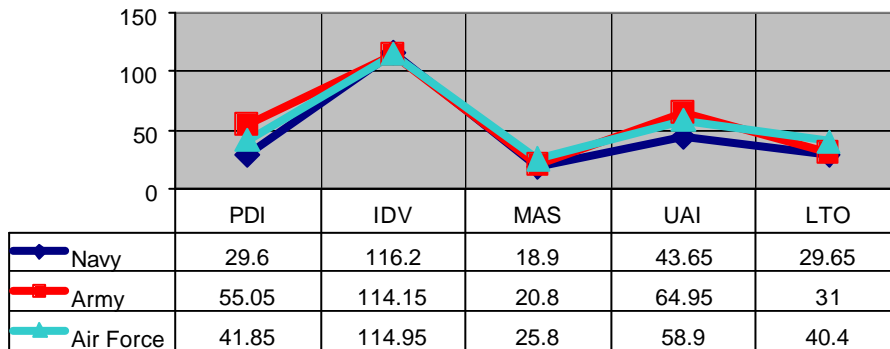
**Australia**



**Britain**



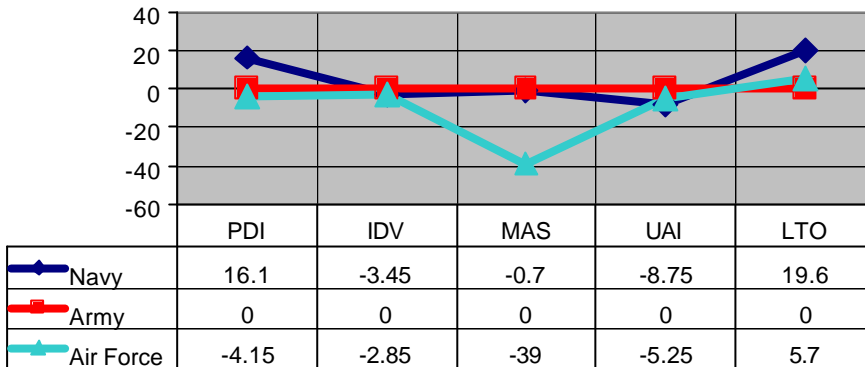
**Canada**



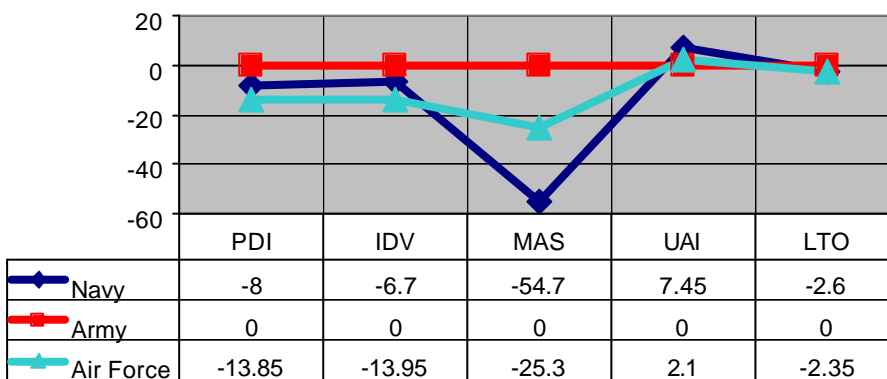
**Exhibit 9-9a. VSM intra-national cultural scores.**

From Exhibits 9-6c, 9-7c and 9-8c

### Australia



### Britain



### Canada

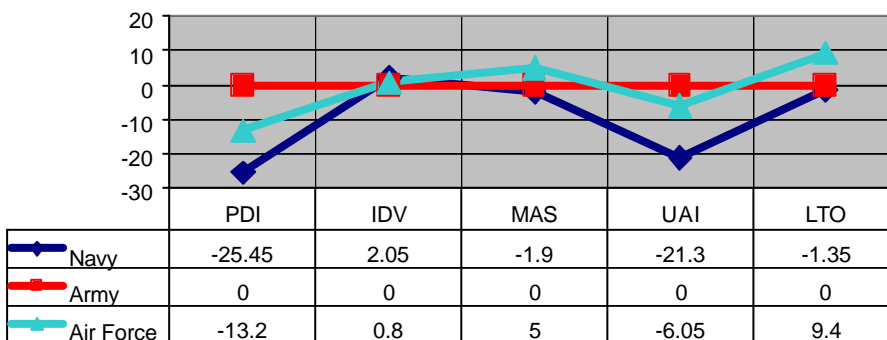


Exhibit 9-9b. VSM relative intra-national cultural distances.  
From Exhibits 9-6d, 9-7d and 9-8d

Exhibit 9-9a compares the intra-national VSM scores and demonstrates that the overall profiles for the services in each of the countries are similar. With the exception of MAS all three countries' score profiles are very similar. Exhibit 9-9b compares the relative positions of the intra-national comparisons. The following can be observed:

- PDI has no consistency across the samples. When this variation is compared with the closeness of the national civil – military PDI scores in Exhibits 9-5a and 9-5b the indication is that national culture has a greater influence on armed forces' PDI than does organisational culture.
- IDV is consistently strong across all three set of results with all recording significantly higher than the theoretical maximum of 100. The 100% consistency of extremely high scores strongly indicates that organisational culture has a greater influence on IDV than does national culture.
- MAS has no apparent consistency at the organisational level, which does not match the international level consistency reflected in Exhibits 5-5a and 5-5b. This may indicate that neither national nor organisational culture has a greater influence on MAS than the other. It is also possible that the significantly wide range of scores is due to unidentified influences on the samples. This merits further investigation, as it is not possible to draw clear conclusions from these comparisons.
- UAI is consistent across the services of Australia and Britain. Exhibit 9-5a shows that Canada's armed forces have a significantly higher UAI than either Australia or Britain. This was predicted and discussed in the national section. This indicates that organisational culture has a greater influence on UAI than does national culture.
- LTO is stable across all three services with the exception of the Australian Navy. The Australian Navy score is without explanation and merits further investigation. This indicates that organisational culture has a stronger influence on the LTO than does national culture.

<b>Index/ Samples</b>	<b><u>PDI</u></b>	<b>IDV</b>	<b>MAS</b>	<b>UAI</b>	<b>LTO</b>
<b>Intra - national Pre-dominant Influences</b>					
Australia	National	Organisation	Unclear	Organisation	Organisation
Britain	National	Organisation	Unclear	Organisation	Organisation
Canada	National	Organisation	Unclear	Organisation	Organisation

Exhibit 9-9c. VSM relative intra-national cultural influences.  
Extracted from Exhibits 9-9a and 9-9b

Exhibit 9-9c demonstrates that within the context of the intra-national samples, the results indicate there is an identifiable armed forces culture that transcends national boundaries IDV, UAI and LTO. Exhibit 9-9c also indicates that within the same context national culture transcends organisational culture in its influence of PDI. Exhibit 9-9c indicates that neither national nor organisational culture is predominant at the intra-national level for MAS.

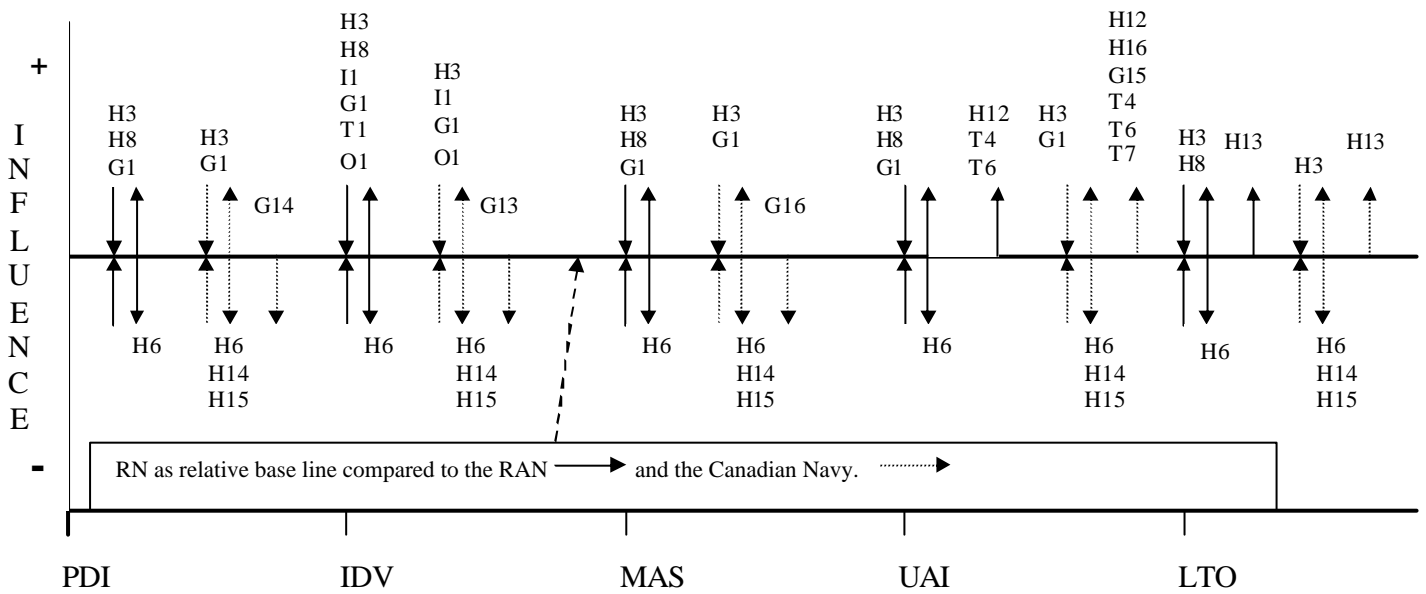
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**INTERNATIONAL ARMED FORCES ORGANISATIONAL LEVEL  
ANALYSIS AND DEDUCTIONS**

This section examines the relationship between the international cultural influences at organisational level identified in Chapter 6 and the findings of the VSM in Chapter 8.

**Naval international organisational culture**



**Exhibit 9-10a. Naval international influences.**  
Transferred from Exhibit 6-7

Exhibit 9-10a provides naval international influences identified in Chapter 6. Exhibit 9-10b summarises the expected impact of the influences when they are translated onto the VSM results comparing the three navies with each other.

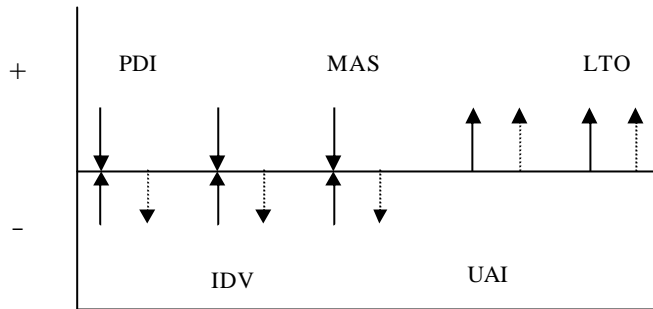


Exhibit 9-10b. Summary of Naval international influences.  
Summarised from Exhibit 9-10a

Exhibit 9-10c provides the international naval VSM scores identified in Chapter 8. Exhibit 9-10c shows that the three profiles are generally similar. Exhibit 9-10d translates the absolute results from Exhibit 9-10c in order to demonstrate the relative positions of the three navies.

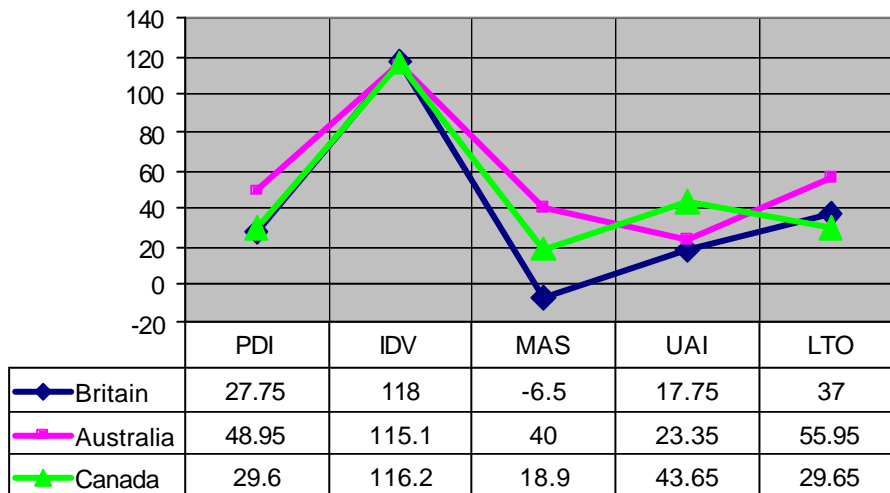


Exhibit 9-10c. Naval international organisation VSM profile.  
Transferred from Exhibit 8-8a

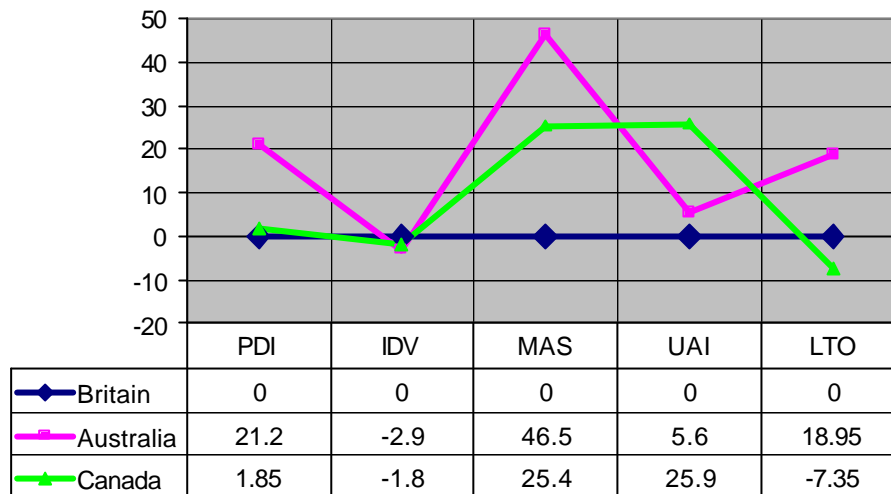


Exhibit 9-10d. Naval VSM relative international organisation cultural distance.  
Transferred from Exhibit 8-8b

Exhibit 9-10e compares the international naval VSM scores and demonstrates that while the overall profiles for the services in each of the countries are similar there are some significant differences. Exhibit 9-10e compares the relative positions of the international comparisons. The following can be observed:

- Value profiling is inconsistent to the point of meaninglessness at the international naval organisational level. As it has produced useful results for the national and intra-national samples, it is unlikely that the process has been incorrectly applied. It is possible that there is insufficient accurate information available to undertake meaningful value profiling for international organisational samples. Another possibility is that the weighting of individual influences is not recognised by value profiling which can skew predictions accordingly.
- PDI is stable across Britain and Canada but not Australia. When this variation is compared with the closeness of the national civil – military PDI scores in Exhibits 9-5a and 9-5b the indication is that national culture has a greater influence on armed forces PDI than does organisational culture.
- IDV is very stable across all three set of results with all recording significantly higher than the theoretical maximum of 100. The 100% consistency of extremely high

scores strongly indicates that organisational culture has a greater influence on IDV than does national culture.

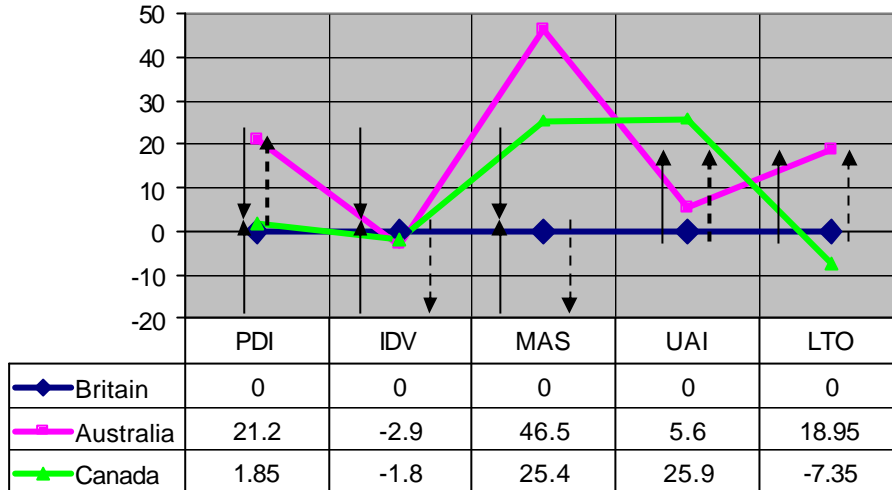
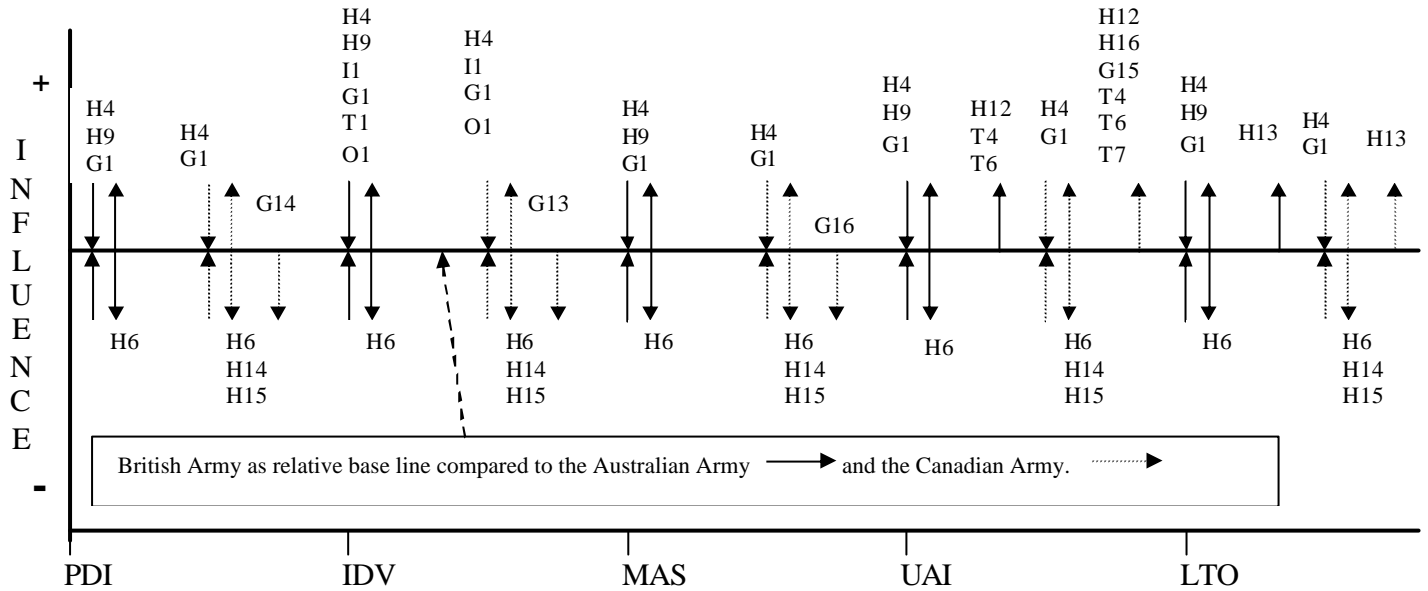


Exhibit 9-10e. International fusion of value profiling and relative VSM results for Navy.  
Derived from Exhibits 9-10b and 9-10d

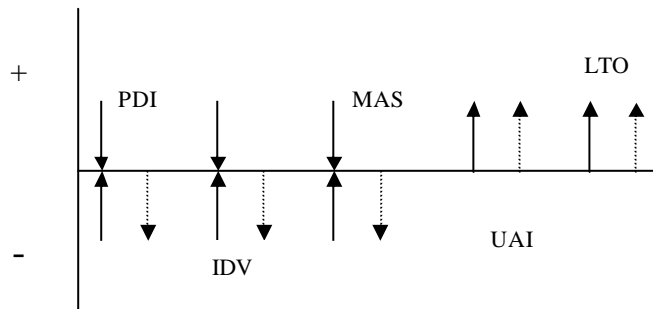
- MAS has no apparent consistency at the international organisational level, which does not match the international national level consistency reflected in Exhibits 9-5a and 9-5b. This may indicate that national culture has a greater influence on MAS than organisational culture. It is also possible that the significantly wide range of scores is due to unidentified influences on the samples. This merits further investigation, as it is not possible to draw clear conclusions from these comparisons.
- UAI is consistent across the services of Australia and Britain. Exhibit 9-10e shows that Canada’s Navy has a significantly higher UAI than either Australia or Britain. This was predicted and discussed in the national section and is consistent with the previous findings. This indicates that organisational culture has a greater impact on UAI than does national culture.
- LTO is not stable across the three services. This indicates that organisational culture has a stronger influence on LTO than does national culture.

**Army international organisational culture**



**Exhibit 9-11a. Army international influences.**  
Transferred from Exhibit 6-8

Exhibit 9-11a provides army international influences identified in Chapter 6. Exhibit 9-11b summarises the expected impact of the influences when they are translated onto the VSM results comparing the three armies with each other.



**Exhibit 9-11b. Summary of Army international influences.**  
Summarised from Exhibit 9-11a

Exhibit 9-11c provides the international army VSM scores identified in Chapter 8. Exhibit 9-11c shows that the three profiles are generally similar with the exception of UAI. Exhibit 9-11d translates the results from Exhibit 9-11c in order to demonstrate the relative positions of the three armies.

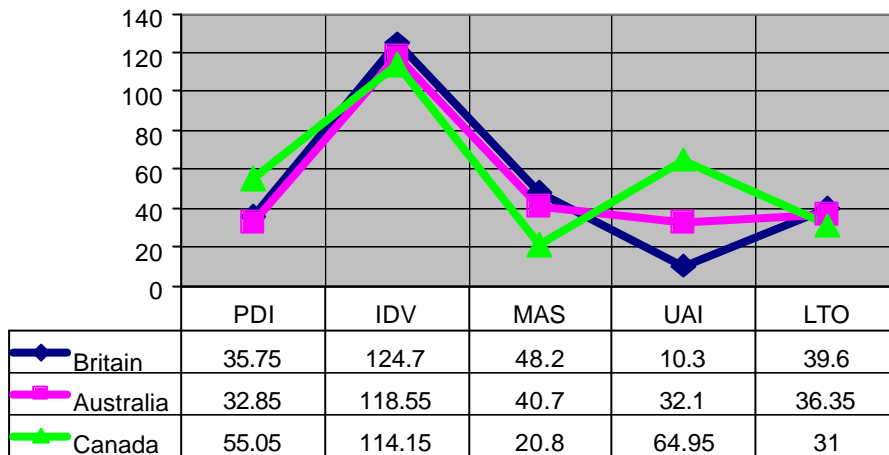


Exhibit 9-11c. Army international organisation VSM profile.  
Transferred from Exhibit 8-9a

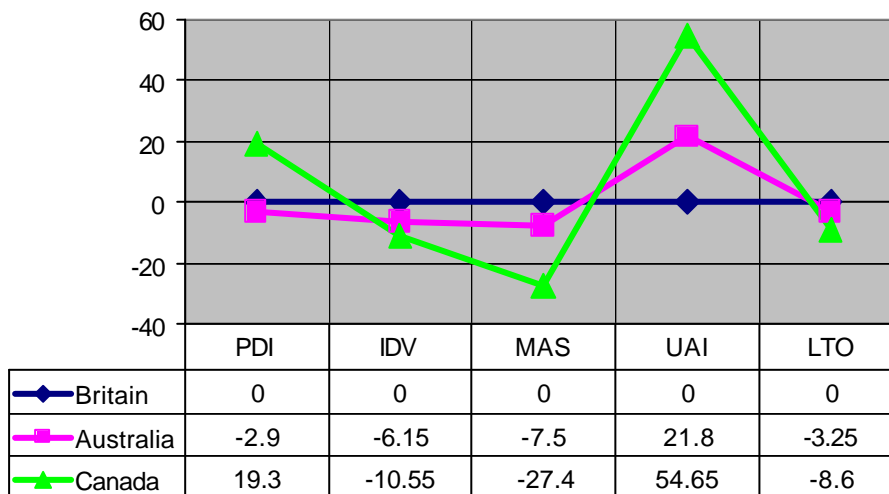


Exhibit 9-11d. Army VSM relative international organisation cultural distance.  
Transferred from Exhibit 8-9b

Exhibit 9-11e compares the international army VSM scores and demonstrates that while the overall profiles for the services in each of the countries are similar there are some significant differences. Exhibit 9-11e compares the relative positions of the international comparisons. The following can be observed:

- PDI is stable across the British and Australian Armies but not that of Canada. This was predicted by the value profiling process, although direction was incorrect for Canada's Army. When this variation is compared with the closeness of the national civil – military PDI scores in Exhibits 9-5a and 9-5b the indication is that national culture has a greater influence on armed forces PDI than does organisational culture.
- IDV is very stable across all three set of army results with all recorded significantly higher than the theoretical maximum of 100. The 100% consistency of extremely high scores strongly indicates that organisational culture has a greater influence on IDV than does national culture.
- MAS has no apparent consistency at the international organisational level, which does not match the international national level consistency reflected in Exhibits 9-5a and 9-5b. This was predicted by the value profiling process. This may indicate that national culture has a greater influence on MAS than organisational culture. It is also possible that the significantly wide range of scores is due to unidentified influences on the samples.
- UAI is inconsistent across the three armies. Exhibit 9-11e shows that this was predicted by the value profiling process. Canada's much higher UAI score and Australia's higher score were clearly predicted and discussed in the national level section. Although the VSM results might appear to indicate otherwise, there is clear evidence that organisational culture has a greater impact on army UAI than does national culture.
- LTO is stable across the three armies. This indicates that organisational culture has a stronger influence on LTO than does national culture.

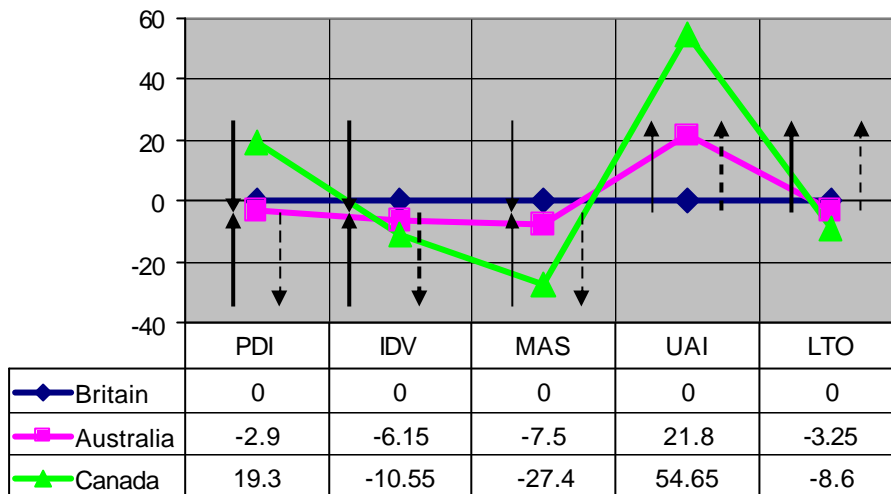
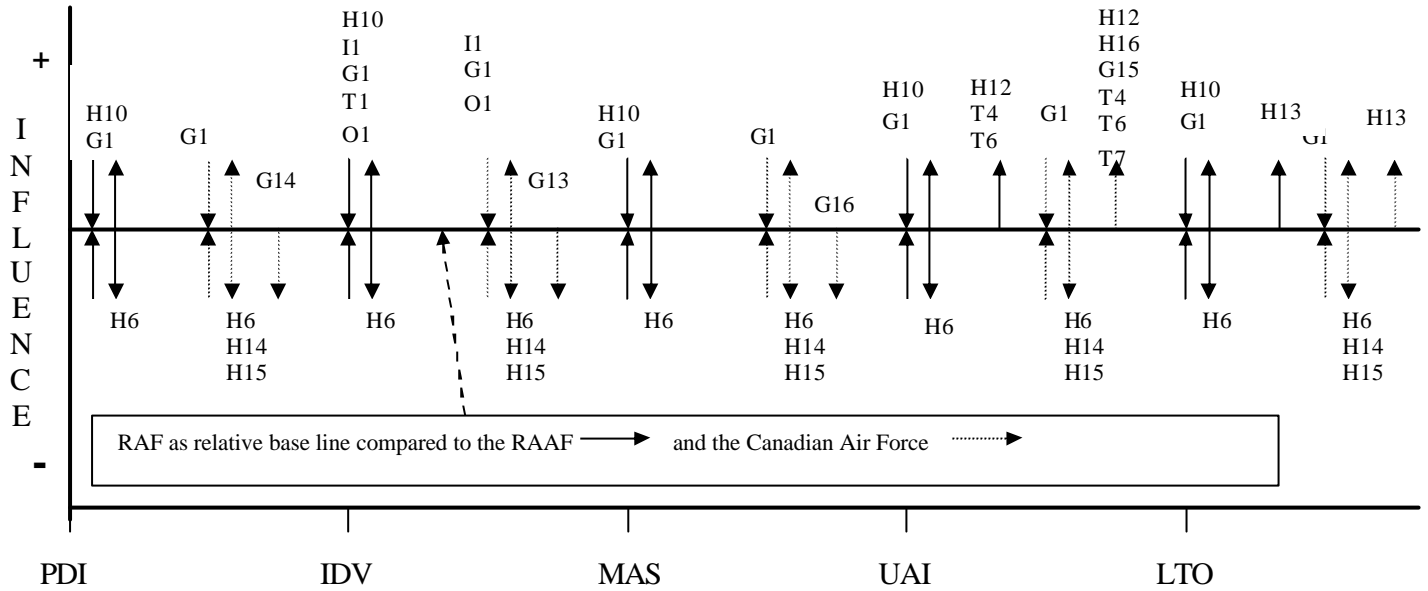


Exhibit 9-11e. International fusion of value profiling and relative VSM results for Army.  
 Derived from Exhibits 9-11b and 9-11d



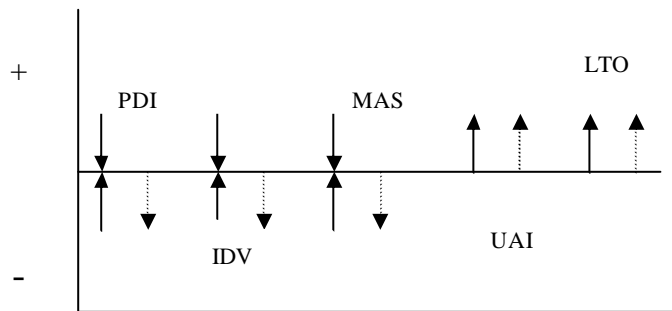
**Air Force international organisational culture**



**Exhibit 9-12a. Air force international influences.**

Transferred from Exhibit 6-9

Exhibit 9-12a provides air force international influences identified in Chapter 6. Exhibit 9-12b summarises the expected impact of the influences when they are translated onto the VSM results comparing the three air forces with each other.



**Exhibit 9-12b. Summary of Air force international influences.**

Summarised from Exhibit 9-12a

Exhibit 9-12c provides the international air force VSM scores identified in Chapter 8. Exhibit 9-12c shows that the three profiles are generally similar with the exception of UAI. Exhibit 9-12d translates the results from Exhibit 9-12c in order to demonstrate the relative positions of the three air forces.

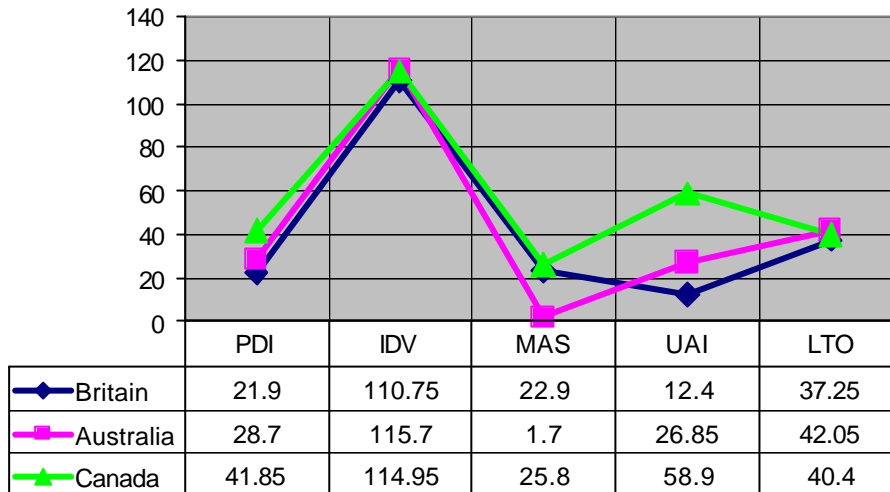


Exhibit 9-12c. Air Forces international organisation VSM profile.  
Transferred from Exhibit 8-10a

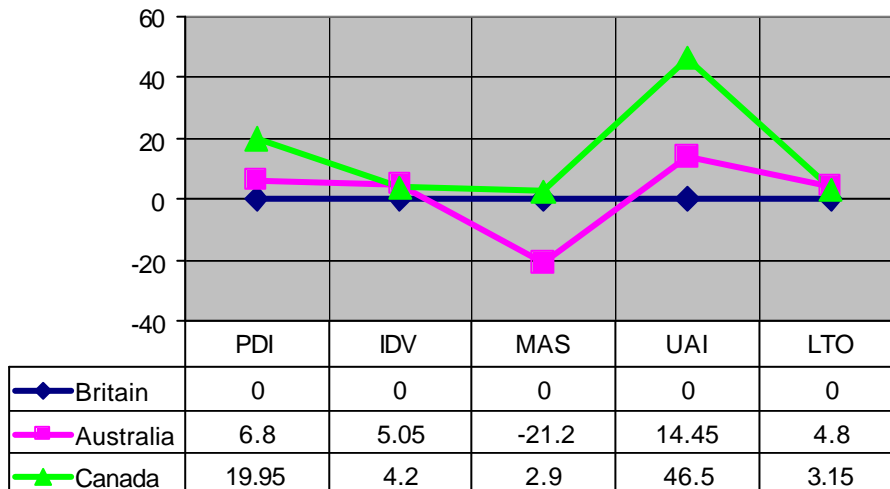


Exhibit 9-12d. Air Force VSM relative international organisation cultural distance.  
Transferred from Exhibit 8-10b

Exhibit 9-12e compares the international air force VSM scores and demonstrates that while the overall profiles for the services in each of the countries are similar there are some significant differences. Exhibit 9-12e compares the relative positions of the international comparisons. The following can be observed:

- PDI is stable across the British and Australian Air Forces but not that of Canada. This was predicted by the value profiling process, although direction was incorrect for Canada's Air Force. When this variation is compared with the closeness of the national civil – military PDI scores in Exhibits 9-5a and 9-5b the indication is that national culture has a greater influence on armed forces PDI than does organisational culture.

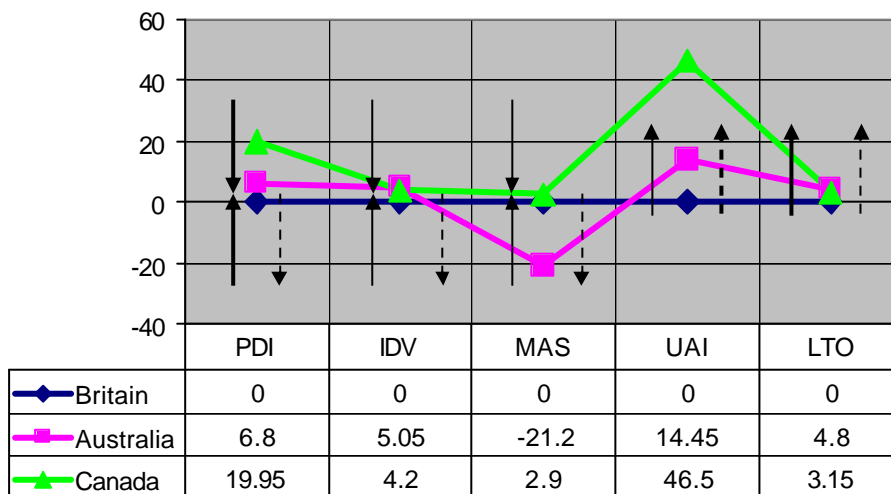


Exhibit 9-12e. International fusion of value profiling and relative VSM results for Air Force.

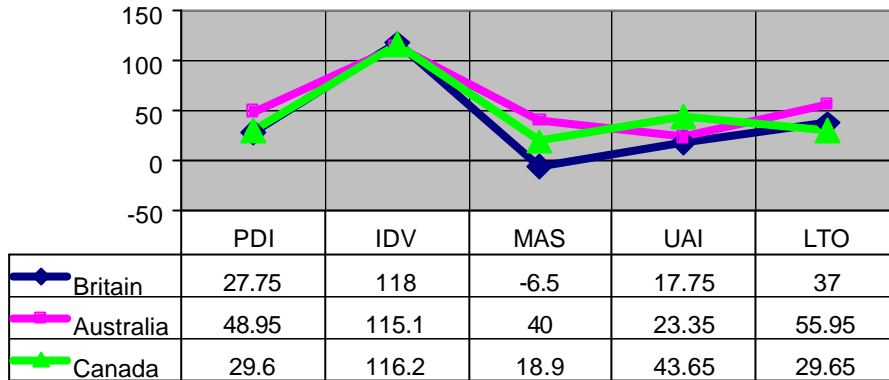
Derived from Exhibits 9-12b and 9-12d

- IDV is very stable across all three set of results with all recording significantly higher than the theoretical maximum of 100. The 100% consistency of extremely high scores strongly indicates that organisational culture has a greater influence on IDV than does national culture.

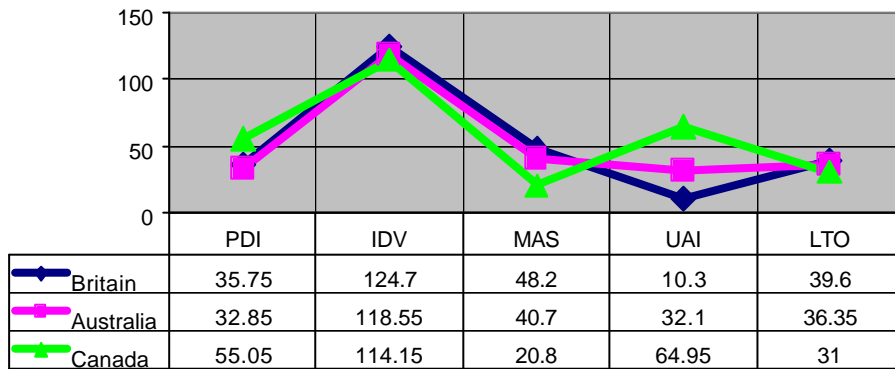
- MAS has no apparent consistency at the international organisational level, which does not match the international national level consistency reflected in Exhibits 9-5a and 9-5b. This may indicate that national culture has a greater influence on MAS than organisational culture. It is also possible that the significantly wide range of scores is due to unidentified influences. This merits further investigation, as it is not possible to draw clear conclusions from these comparisons.
- UAI is inconsistent across the three air forces. Exhibit 9-12e shows that this was predicted by the value profiling process. Canada's much higher UAI score and Australia's higher score were clearly predicted and discussed in the national level section. Although the VSM results might appear to indicate otherwise, there is clear evidence that organisational culture has a greater impact on army UAI than does national culture and it is reasonable to expect that the similar influences are at work in the respective air forces. Further investigation would be required to substantiate this prediction.
- LTO is stable across the three air forces although the slightly higher scores of Australia and Canada were predicted by the value profiling process. This indicates that organisational culture has a stronger influence on LTO than does national culture.

**International comparison by international service samples**

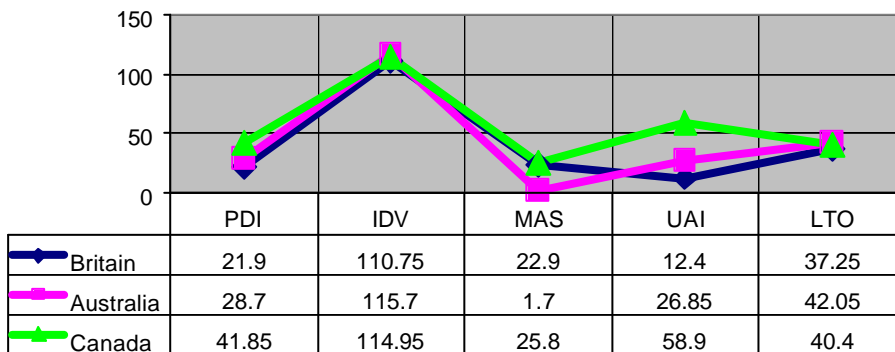
**Navy**



**Army**

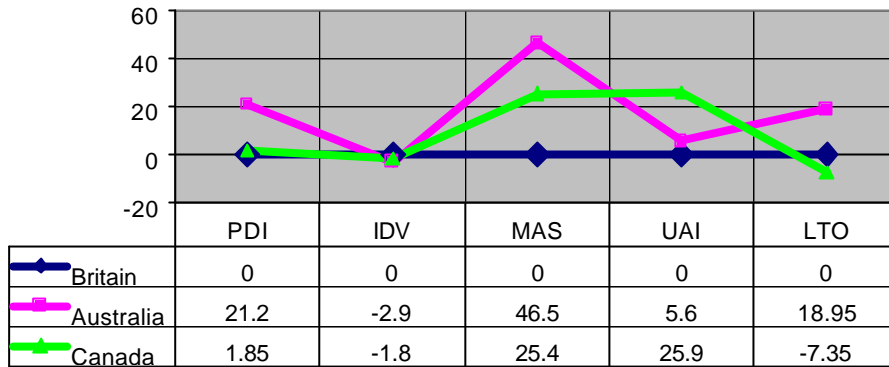


**Air Force**

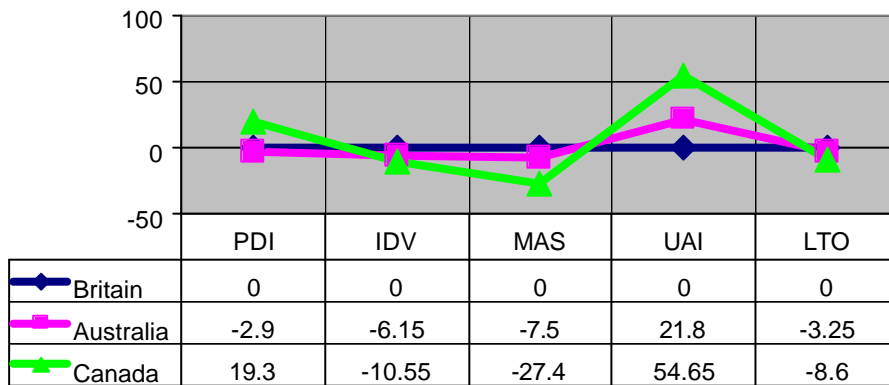


**Exhibit 9-13a. VSM international cultural scores.**  
From Exhibits 9-10c, 9-11c and 9-12c

### Navy



### Army



### Air Force

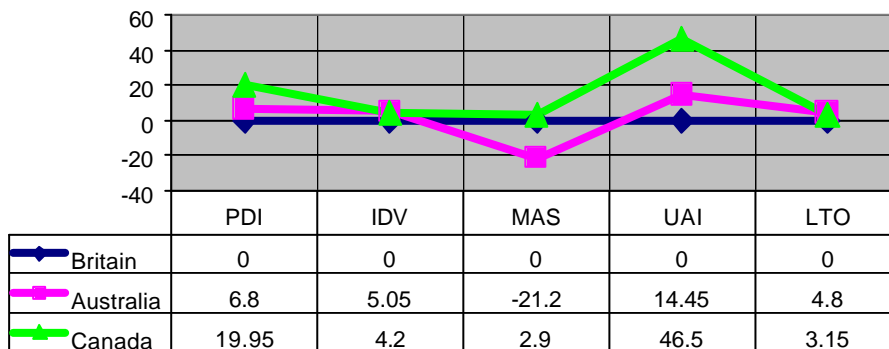


Exhibit 9-13b. VSM relative international cultural distances.  
From Exhibits 9-10d, 9-11d and 9-12d

Exhibit 9-13a compares the international VSM scores and demonstrates that the overall profiles for the services in each of the countries are similar. Exhibit 9-13b compares the relative positions of the international comparisons. The following can be observed:

- PDI variation is consistent across the armies and air forces but not the navies. When this variation is compared with the national civil – military PDI scores in Exhibits 9-5a and 9-5b the indication is that national culture has a greater influence on armed forces PDI than does organisational culture.
- IDV is consistently strong across all three services with all recorded significantly higher than the theoretical maximum of 100. The 100% consistency of extremely high scores strongly indicates that organisational culture has a greater influence on IDV than does national culture.
- MAS has little apparent consistency at the international organisational level, which does not match the international level consistency reflected in Exhibits 9-5a and 9-5b. This may indicate that neither national nor organisational culture has a greater influence on MAS than the other. It is also possible that the significantly wide range of scores is due to unidentified influences on the samples. This merits further investigation, as it is not possible to draw clear conclusions from these comparisons.
- UAI relative positions are consistently explained across all three services. Exhibit 9-5a shows that Canada's armed forces have a significantly higher UAI than either Australia or Britain. This was predicted and discussed in the national section. This indicates that organisational culture has a greater influence on UAI than does national culture.
- LTO is stable across all armies, air forces and navies with the exception of the Australian Navy. The Australian Navy's score variations are without explanation and merits further investigation. This indicates that organisational culture has a stronger influence on the LTO than does national culture.

<b>Index/ Samples</b>	<b><u>PDI</u></b>	<b>IDV</b>	<b>MAS</b>	<b>UAI</b>	<b>LTO</b>
<b>International Pre-dominant Influences</b>					
Navy	Nation	Organisation	Unclear	Organisation	Nation
Army	Nation	Organisation	Nation	Organisation	Organisation
Air Force	Nation	Organisation	Unclear	Organisation	Organisation

Exhibit 9-13c. VSM relative international cultural influences.  
 Extracted from Exhibits 9-13a and 9-13b

Exhibit 9-13c demonstrates that within the context of the international samples, the results indicate there is an identifiable elements of armed forces culture that transcend national boundaries. This proposition is strongly for IDV, UAI and less for LTO. Exhibit 9-13c indicates that, within the same context, national culture transcends organisational culture in its influence on PDI. Exhibit 9-13c indicates that it is not clear whether national nor organisational culture is predominant at the international level for MAS.

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## **CHAPTER SUMMARY**

This Chapter has collated the data from Chapters 6 and 8 and analysed the results of the value profiling process. Chapter 9 completes the value profile process identified in the methodology in Chapter 2 using the data to examine whether there is evidence to show that national and military organisational values have a significant influence on the cultures of armed forces. The conclusions have been summarised at the end of each section and Chapter 10 draws on this evidence to examine the implications of the research. Chapter 10 revisits the aims and objectives from Chapter 1 to determine if they have been achieved and where future research should focus.

## **CHAPTER 10 - SUMMARY AND SIGNIFICANCE OF THE RESEARCH**

Chapter 1 stated that the aim of this study was to identify whether national and military organisational values have a significant influence on the cultures of armed forces, in order to assess the impact of culture on Joint, Combined and Multinational operations. Exhibit 10-1 examines the overarching conclusions drawn from the previous three sections in order to demonstrate the national and organisational influences on the cultures of the armed forces of Australia, Britain and Canada. Subsequent sections examine the impact of the influences on joint, combined and multinational operations.

<b>Index/ Samples</b>	<b><u>PDI</u></b>	<b>IDV</b>	<b>MAS</b>	<b>UAI</b>	<b>LTO</b>
<b>National Armed Force Pre-dominant Influences</b>					
ADF	Nation	Organisation	Organisation	Organisation	Organisation
British Armed Forces	Nation	Organisation	Organisation	Organisation	Organisation
CF	Nation	Organisation	Organisation	Organisation	Organisation
<b>Intra - national Armed Force Pre-dominant Influences</b>					
Australia	Nation	Organisation	Unclear	Organisation	Organisation
Britain	Nation	Organisation	Unclear	Organisation	Organisation
Canada	Nation	Organisation	Unclear	Organisation	Organisation
<b>International Armed Force Pre-dominant Influences</b>					
Navy	Nation	Organisation	Unclear	Organisation	Nation
Army	Nation	Organisation	Nation	Organisation	Organisation
Air Force	Nation	Organisation	Unclear	Organisation	Organisation

Exhibit 10-1. Predominant cultural influences.

From Exhibits 9-5c, 9-9c and 9-13c

Exhibit 10-1 summarises the findings from Chapter 9 and demonstrates the following:

- PDI. There are consistent indications when examining culture from both the national and organisational perspectives that national culture has more influence on PDI in the armed forces than does organisational culture.
- IDV. The extremely high scores produced by all sample from the national and organisational perspectives, strongly indicate that organisational culture has a greater influence on IDV than does national culture.
- MAS. When examining MAS at the national level there were consistent indications that organisational culture was the predominant influence. This was not supported from the organisational perspective with unclear evidence and one indication of a slight national influence. The influences on MAS are generally not clear and further research is required to decipher the influences.
- UAI. There are consistent indications when examining culture from both the national and organisational perspectives that organisational culture has more influence on UAI in the armed forces than does national culture.
- LTO. With the exception of the international navy comparisons, there are consistent indications when examining culture from both the national and organisational perspectives that organisational culture has more influence on LTO in the armed forces than does national culture. The naval anomaly is not predicted in the value profiling process and further research is required to understand this.

The application and significance of these conclusions is demonstrated in the following two sections.

## **CONFLICTING RESULTS**

Using the VSM and a similar methodology, Study 23 by Soeters at Exhibit 220 in Chapter 2 found the following results for officer cadets at military academies. (Soeters 1997) Comparison with the findings of this research is added after Soeters' findings, which are in italics:

- *PDI much higher than civilian samples from Hofstede's and Hoppe's studies.* Soeters' results differ from this study, which indicates that PDI for the armed forces is generally close to their respective civilian samples.
- *IDV all but two lower (more collective) than previous studies.* This study indicates that all military samples have a significantly higher IDV than their respective civilian samples.
- *MAS all lower than their civilian counterparts.* This study indicates some agreement with the findings of Soeters although the findings were generally unclear.
- *UAI mixed results but most within three positions of previous studies.* This study indicates that the Australian and British armed forces score consistently lower on the UAI than their respective civilian samples, while Canada consistently scored slightly higher. These results were predicted by the value profiling process but appear to diverge from those of Soeter.
- *LTO conceptual relevance for military not clear and therefore not included in Study 23.* Comparison therefore not available.

As one of the only researchers to have used the VSM in a similar context to this study, Soeters' conclusions are of significant interest for this study. Soeters' findings for PDI and IDV scores for officer cadets bear no resemblance to those of the staff officer samples in this study. It is difficult to hypothesise without detailed study but the conflicting results imply that there is a significant enculturation process at the

organisational level that occurs after formal military training has been completed. This could mean that the culture of the main bodies of the armed forces is not represented and inculcated into new recruits within the training institutions of the armed forces. The differences in findings also imply that leaders in the armed forces do not arrive 'ready made' but have adapted and developed over time. The different findings of Soeters' and of this study imply that there is merit in researching and assessing the training and enculturation of officers for armed forces.

## **PRACTICAL POLICY APPLICATION**

Very little research systematically compares the cultures of armed forces using a rigorous methodology. However, this is not the main significance of this study. This research was categorised in Chapter 1 as applied social science with a practical foundation and application. This study aims to provide an academically sound base for anyone wishing to make policy decisions to deal with the situations that differing cultural values can cause. The analysis and conclusions in previous sections show that the implications of the national, intra-national and international observations are what make this a significant research effort. The information provided by this study can be applied to support armed forces to become more effective in the manner in which they interact with other nationalities, other armed forces and other agencies and organisations.

One example of how the results of this research have been applied successfully in a the 'real world' is provided at Annexes O and P. Annex O was a pilot presentation given to all Directing Staff (DS) at the British Joint Services Command and Staff College (JSCSC) at the behest of the director of academic studies. The requirement was to examine the issues concerning the successful integration and participation of international students on the Advanced Command and Staff Course. The original work was developed further and became part the standard induction package for new DS at JSCSC. A paper was published in *Defence Studies* (Stocker 2002) to support the presentations. A copy of this paper is reproduced at Annex P for reference.

Another example of how this research can be applied is provided in the (hypothetical but based on real life experience of the researcher) brief provided at Annex Q. In Annex Q a notional British infantry battalion has been assigned to support operations in a multi-national task force. The battalion is to come under command of a multi-national headquarters commanded by a Canadian Brigadier General and staff from Australia, Britain, Canada, New Zealand and the Netherlands. A company of Australian Infantry is to be under command of the battalion for the duration of the deployment. The situation in which the battalion is due to deploy will place officers and soldiers into an environment

where unintended misunderstandings may have a significant impact on the relationship with personnel from the other nations. The brief aims to aid practical understanding of cultural differences of the armed forces encountered from a neutral perspective. The brief provides some specific outline guidance on how to understand the cultural differences of the Canadian commander and the Australian troops under command.

## **RECOMMENDATIONS AND FUTURE STUDY**

Few, if any, studies are complete products and represent a compromise between achieving the aim and objectives and available resources. This section provides recommendations for future study that would support or refine the conclusions that have been identified in previous sections of this Chapter. Four specific recommendations for developing this study are methodology, samples, value profiling and the multi-national issue.

### **Methodology**

Neither the value profiling process nor the VSM can claim to be 100% accurate. Both process demonstrate anomalies, such as expected influences being different from the VSM results and the possible occasional rogue VSM score such as the Royal Navy's score of -6 for MAS on a theoretical scale of 0 to 100. It is recommended that neither method of examining culture should be used in isolation for business purposes other than to provide broad understanding of potential areas of difference and similarities. To improve the reliability of the conclusions different methodologies could be used to complement the methodology used to produce this study.

### **Samples**

The samples used for this study meet the minimum requirements identified by Hofstede to ensure that valid conclusions can be drawn from application of the VSM. However, the size and type of the samples can do little more than demonstrate that the methodology is sound and provide a narrow set of conclusions that are Anglophone specific. The following recommendations are made for sampling of future studies:

#### **Sample sizes**

For this type of study, quantity can improve quality provided that the same strict procedures are applied that have been used in this research. Exhibit 4-4 in Chapter 4



showed that while the minimum number of 20 respondents per sample was achieved for all except the Canadian Navy in many cases they were not significantly greater. The issue with these relatively small sample sizes is that individual influences may have an impact on the overall group result that is sought. In order to preclude individual influence, larger peer sample sizes would improve the group result and negate random individual influences.

### Sample types

This study specifically set out to identify the values of the next generation of decision-making leaders of the sampled armed forces. The samples were closely correlated in terms of career profile and demographic profile in order to ensure that valid comparisons could be made. However, it is quite possible that the staff college samples used for this study may not present the complete picture of the cultural values of the armed forces they represent. In order to provide greater granularity it is recommended that the VSM would need to be applied to a similar set of Senior Non-Commissioned Officer (SNCO) cohorts. To become a SNCO, soldiers generally have had to demonstrate a similar commitment to the armed forces that is expected from staff college students and they therefore reflect another tier of military culture. It is also possible that different elements of the armed forces engender different values. To get sucked into more detail in this study would add far too much complexity to a set of issues that are already very difficult to decipher. No two regiments are alike, no two ships are the same, and no two squadrons are identical and it would be valid to compare these core building blocks of the respective armed forces for similarities and differences.

### Countries

This study has identified in several places that it is in danger of being ethnocentric. This criticism has been particularly difficult to avoid, as all nine samples surveyed are Anglophone. The limited type of sample has the strength that it has helped to indicate that the methodology for this study is sound but has the corresponding limitation that the

conclusions are constrained to the three countries examined. It is quite possible that sampling the armed forces of countries that have distinctly different cultural values from Australia, Britain and Canada could produce a more refined set of conclusions. By studying armed forces that also have different organisational structures, roles and missions, it is also possible that a broader set of conclusions could be produced which would further enhance the applicability of this research.

### Ongoing sampling

The samples surveyed in this study have been produced within a few months of each other. Although this is methodologically sound for comparative purposes, it also means that the conclusions are based upon a single historical snapshot. Chapter 1 identified that although cultures are relatively stable they can evolve and change. Culture change is generally divided into two categories: “change by increment” where relatively slow development is often comfortable and may go unnoticed, or change by disaster which is almost always quick, uncomfortable and noticed. (Bohannon 1995, p61) It could be expected that rapid change to military cultures will be supported by documentary evidence of some form. For example, a significant operational set back or major crisis of moral conscience could be expected to affect organisational values and the value profiling process and VSM would expect to document such changes if reapplied after such an event. Adjusting to the gradual shift in civilian society would be more difficult to track through a single iteration and it is likely that several would be required to identify trends in changes to cultural values. To monitor cultural change of the samples in this study, it is recommended that the methodology would need to be reapplied at regular intervals of one to two years over a five to ten year period. Clearly closer time intervals of a year (no closer as the staff courses are a year long) and for up to ten years would provide greater granularity and a more accurate view of value change or stability stable within the sample sets. Using the same methodology and sample sets in this manner would provide validation to the conclusions of this study or demonstrate that further research is required.

## **Value Profiling**

The value profiling process was designed specifically to support the methodology of this research and is based on a variety of tools. At the international level the value profiling process was not effective (See Exhibits 9-10e, 9-11e and 9-12e). As value profiling worked at the national and inter-national organisational levels this indicates that further refinement is required. One of the weaknesses of the profiling process is that it demonstrates the number of influences but does not identify their relative power in relation to other influences. It is recommended that a future study could refine the value profiling process to include the relative weighting of each influence.

## **Multi-national organisational samples**

This study has shown that the values of the armed forces are different from those of the civilian cultures from which they stem. It has not provided any evidence to show the specific differences that might be expected from civilian agencies that armed forces might expect to find when deployed on operations. Although it is quite straightforward to conclude that there will be differences, specifics using the VSM are not available from other studies. A valuable area of further investigation is to apply the methodology from this study to organisations such as the International Federation of Red Cross and Red Crescent Societies, the International Committee of the Red Cross (ICRC) and the United Nations (UN). Each of these has different challenges and attractions some of which are detailed below:

- Red Cross and Red Crescent Societies tend to be national organisations and therefore the impact of national culture can be assessed relatively straightforwardly using the same methodology used for this study. These organisations are also likely to be operating in many of the environments in which armed forces deploy.
- The ICRC is one of the most significant organisations likely to be working in an environment where armed forces are likely to deploy operationally and therefore

merits detailed comparison. It has the additional interest that as an international organisation a single national culture is unlikely to have a predominant influence and therefore comparisons are only likely to be valid at the organisational level.

- The UN is similar to the ICRC in that it is a major organisation likely to have significant influence in an area where armed forces deploy and is not permeated by a single national culture. The UN has additional research interest, as it has a number of semi-autonomous departments that might have distinct subcultures.

### **Untested influences**

It has not been possible to test five of the influences identified during the value profiling process in Chapter 3. The following recommendations are made for future study:

*Influence G3: Officers may not be the truest representatives of the cultures of the sampled armed forces. Long serving soldiers are considered to be more enculturised with more traditional outlooks and perspectives. Only samples of officers have been collected for this study. To examine this Influence a suitable sample of SNCO's that fulfil the same demographic criteria would be required.*

*Influence G5: There are values, such as professionalism, which are considered to be central to all of the samples but are not measurable using the VSM. A separate survey examining such values would be required to test this Influence.*

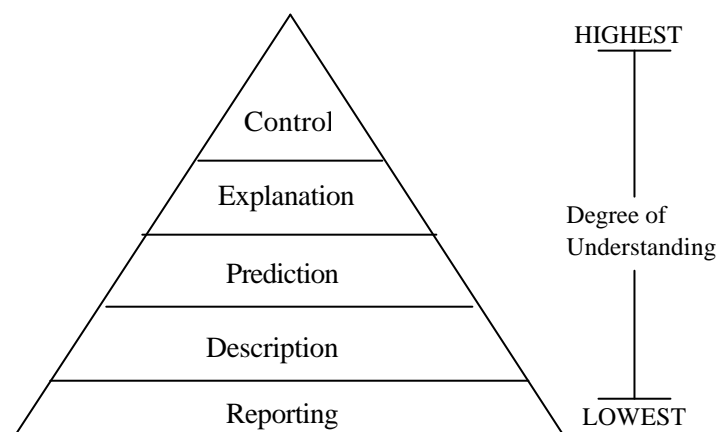
*Influence S1: The situational focus of the three national samples are different, with the ADF concentrating on civilian refugees and regional crises, British armed forces on medium scale war fighting and CF on shifting from a tactical to strategic orientation. These differences will influence the relative values of the armed forces. Although this is an important influence it has not been possible to identify how this influence might affect the values contained in the VSM. To examine the impact of this influence would require research focussed on this issue.*

Influence S4: *Ethos and Identity (discussed in Chapter 1) do not necessarily translate across national or organisational boundaries but cultural values do. A separate survey examining ethos and identity would be required to test Influence S4. Evidence presented in Chapters 5 and 6 supports this influence.*

Influence S5: *Over time the CF can be expected to produce a lower overall UAI score as the move away from the relatively constrained view implied by a tactical focus to the wider perspective required to become strategic orientated force. This time dependent influence cannot be assessed on the basis of a survey undertaken at a single point in time. To assess this effectively one or preferably more surveys would have to be conducted over a period.*

## **SUMMARY - ACADEMIC IMPORTANCE OF THIS STUDY**

It is argued that "...research helps managers make decisions, rather than research making decisions for managers. Research does *not* make decisions: managers do." (Davis and Cosenza 1993, p37-8) This study has not aimed to provide solutions to particular problems. It has aimed to further the understanding of how differing cultural values will affect British and other armed forces in the course of undertaking their core business of providing a credible and effective military capability. A route to finding an understanding of this situation has been achieved through completing the objectives of this study. The levels of scientific research identified in Exhibit 10-2 are matched with the chapters in which the objectives were met.



**Exhibit 10-2. Levels of Scientific Research Endeavour.**  
(Davis and Cosenza 1993)

Chapter 1 introduced the background, aim and objectives, defined culture and values. This equates to the lowest level of understanding in Exhibit 2-14 by reporting the issues and achieved the following objective:

*Define culture, values and related concepts.*

Chapter 2 discusses the methodology required to meet the policy-orientated requirements of this study. This equates to the lowest level of understanding in Exhibit 2-14 by reporting the issues and achieved the following objective:

*Outline a viable methodology to examine and profile cultural values.*

Chapter 3 shows in detail why values are the central focus for this study. This equates to the description levels identified in Exhibit 2-14 and achieved the following objective:

*Demonstrate why values form the basis of this study.*

Chapter 4 demonstrates how survey models can be used to map and predict this element of culture. A specific method of measuring culture is examined in detail and expectations of the results discussed. This equates to the description levels identified in Exhibit 2-14 and demonstrated the viability of the following objective:

*Execute a measurement of values in a consistent and academically sound manner.*

Chapter 5 reviews available academic literature on the military cultures of Australia, Britain and Canada. This chapter matches the reporting and description levels of understanding in Exhibit 2-14 and supported the following objective:

*Review the body of cross-cultural academic literature on cultural values and the military.*

Chapter 6 maps the influences on the cultural values examined in this study. This chapter matches the prediction levels of understanding in Exhibit 2-14 and completed the first objective and supported the second objective below:

*Review the body of cross-cultural academic literature on cultural values and the military.*

*Execute a measurement of values in a consistent and academically sound manner.*

Chapter 7 presents the data collected using the Values Survey Model 94 (VSM 94) and the calculations to produce the value indices. Chapter 7 equates to the description levels detailed in Exhibit 2-14 and supported the following objective:

*Execute a measurement of values in a consistent and academically sound manner.*

Chapter 8 present the data from Chapter 7 in graphical form. This equates to the description level of understanding in Exhibit 2-14 and completed the following objective:

*Execute a measurement of values in a consistent and academically sound manner.*

Chapter 9 collates and presents the data from Chapters 6 and 8 in graphical form. This equates to the prediction level of understanding in Exhibit 2-14 and completed the following objectives:

*Examine national influences on the culture of the armed forces of Australia, Britain and Canada.*

*Examine intra-national organisational influences on the culture of the services of the armed forces of Australia, Britain and Canada.*

*Examine international organisational influences on the culture of the services of the armed forces of Australia, Britain and Canada.*

*Focus on the values of the armed forces examined in this study in order to compare the findings with the results obtained from the Values Survey Module.*

Chapter 10 presents the analysis and conclusions that cover the policy implications of the key points that have arisen. Recommendations for future research are made. This chapter achieves the explanation and control levels identified in Exhibit 2-14 and completed the following objective:



*Discuss the implications of the findings of this study and demonstrate how the values of the nations and organisations that have been examined can be expected to affect future operations.*

### **CHAPTER REFERENCES**

Bohannon, P. (1995). How Culture Works. New York, The Free Press.

Davis, D. and R. M. Cosenza (1993). Business Research for Decision Making. Belmont, California, Wadsworth.

Soeters, J. L. (1997). "Value Orientations in Military Academies: A Thirteen Country Study." Armed Forces and Society **24**(1): 7-32.

Stocker, A. (2002). "Cultural Values at Work on the Advanced Command and Staff Course." Defence Studies **2**(1): 139-156.

**ANNEX A**  
**HOFSTEDE'S VALUES SURVEY MODULE 94 (MODIFIED)**  
**INTERNATIONAL QUESTIONNAIRE PAGE 1 OF 5**

Please think of an ideal job - disregarding your present occupation. In choosing an ideal job, how important would it be to you to ... (please circle one answer in each line across):

- 1 = of utmost importance
- 2 = very important
- 3 = of moderate importance
- 4 = of little importance
- 5 = of very little or no importance

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. have sufficient time for your personal or family life  | 1 | 2 | 3 | 4 | 5 |
| 2. have good physical working conditions (good ventilation and lighting, adequate work space, etc.) | 1 | 2 | 3 | 4 | 5 |
| 3. have a good working relationship with your direct superior                                       | 1 | 2 | 3 | 4 | 5 |
| 4. have security of employment  | 1 | 2 | 3 | 4 | 5 |
| 5. work with people who cooperate well with one another   | 1 | 2 | 3 | 4 | 5 |
| 6. be consulted by your direct superior in his/her decisions  | 1 | 2 | 3 | 4 | 5 |
| 7. have an opportunity for advancement to higher level jobs   | 1 | 2 | 3 | 4 | 5 |
| 8. have an element of variety and adventure in the job  | 1 | 2 | 3 | 4 | 5 |

**INTERNATIONAL QUESTIONNAIRE – PAGE 2 OF 5**

In your private life, how important is each of the following to you? (please circle one answer in each line across):

- 1 = of utmost importance
- 2 = very important
- 3 = of moderate importance
- 4 = of little importance
- 5 = of very little or no importance

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 9. Personal steadiness and stability  | 1 | 2 | 3 | 4 | 5 |
| 10. Thrift  | 1 | 2 | 3 | 4 | 5 |
| 11. Persistence (perseverance)  | 1 | 2 | 3 | 4 | 5 |
| 12. Respect for tradition   | 1 | 2 | 3 | 4 | 5 |
| 13. How often do you feel nervous or tense at work?   |   |   |   |   |   |
| 1. never  |   |   |   |   |   |
| 2. seldom   |   |   |   |   |   |
| 3. sometimes  |   |   |   |   |   |
| 4. usually  |   |   |   |   |   |
| 5. always   |   |   |   |   |   |
| 14. How frequently, in your experience, are subordinates afraid to express disagreement with their superiors? |   |   |   |   |   |
| 1. very seldom  |   |   |   |   |   |
| 2. seldom   |   |   |   |   |   |
| 3. sometimes  |   |   |   |   |   |
| 4. frequently   |   |   |   |   |   |
| 5. very frequently  |   |   |   |   |   |

**INTERNATIONAL QUESTIONNAIRE - PAGE 3 OF 5**

To what extent do you agree or disagree with each of the following statements? (please circle one answer in each line across):

- 1 = strongly agree
- 2 = agree
- 3 = undecided
- 4 = disagree
- 5 = strongly disagree

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 15. Most people can be trusted  | 1 | 2 | 3 | 4 | 5 |
| 16. One can be a good manager without having precise answers to most questions that subordinates may raise about their work           | 1 | 2 | 3 | 4 | 5 |
| 17. An organization structure in which certain subordinates have two bosses should be avoided at all cost                             | 1 | 2 | 3 | 4 | 5 |
| 18. Competition between employees usually does more harm than good  | 1 | 2 | 3 | 4 | 5 |
| 19. A company's or organization's rules should not be broken - not even when the employee thinks it is in the company's best interest | 1 | 2 | 3 | 4 | 5 |
| 20. When people have failed in life it is often their own fault   | 1 | 2 | 3 | 4 | 5 |

**INTERNATIONAL QUESTIONNAIRE – PAGE 4 OF 5**

Some information about yourself (these need to be completed to ensure results match statistically):

21. Are you:

1. male
2. female

22. How old are you:

1. Under 20
2. 20-24
3. 25-29
4. 30-34
5. 35-39
6. 40-49
7. 50-59
8. 60 or over

23. How many years of formal school education (or their equivalent) have you completed to date (starting with primary school):

1. 10 years or less
2. 11 years
3. 12 years
4. 13 years
5. 14 years
6. 15 years
7. 16 years
8. 17 years
9. 18 years or over

**INTERNATIONAL QUESTIONNAIRE – PAGE 5 OF 5**

24. Are you:

1. A civilian?
2. A navy officer?
3. An army officer?
4. An air force officer?
5. A marine officer?

25. Are you:

1. An MBA Student?
2. An MDA Student?
3. A military staff college student?
4. Other? (Please specify if applicable) .....

26. What is your nationality?

---

27. And what was your nationality at birth (if different)?

---

Royal Military College of Science  
Major A B Stocker R SIGNALS  
Part-time Research Student the Department of  
Defence Management and Security Analysis

*Cranfield*  
UNIVERSITY

Cranfield University  
RMCS Shrivenham  
Swindon SN6 8LA England  
A5hleyhere@aol.com

25 September 2000

All ACSC students

**VALUE SURVEY AND ORGANISATIONAL CULTURE QUESTIONNAIRES**

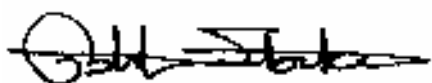
1. **Introduction.** The purpose of this letter is to provide background information to the Value Survey and Organisational Culture questionnaires you have received. Please do take the time to read this letter and complete and return the questionnaires, as they aim to provide knowledge to improve communication between different organisations.
2. **Background.** Replies to the questionnaires will be used to support research examining select international samples of military and civilian peer groups. The aim is to assess, as objectively as possible, differences between social, cultural and work groups and how communication can be improved between them. The research is being sponsored by Commandant RMCS, through the Department of Defence Management and Security Analysis and is supported by Commandant JSCSC.
3. **Informed Consent.** When asking you to complete the two questionnaires I am ethically (and in some countries legally) bound to inform you of the following:
  - a. Answering the questionnaires is voluntary;
  - b. The information being collected is to be used solely for academic research and the final results will be published in a research thesis at Cranfield University at RMCS;
  - c. All information gathered from the questionnaires is pooled into matching samples and therefore responses will be anonymous, with no means of identifying individuals from the published results. No personal information will be published or stored about any individuals responding to the questionnaires;
  - d. If all or any part of the requested information is not provided, questionnaires are unusable;
  - e. Anyone may contact me to ensure their rights of access to, and correction of, any information provided are maintained.
  - f. There will be no harmful effects on any individuals participating in the questionnaires;

g. Respondents have the right to withdraw their replies, if they can be identified, from the research programme at any stage.

h. It is my intention to maintain objectivity and integrity, and to conduct unbiased investigations by using responses from the attached questionnaires to support the research being undertaken.

i. I undertake to be accurate and objective in reporting the results, and to do so in a manner that encourages responsible discussion.

4. Contact. If anyone requires further information, wishes to discuss issues raised by the questionnaires or any related matters, please feel free to contact me through the above postal or e-mail addresses.

A handwritten signature in black ink, appearing to read 'G. S. S. S.', with a large, stylized flourish extending to the right.



**ANNEX C – CONCEPTUAL MODELS**

<b>Learning Framework (1996)</b>	<b>Hofstede (1980, 1991)</b>	<b>Kluckhohn &amp; Strodtbeck (1961)</b>	<b>Hofstede &amp; Bond (1988)</b>	<b>Trompenaars (1993)</b>	<b>Hampden Turner &amp; Trompenaars (1993)</b>	<b>Triandis (1986)</b>	<b>Bluedorn (1995)</b>	<b>House, Hanges, Agar &amp; Quintalla (1995)</b>	<b>Hampden Turner &amp; Trompenaars (1998<sup>1</sup>)</b>	<b>Hofstede (2001<sup>2</sup>)</b>
Individual – Collective	Individualism-Collectivism	Relational orientation (collective, individual)  Space orientation (public, private, mixed)	Collectivism: integration moral discipline	Individualist-Collectivist  Universalist – Particularist  Specific-Diffuse	Individualism-Communitarism  Universalism – Particularism	Individualism-Collectivism:  family integrity interdependence with sociability separation from in-groups self-reliance with hedonism		Individualism-Collectivism	<i>Individualism-Communitarism</i>  <i>Universalism – Particularism</i>  <i>Specific-Diffuse</i>	<i>Individualism –Collectivism</i>
Tough – Tender			Human-heartedness:  kindness patience courtesy					Humanistic-Impersonal		
Equal – Unequal	Power distance	Relational orientation (hierarchical)		Achievement – Ascription oriented	Achieved-Ascribed  Equality-Hierarchy			Power Stratification-Egalitarianism	<i>Achievement – Ascription oriented</i>	<i>Power distance</i>
Dynamic – Stable	Uncertainty avoidance	Human nature  Relationship to nature		Neutral – Affective				Tolerance-Intolerance of uncertainty	<i>Neutral-emotional</i>	<i>Uncertainty avoidance</i>

<b>Learning Framework (1996)</b>	<b>Hofstede (1980, 1991)</b>	<b>Kluckhohn &amp; Strodtbeck (1961)</b>	<b>Hofstede &amp; Bond (1988)</b>	<b>Trompenaars (1993)</b>	<b>Hampden Turner &amp; Trompenaars (1993)</b>	<b>Triandis (1986)</b>	<b>Bluedorn (1995)</b>	<b>House, Hanges, Agar &amp; Quintalla (1995)</b>	<i>Hampden Turner &amp; Trompenaars (1998<sup>1</sup>)</i>	<i>Hofstede (2001<sup>2</sup>)</i>
Active – Reflective:  pace intuition pragmatism					Analyzing-Integrating  Inner-Outer directed		Time:  pace			
Scarce – plentiful:  punctuality polychronicity time horizon		Time orientation (past, present, future)	Confucian dynamism	Future-Present-Past oriented	Sequence-Synchronisation		punctuality polychronicity time horizon	Future-Present		<i>Long-term – Short term orientation</i>
Doing-Being:  control human focus	Masculine - Feminine	Activity orientation (being, doing, controlling)		Internal – External oriented				Masculinity-Femininity  Achievement orientation		<i>Masculinity – Femininity</i>

Exhibit C-1. Conceptual similarities between the models of cultural difference.

Amended from (Wilson, Hoppe et al. 1996, P36-37) with additions, in italics, from 1 (Trompenaars and Hampden-Turner 1998, P29) and 2 (Hofstede 2001, P29)

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Trompenaars, F. and C. Hampden-Turner (1998). Riding the Waves of Culture: Understanding Diversity in Global Business. New York, McGraw Hill.  
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**ANNEX D - COUNTRY AND OCCUPATION CROSS-TABULATION FOR WORLD VALUES SURVEY**

COUNTRY	CWE OCCUPATION													Total		
	>10emp	<10emp	prof	middle	junior	superv	skilled	semi-skun	skill	farmer	farm wk	arm frce	never wk		1415	88
france	8	44	<b>51</b>	<b>97</b>	45	16	115	28	5	30	8	<b>7</b>	5			459
britain	58	45	<b>72</b>	<b>64</b>	18	33	200	51	73	6	9	<b>6</b>				635
wgermany	10	61	<b>31</b>	<b>187</b>	232	59	191	60	6	25	4	<b>8</b>	5			879
italy	30	78	<b>137</b>	<b>206</b>	94	29	153	104	66	51	8	<b>35</b>	7	66		1064
nethland	9	22	<b>69</b>	<b>92</b>	11	33	86	25	25	18	2	<b>3</b>	7			402
denmark	13	37	<b>9</b>	<b>100</b>	19		43	13	32	21		<b>3</b>				290
belgium	43	164	<b>32</b>	<b>226</b>	139	31	242	84	118	10	2	<b>17</b>	9			1117
spain	61	241	<b>134</b>	<b>267</b>	61	124	488	258	253	101	174	<b>28</b>	12			2202
ireland	28	39	<b>58</b>	<b>40</b>	42	15	109	37	44	86	7	<b>7</b>	2			514
nireland	21	13	<b>17</b>	<b>17</b>	18	13	49	9	6	4	2					169
usa	70	55	<b>144</b>	<b>64</b>	22	52	199	68	32	20	4	<b>11</b>	5			746
canada	36	35	<b>145</b>	<b>75</b>	33	37	80	161	85	44	8		5			744
japan	103	33	<b>31</b>	<b>95</b>	80	23	33	46	20	500	1	<b>2</b>	2			969
mexico	182	111	<b>141</b>	<b>40</b>	13	35	27	21	55	15	11	<b>9</b>	42			702
s africa	302	170	<b>209</b>	<b>122</b>	6				22	179	155					1165
hungary	13	4	<b>41</b>	<b>23</b>	5	24	185	46	23	5	26	<b>5</b>	3			403
norway	43	41	<b>64</b>	<b>41</b>	4	48	117	40	52	25	3	<b>3</b>				481
sweden	26	20		<b>69</b>	740		129		44	18	1					1047
iceland	18	40	<b>50</b>	<b>28</b>	9	23	44	9	39	15	1	<b>6</b>		2815		325
argentin	18	81	<b>49</b>	<b>78</b>	42	34	86	57	49	2		<b>10</b>	3			509
finland	74	31		<b>43</b>			70			11						229
switz	169	72	<b>74</b>		99		116		14	19						563
brazil	19	140	<b>58</b>	<b>117</b>		80	250	26	159	26	29	<b>32</b>				936
nigeria	467	25	<b>144</b>	<b>43</b>	21	30	60	34	47	90	13	<b>23</b>	4			1001
chile	5	21	<b>85</b>	<b>208</b>	80	31	128	185	133	7	14	<b>24</b>	6			927
byelorus	43	17	<b>90</b>	<b>24</b>	3	15	72	40	4					707		1015
india	87	187	<b>376</b>	<b>178</b>	227	56	127	42	52	134	48	<b>25</b>	24			1563
czech		1	<b>41</b>	<b>96</b>	79	24	159		184		22	<b>5</b>	1			612
egermany	4	17	<b>6</b>	<b>93</b>	99	71	162	23	4	8	4	<b>5</b>				496
slovenia	11	10	<b>75</b>	<b>56</b>	4	17	135	29	34	13	7					391
bulgaria	10	2	<b>66</b>	<b>44</b>	4	35	144	27	27	6	35	<b>16</b>				416

romania	6	9	<b>86</b>	<b>72</b>	35	60	205	12	17	34	11	<b>13</b>	1	561
china	59	42	<b>72</b>	<b>42</b>	22	76	100	7	6	1				427
portugal	3	65	<b>31</b>	<b>17</b>	101	11	215	44	25	32	47	<b>11</b>	3	605
austria	127		<b>364</b>	<b>112</b>	182	40	219	273		128				1445
turkey	8	121	<b>50</b>	<b>6</b>	54	19	88	93	20	104	9	<b>5</b>	1	578
moscow	27	16	<b>118</b>	<b>10</b>	5	17	108	38	10		3	<b>26</b>	7	385
lithuan	16	7	<b>84</b>	<b>60</b>	40	15	72	73		8	42	<b>4</b>	1	422
latvia	14	28	<b>35</b>	<b>5</b>	30		145	14		11				282
estonia	12	19	<b>29</b>	<b>19</b>	31		173	16		10				309
russia		1	<b>157</b>	<b>137</b>			392			27				714
fra81	1	62	<b>44</b>	<b>103</b>	68	27	112	95	3	45	7	<b>22</b>		589
brit81	9	62	<b>88</b>	<b>80</b>	21	31	195	74	53	8	7	<b>8</b>		636
ger81	6	104	<b>26</b>	<b>211</b>	387	44	311	106	39	57	6	<b>8</b>		1305
ita81	3	237	<b>114</b>	<b>131</b>	98	24	154	129	133	36	20	<b>14</b>		1093
neth81	3	66	<b>27</b>	<b>200</b>	58	71	124	24	47	26	6	<b>12</b>		664
den81	2	58	<b>9</b>	<b>66</b>	95	34	97	31	72	45	2	<b>3</b>		514
bel81	7	39	<b>39</b>	<b>91</b>	58	23	113	43	69	8	6	<b>5</b>		501
spain81	10	229	<b>112</b>	<b>160</b>	89	41	145	165	53	130	62	<b>32</b>		1228
ire81	4	73	<b>50</b>	<b>64</b>	9	16	157	31	169	103	7	<b>7</b>		690
nire81	1	18	<b>25</b>	<b>8</b>	3	11	36	3	42	16	1			164
can81		116	<b>81</b>	<b>90</b>		28	147	63	64	23	4	<b>4</b>		620
japan81	20	24	<b>13</b>	<b>106</b>	143	17	35	104	46	175	1	<b>1</b>		685
mex81	15	61	<b>154</b>	<b>145</b>	107	33	151	44	93	144	117	<b>5</b>		1069
safr81	28	75	<b>104</b>	<b>101</b>	52	71	135	120	130	31	6	<b>19</b>		872
norway81	5	67	<b>49</b>	<b>55</b>	4	38	121	41	48	25	7	<b>4</b>		464
ice81	2	58	<b>61</b>	<b>55</b>	59	52	101	34	197	43	1	<b>39</b>		702
argent81	3	38	<b>91</b>	<b>126</b>	36	31	74	38	2					439
Total	2372	3552	<b>4612</b>	<b>5105</b>	4036	1818	7924	3238	3045	2759	970	<b>532</b>	1481011570740934	

**CASE PROCESSING SUMMARY**

	Cases		Missing		Total	
	Valid	Percent	N	Percent	N	Percent
COUNTRY	40934	45.5%	48974	54.5%	89908	100.0%
* CWE						
OCCUPAT						
ION						

Both tables created using SPSS from data supplied by World Values Study Group (1994). World Values Survey, 1981-1984 and 1990-1993. Ann Arbor, Inter-university Consortium for Political and Social Research.

**ANNEX E – HOFSTEDE’S VALUES SURVEY MODULE SCORES**

<b>Country</b>	<b>Actual</b>	<b>Predicted</b>	<b>Country</b>	<b>Actual</b>	<b>Predicted</b>
<i>Malaysia</i>	104	78	<i>South Korea</i>	60	61
<i>Guatemala</i>	95	68	Iran	58	61
<i>Panama</i>	95	65	Taiwan	58	63 65
Philippines	94	73 76	Spain	57	56
Mexico	81	70 72	Pakistan	55	74 75
Venezuela	81	66 70	<b>Japan</b>	<b>54</b>	<b>57</b>
<i>Arab Countries</i>	80		Italy	50	53 52
<i>Ecuador</i>	78	78	South Africa	49	62 64
<i>Indonesia</i>	78	86	Argentina	49	56 57
India	77	78 77	<i>Jamaica</i>	45	61
<i>West Africa</i>	77		USA	40	42 41
<i>Yugoslavia</i>	76	53	<b>Canada</b>	<b>39</b>	<b>36</b>
Singapore	74	64 70	Netherlands	38	38 37
<b>Brazil</b>	<b>69</b>	<b>72 73</b>	<b>Australia</b>	<b>36</b>	<b>44 45</b>
Hong Kong	68	56 59	<i>Costa Rica</i>	35	66
France	68	42 40	Germany	35	42 41
Colombia	67	75 79	<b>Britain</b>	<b>35</b>	<b>45 44</b>
<i>Salvador</i>	66	68	Switzerland	34	32 33
Turkey	66	60	Finland	33	30 29
Belgium	65	36	Norway	31	27 26
<i>East Africa</i>	64		Sweden	31	23
Peru	64	69 73	Ireland	28	37
Thailand	64	74 76	New Zealand	22	35 37
Chile	63	56 57	Denmark	18	28
Portugal	63	53 54	Israel	13	44 47
<i>Uruguay</i>	61	51	Austria	11	40
Greece	60	51 52			
			MEAN SCORE	57	

Exhibit E-1. PDI Values by country.

Compiled from (Hofstede 1980, P104) and (Hofstede 2001, P87)

Note: Standard text shows data from Hofstede 1980. Italics show amendments and additions from Hofstede 2001.

Country	Actual	Controlling for age	Country	Actual	Controlling for age
Greece	112	98	<i>Ecuador</i>	<i>67</i>	
Portugal	104	102	Germany	65	53
<i>Guatemala</i>	<i>101</i>		Thailand	64	73
<i>Uruguay</i>	<i>100</i>		Iran	59	59
Belgium	94	80	Finland	59	54
<i>Salvador</i>	<i>94</i>		Switzerland	58	62
<b>Japan</b>	<b>92</b>	<b>112</b>	<i>West Africa</i>	<i>54</i>	
Yugoslavia	88	77	Netherlands	53	45
Peru	87	91	<i>East Africa</i>	<i>52</i>	
France	86	73	<b>Australia</b>	<b>51</b>	<b>47</b>
Chile	86	66	Norway	50	38
Spain	86	89	South Africa	49	62
Colombia	<i>67 80</i>	<i>75 77</i>	New Zealand	49	60
<i>Panama</i>	<i>86</i>		<i>Indonesia</i>	<i>48</i>	
<i>Costa Rica</i>	<i>86</i>		<b>Canada</b>	<b>48</b>	<b>55</b>
Argentina	86	74	USA	46	36
Turkey	85	61	Philippines	44	45
<i>South Korea</i>	<i>85</i>		India	40	48
Mexico	82	86	<i>Malaysia</i>	<i>36</i>	
Israel	81	73	<b>Britain</b>	<b>35</b>	<b>43</b>
Colombia	80	77	Ireland	35	54
Venezuela	76	78	Hong Kong	29	61
<b>Brazil</b>	<b>76</b>	<b>74</b>	Sweden	29	23
Italy	75	58	Denmark	23	32
Pakistan	70	82	<i>Jamaica</i>	<i>13</i>	
Austria	70	77	Singapore	8	31
Taiwan	69	73			
<i>Arab countries</i>	<i>68</i>		MEAN SCORE	65	

Exhibit E-2. UAI Values by country  
Compiled from (Hofstede 1980, P165) and (Hofstede 2001, P151)

Note: Standard text shows data from Hofstede 1980. Italics show amendments and additions from Hofstede 2001.

Country	Actual	Predicted	Country	Actual	Predicted
USA	91	95 90	Turkey	37	35 36
<b>Australia</b>	<b>90</b>	<b>62 64</b>	<i>Uruguay</i>	36	39
<b>Britain</b>	<b>89</b>	<b>74 66</b>	Greece	35	41 44
<b>Canada</b>	<b>80</b>	<b>80</b>	Philippines	32	23 20
Netherlands	80	71 68	Mexico	30	33 28
New Zealand	79	58 65	<i>Yugoslavia</i>	27	43
Italy	76	62 54	Portugal	27	42 39
Belgium	75	71	<i>East Africa</i>	27	
Denmark	74	75 80	<i>Malaysia</i>	26	15
Sweden	71	85 92	Hong Kong	25	29 33
France	71	80 75	Chile	23	38 37
Ireland	70	52 56	Singapore	20	15 21
Norway	69	73 78	Thailand	20	19
Switzerland	68	73 76	<i>West Africa</i>	20	
Germany	67	81 74	<i>Salvador</i>	19	21
South Africa	65	38 33	<i>South Korea</i>	18	34
Finland	63	68 72	Taiwan	17	27 28
Austria	55	61	Peru	16	22 21
Israel	54	47 51	<i>Costa Rica</i>	15	21
Spain	51	51 44	Pakistan	14	22 24
India	48	34 27	<i>Indonesia</i>	14	13
<b>Japan</b>	<b>46</b>	<b>60 53</b>	Colombia	13	18 16
Argentina	46	47 43	Venezuela	12	28 26
Iran	41	34	<i>Panama</i>	11	23
<i>Jamaica</i>	39	27	<i>Ecuador</i>	8	12
<b>Brazil</b>	<b>38</b>	<b>37 27</b>	<i>Guatemala</i>	6	22
<i>Arab countries</i>	38		MEAN SCORE		43

Exhibit E-3. IDV Values by country.  
 Compiled from (Hofstede 1980, P222) and (Hofstede 2001, P215)

Note: Standard text shows data from Hofstede 1980. Italics show amendments and additions from Hofstede 2001.



Country	Actual	Controlling for Women %	Country	Actual	Controlling for Women %
<b>Japan</b>	<b>95</b>	<b>87</b>	Singapore	48	52
Austria	79	75	Israel	47	41
Venezuela	73	70	<i>Indonesia</i>	46	
Italy	70	72	<i>West Africa</i>	46	
Switzerland	70	63 67	Turkey	45	53
Mexico	69	64	Taiwan	45	38
Ireland	68	74	<i>Panama</i>	44	
<i>Jamaica</i>	68		Iran	43	52
<b>Britain</b>	<b>66</b>	<b>66</b>	France	43	41
Germany	66	59	Spain	42	35
Philippines	64	58	Peru	42	32
Colombia	64	56	<i>East Africa</i>	41	
South Africa	63 66	60	<i>Salvador</i>	40	
<i>Ecuador</i>	63		<i>South Korea</i>	39	
USA	62	-	<i>Uruguay</i>	38	
<b>Australia</b>	<b>61</b>	<b>59</b>	<i>Guatemala</i>	37	
New Zealand	58	55	Thailand	34	45
Greece	57	73	Portugal	31	32
Hong Kong	57	61	Chile	28	26
Argentina	56	50	Finland	26	51
India	56	47	<i>Yugoslavia</i>	21	42
Belgium	54	53	<i>Costa Rica</i>	21	
<i>Arab Countries</i>	53		Denmark	16	22
<b>Canada</b>	<b>52</b>	<b>53</b>	Netherlands	14	-
<i>Malaysia</i>	50		Norway	8	10
Pakistan	50	40	Sweden	5	6
<b>Brazil</b>	<b>49</b>	<b>44</b>	MEAN SCORE	49	

Exhibit E-4. MAS Values by country.  
Compiled from (Hofstede 1980, P279) and (Hofstede 2001, P286)

Note: Standard text shows data from Hofstede 1980. Italics show amendments and additions from Hofstede 2001.

Score Rank	Country or Region	LTO Score
1	China	118
2	Hong Kong	96
3	Taiwan	87
4	Japan	80
5	South Korea	75
6	Brazil	65
7	India	61
8	Thailand	56
9	Singapore	48
10	Netherlands	44
11	Bangladesh	40
12	Sweden	33
13	Poland	32
14	Germany (F.R.)	31
15	Australia	31
16	New Zealand	30
17	United States	29
18	Great Britain	25
19	Zimbabwe	25
20	Canada	23
21	Philippines	19
22	Nigeria	16
23	Pakistan	00

Exhibit E-5. LTO Values by country  
(Hofstede 2001, P356)

REFERENCES:

Hofstede, G. (1980). Culture's Consequences: International differences in work-related values. Beverley Hills, Sage.

Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. Thousand Oaks, Sage.

Note: Standard text shows data from Hofstede 1980. Italics show amendments and additions from Hofstede 2001.

**ANNEX F – TROMPENAARS AND HAMPDEN-TURNER SCORES**

<b>Country</b>	<b>%</b>	<b>Country</b>	<b>%</b>
Switzerland	97	Argentina	70
USA	93	Singapore	69
<b>Canada</b>	<b>93</b>	<b>Japan</b>	<b>68</b>
Ireland	92	Cuba	65
Sweden	92	Mexico	64
<b>Australia</b>	<b>91</b>	Greece	61
<b>Britain</b>	<b>91</b>	Indonesia	57
Netherlands	90	Bulgaria	54
Romania	88	India	54
Germany	87	China	47
Hungary	85	Russia	44
Czech Republic	83	South Korea	37
<b>Brazil</b>	<b>79</b>	Nepal	36
Spain	75	Venezuela	32
Poland	74		
France	73	MEAN SCORE	71.5
Nigeria	73		

Exhibit F-1. Percentage of respondents opting for a universalist system rather than a particular social group.

Compiled and amended from (Trompenaars and Hampden-Turner 1997, P35) and (Trompenaars and Hampden-Turner 1998, P35)

<b>Country</b>	<b>%</b>	<b>Country</b>	<b>%</b>
Israel	89	Germany	53
Romania	81	Pakistan	52
Nigeria	74	Italy	52
<b>Canada</b>	<b>71</b>	Ireland	50
USA	69	Greece	46
Czech Republic	68	Malaysia	45
Denmark	67	Portugal	44
Switzerland	66	Indonesia	44
Netherlands	65	Bahrain	44
Finland	64	Singapore	42
Spain	63	France	41
<b>Australia</b>	<b>63</b>	China	41
<b>Britain</b>	<b>61</b>	<b>Brazil</b>	<b>40</b>
Sweden	60	Philippines	40
Russia	60	<b>Japan</b>	<b>39</b>
Bulgaria	59	India	37
Poland	59	Mexico	32
Belgium	57	Nepal	31
Hungary	56	Egypt	30
Norway	54		
Venezuela	53	MEAN SCORE	54

Exhibit F-2. Percentage of respondents opting for individual freedom.  
 Compiled and amended from (Trompenaars and Hampden-Turner 1997, P51) and  
 (Trompenaars and Hampden-Turner 1998, P52)

<b>Country</b>	<b>%</b>	<b>Country</b>	<b>%</b>
Ethiopia	81	<b>Brazil</b>	<b>40</b>
<b>Japan</b>	<b>74</b>	Norway	39
Poland	70	Thailand	38
New Zealand	69	Greece	38
Hong Kong	64	Israel	38
Austria	59	Germany	35
China	55	Denmark	34
Indonesia	55	Italy	33
India	51	Switzerland	33
Bulgaria	50	Malaysia	32 <i>30</i>
<b>Canada</b>	<b>49</b>	France	30
Burkina Faso	49	Ireland	29
Singapore	48	Argentina	28
<b>Australia</b>	<b>48</b>	Russia	28 <i>24</i>
UAE	48	Bahrain	24
Nigeria	48	Philippines	23
Portugal	47	Venezuela	20
Sweden	46	Saudi Arabia	20
Netherlands	46	Cuba	20 <i>19</i>
Hungary	45	Spain	19
<b>Britain</b>	<b>45</b>	Oman	19
Czech Republic	44	Egypt	19
USA	43	Kuwait	15
Mexico	41		
Finland	41	MEAN SCORE	41
Belgium	40		

Exhibit F-3. Percentage of respondents who would not openly show emotion at work.  
 Compiled and amended from (Trompenaars and Hampden-Turner 1997, P70)  
 (Trompenaars and Hampden-Turner 1998, P71)

Note: Standard text shows data from Trompenaars and Hampden-Turner 1997. Italics show amendments and additions from Trompenaars and Hampden-Turner 1998.

<b>Country</b>	<b>%</b>	<b>Country</b>	<b>%</b>
Sweden	91	Hong Kong	73
Netherlands	91	Malaysia	72
Switzerland	90	Spain	71
Bulgaria	89	<b>Japan</b>	<b>71</b>
Czech Republic	89	Mexico	70
Finland	89	New Zealand	70
Hungary	89	Thailand	69
Denmark	89	Greece	67
<b>Britain</b>	<b>88</b>	Cuba	67
France	88	Saudi Arabia	67
<b>Canada</b>	<b>87</b>	India	66
Russia	86	Ethiopia	66
Uruguay	85	Austria	65
Ireland	84	South Korea	65
Germany	83	Egypt	63
Belgium	83	Bahrain	63
USA	82	Indonesia	58
Norway	80	Singapore	58
Philippines	78	Kenya	53
<b>Australia</b>	<b>78</b>	Venezuela	52
Oman	78	Kuwait	47
<b>Brazil</b>	<b>77</b>	Nigeria	46
UAE	76	Burkina Faso	41
Poland	76	Nepal	40
Israel	75	China	32
Pakistan	74		
Portugal	73	MEAN SCORE	72

Exhibit F-4. Percentage of respondents who would not help their boss outside of work hours.

Compiled and amended from (Trompenaars and Hampden-Turner 1997, P88) and (Trompenaars and Hampden-Turner 1998, P90)

Country	%	Country	%
Norway	94	Pakistan	78
Ireland	94	Ethiopia	76
Denmark	92	Germany	74
Finland	89	Russia	74
New Zealand	89	South Korea	73
<b>Britain</b>	<b>89</b>	Switzerland	73
USA	87	<i>Belgium</i>	72
<b>Canada</b>	<b>87</b>	<b><i>Brazil</i></b>	<b>70</b>
Sweden	87	Argentina	69
Czech Republic	87	Cuba	69
<b>Australia</b>	<b>86</b>	Bahrain	67
Portugal	86	Burkina Faso	63
France	83	Kenya	62
Hungary	83	Philippines	62
Spain	82	Serbia	60
Mexico	81	Hong Kong	58
China	81	India	57
Poland	80	Thailand	57
Italy	80	Oman	53
Greece	79	Austria	51
Singapore	79	Saudi Arabia	50
<b>Japan</b>	<b>79</b>	Kuwait	50
Bulgaria	78	MEAN SCORE	75

Exhibit F-5. Percentage of respondents who disagree that respect depends on family background.

Compiled and amended from (Trompenaars and Hampden-Turner 1997, P106) and (Trompenaars and Hampden-Turner 1998, P109)

Note: Standard text shows data from Trompenaars and Hampden-Turner 1997. Italics show amendments and additions from Trompenaars and Hampden-Turner 1998.

Country	Score	Country	Score
Hong Kong	5.71	Netherlands	4.63
Portugal	5.62	Norway	4.56
Czech Republic	5.55	Indonesia	4.55
Pakistan	5.47	Argentina	4.51
Austria	5.44	<b>Britain</b>	<b>4.50</b>
Serbia	5.33	Italy	4.44
South Korea	5.28	Spain	4.42
Hungary	5.25	<i>New Zealand</i>	<i>4.41</i>
Sweden	5.23	Thailand	4.40
Denmark	5.22	<b>Canada</b>	<b>4.38</b>
Finland	5.11	Belgium	4.35
China	5.07	Poland	4.31
France	4.89	USA	4.30
Switzerland	4.88	Malaysia	4.23
Egypt	4.83	<b>Australia</b>	<b>4.11</b>
Russia	4.75	Nigeria	4.10
Bahrain	4.73	India	4.03
<b>Japan</b>	<b>4.72</b>	<b>Brazil</b>	<b>3.85</b>
Singapore	4.71	Ireland	3.82
Cuba	4.69	Philippines	3.40
Germany	4.69		
Uruguay	4.67	MEAN SCORE	4.69

Exhibit F-6. Long versus short-termism: time horizon (7 = 1 years. 1 = seconds).  
 Compiled and amended from (Trompenaars and Hampden-Turner 1997, P128) and  
 (Trompenaars and Hampden-Turner 1998, P131)

Note: Standard text shows data from Trompenaars and Hampden-Turner 1997. Italics show amendments and additions from Trompenaars and Hampden-Turner 1998.



Country	%	Country	%
Romania	68	UAE	32
Cuba	56	Belgium	31
Spain	50	Italy	31
Nigeria	47	India	30
France	46	Germany	30
Denmark	45	Bulgaria	30
Portugal	44	Hong Kong	29
Norway	43	Switzerland	29
<b>Canada</b>	<b>42</b>	Russia	28
Greece	40	Ethiopia	28
<b>Brazil</b>	<b>39</b>	Hungary	28
South Korea	39	Philippines	26
Austria	38	Malaysia	26
Poland	38	Indonesia	25
Ireland	38	China	22
New Zealand	38	Sweden	21
Thailand	36	Singapore	20
<b>Australia</b>	<b>36</b>	<b>Japan</b>	<b>19</b>
Argentina	36	Kuwait	18
<b>Britain</b>	<b>36</b>	Oman	11
Mexico	34	Egypt	9
Saudi Arabia	33	Bahrain	9
Israel	33		
Netherlands	33		
USA	32	MEAN SCORE	33
Finland	32		

Exhibit F-7. Percentage of respondents who believe it is worth trying to control nature.

Compiled and amended from (Trompenaars and Hampden-Turner 1997, P143) and (Trompenaars and Hampden-Turner 1998, P147)

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### ANNEX G – REPLICATIONS OF THE VSM

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
1	(Hofstede 1983)	Yes	Yes	Yes	Yes	No	Arab Countries (Egypt, Lebanon, Libya, Kuwait, Iraq, Saudi Arabia, UAE), Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Colombia, Costa Rica, Denmark, East Africa (Kenya, Ethiopia, Zambia), Ecuador, Finland, France, Great Britain, Germany, Greece, Guatemala, Hong Kong, Indonesia, India, Iran, Ireland, Israel, Italy, Jamaica, Japan, South Korea, Malaysia, Mexico, Netherlands, Norway, New Zealand, Pakistan, Panama, Peru, Philippines, Portugal, South Africa, Salvador, Singapore, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, Uruguay, United States, Venezuela, West Africa (Nigeria, Ghana, Sierra Leone), Yugoslavia	'Culture's Consequences' (Hofstede 1980) primarily focussed on National differences. This paper uses the same data to discuss the influence of national culture on organisations. It argues that ethnocentric management theories, based on the value system of a particular country, are untenable. PDI and IDV are the most relevant dimensions for examining leadership.
2	(Hofstede and Bond 1984)	Yes	Yes	Yes	Yes	No	Australia, Hong Kong, India, Japan, New Zealand, Taiwan	Demonstrates the synergy between different cross-cultural studies.
3	(Hofstede and Bond 1988)	Yes	Yes	Yes	Yes	Yes	Australia, Brazil, Canada, Germany, Great Britain, Hong Kong, India, Japan, South Korea, Netherlands, New Zealand, Pakistan, Philippines, Singapore, Sweden, Taiwan, Thailand, United States, East Africa, West Africa	This paper marks a key development in the VSM. It demonstrates the power and influence of culture not only our daily lives but on the way we think and develop theories. The Chinese Value Survey (created by 'Eastern minds') demonstrated the existence of Confucian Dynamism, later to be known as Long Term Orientation.
4	(Shackleton and Ali 1990)	Yes	No	No	Yes	No	Based on the following organisations: four Sudanese, two British and one Pakistani based in Britain.	Values reported by the study demonstrate that the values of Sudanese managers matched those for other African and Arab nations. Values of the British samples were close to those reported by Hofstede. The study shows that the Pakistanis in Britain,

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
								despite a lifetime spent there, scored closer to their country of origin than to their current home.
5	(Leung, Bond et al. 1990)	No	No	Yes	No	No	Canada, Netherlands	On the basis of the Hofstede's analysis of femininity, it was predicted and confirmed that Dutch subjects preferred harmony-enhancing procedures more, and confrontational procedures less than did Canadian subjects.
6	(Hoppe 1990)	Yes	Yes	Yes	Yes	No	Australia, Belgium, Denmark, Finland, France, Germany, Britain, Greece, Ireland, Italy, Malta Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United States	Supports the validity of Hofstede's original four dimensions. Identifies that samples need to be matched to achieve valid results.
7	(Hofstede, Bond et al. 1993)	No	Yes	No	No	No	20 organisations from Denmark and Netherlands	Not specifically VSM but extends work on individualism. All text books on factor analysis assume that the cases in factor analysis derive from individuals and do not consider ecological data. Stability of results depends not on number of cultures or ecological groups studied but by the number of individuals.
8	(Randall 1993)	Yes	Yes	Yes	Yes	No	Compares VSM with results of organisational surveys from Australia, Britain, Canada, Israel, Japan, South, Korea, New Zealand, Pakistan, Scotland, Singapore, United States,	Further research is required to examine the practical utility of the VSM. Linguistic, regional, tribal, ethnic, religious, social class, and caste cleavages within nations make a single VSM score non-representative of a Nation. Organizational subcultures may add further differentiation. Researchers need to describe settings and samples in sufficient detail so that potential limitations can be recognized.
9	(Triandis, McCusker et al. 1993)	No	Yes	No	No	No	France, Venezuela, Poland, China, Chile, Illinois, Japan, Hong Kong, Indonesia, India	Results not specifically extracted from VSM but linked to IDV throughout. States that the most complete results are obtained when

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
								both etics and emics are examined.
10	(Bochner 1994)	No	Yes	No	No	No	Australia, Britain, Malaysia	IDV index is validated using the “I am” test.
11	(Chadwin, Rogers et al. 1995)	Yes	Yes	Yes	Yes	No	Refers to State and Local officials in United States	Argues that VSM indices are not perfect or eternally stable but they do provide an indication of cultural distance.
12	(Chew and Putti 1995)	Yes	Yes	Yes	Yes	No	Japan, Singapore	Findings of this paper suggest that VSM needs to be modified to be applicable to Singapore.
13	(Harrison 1995)	Yes	Yes	No	No	No	Australia, Singapore	Corroborates theoretical construct of PDI and IDV.
14	(Yeh and Lawrence 1995)	No	Yes	No	No	Yes	18 Countries not specified in the paper.	Argues that IDV and LTO are highly interrelated and are not independent dimensions of culture as presented by Hofstede. Also argues that the VSM is not sufficiently refined to provide an adequate relationship between culture and economic success.
15	(Salter 1995)	Yes	Yes	Yes	Yes	No	29 Countries not specified in the paper.	Compares Gray’s model which was developed from Hofstede’s work with VSM. Finds that Gray’s model is weak in explaining professional and regulatory structures from a cultural base.
16	(Albers-Miller and Gelb 1996)	Yes	Yes	Yes	Yes	No	Brazil, Chile, Finland, France, India, Israel, Japan, Mexico, South Africa, Taiwan, United States,	Identifies what it considers to be the following weaknesses of the VSM: <ul style="list-style-type: none"> <li>• It was based upon work undertaken twenty years prior to this paper</li> <li>• Developed empirically rather than theoretically.</li> <li>• Scales for the model were developed within an organizational setting.</li> </ul>
17	(Dawar, Parker et al. 1996)	Yes	Yes	No	Yes	No	Belgium, Britain, Canada, Denmark, France, Germany, Italy, Netherlands, Norway, Spain, United States	The interest of the VSM scores is not their absolute levels but the pattern of differences. UAI and PDI influence the locus of product information search. IDV in this context

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
								shows no relation to patterns of product information search.
18	(Eyjolfsdottir and Smith 1996)	Yes	Yes	Yes	Yes	No	Iceland	Examines the Icelandic pattern of business and management in relation to Iceland's culture.
19	(Humphreys 1996)	Yes	Yes	Yes	Yes	No	Senior technical managers from Britain and Egypt	Uses the VSM on matched samples of principals, vice principals and heads of department. Demonstrates that the export of culturally specific training is fraught with difficulty. Instruments such as the VSM can be used as diagnostic devices in order to determine the nature of cultural difference.
20	(Redpath and Nielsen 1997)	Yes	Yes	Yes	Yes	Yes	Native and non-Native Canadians	Uses the VSM to examine the connections between cultural values and management practices.
21	(Fernandez, Carlson et al. 1997)	Yes	Yes	Yes	Yes	No	Chile, China, Germany, Japan, Mexico, Russia, USA, Venezuela, Yugoslavia	This study suggests there have been significant shifts in values in some countries since Hofstede conducted his original study.
22	(Iribarne 1997)	Yes	Yes	Yes	Yes	No	France, Netherlands, United States	Concludes that the VSM (after 16 years at the time this study was published) has not been surpassed by any other work of the same kind. Limitations tend to be of social science research in general.
23	(Soeters 1997)	Yes	Yes	Yes	Yes	No	Military academies from Belarus, Belgium, Britain, Canada, Denmark, France, Germany, Hungary, Italy, Netherlands, Norway, Spain, United States	Results were: <ul style="list-style-type: none"> <li>• PDI much higher than civilian samples from Hofstede's and Hoppe's studies</li> <li>• IDV all but two lower (more collective) previous studies.</li> <li>• MAS all lower than their civilian counterparts.</li> <li>• UAI mixed results but most within three positions of previous studies</li> <li>• LTO conceptual relevance for military not clear and therefore not included in</li> </ul>

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
								this study.
24	(Soeters and Recht 1998)	Yes	Yes	Yes	Yes	No	Military academies from Argentina, Belarus, 25Belgium, Brazil, Britain, Canada, Denmark, France, Germany, Hungary, Italy, Lithuania, Netherlands, Norway, South Africa, Spain, Sweden, United States	The results of this paper indicate the existence of one international military culture, although there are significant differences between the various national academies. This study is important as it not only replicates the VSM but examines military culture from an organisational perspective. Samples were an average of just over 50 cadets per country and were extended from the 1997 study above.
25	(Soeters and Recht 1998)	Yes	Yes	Yes	Yes	Yes	Britain, Germany, Italy, Norway, Spain, United States	National differences in military cultures are at least as large as in civilian business and public administration organisations. Military cultures tend to correspond to the national cultures from which they stem.
26	(Merritt) accessed 2000	Yes	Yes	Yes	Yes	No	9,000 male commercial airline pilots in 18 countries	Data were used to conduct a replication study of Hofstede's four dimensions of national culture. The dimensions of PDI and IDV were replicated successfully. MAS and UAI showed only moderate replicability – the former due to poor conceptual relevance in the aviation context, the latter due to the operational derivation of a valid concept. PDI and UAI were identified as the most relevant dimensions for aviation
27	(Hagen 2001)	Yes	Yes	Yes	Yes	No	Dutch and German contingents of the GE/NL Corps (Army)	Examines the similarities and differences between the German and the Dutch contingent of the GE/NL Corps at the date of the survey, and how these relationships have changed over time. One question here is of long-term interest: Is it in the future possible for a common organisational culture to develop in the context of diverse nations,

Ser	Author/Study	PDI	IDV	MAS	UAI	LTO	Country/Org	Issues from the studies and remarks
								ones which are differentiated by culturally-specific values? If so, what role does time play in the crystallisation of a common culture?

**ANNEX G REFERENCES**

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**ANNEX H – AUSTRALIA VSM DATA**

**Military VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25	
N Valid	129	129	129	129	128	127	129	129	129	128	129	128	128	129	129	129	129	129	128	128	119	129	128	129	129	
Missing	0	0	0	0	1	2	0	0	0	1	0	1	1	0	0	0	0	0	1	1	10	0	1	0	0	
Mean	1.5891	2.2248	1.7597	2.1395	1.8984	2.1024	1.7209	1.7209	2.0620	2.7266	2.2248	2.7969	2.7734	3.3411	2.2248	2.6357	2.0078	3.2248	3.4531	2.7500	1.1008	4.8527	5.5703	3.0155	3.0388	
Median	1.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	2.0000	2.0000	2.0000	3.0000	4.0000	3.0000	1.0000	5.0000	6.0000	3.0000	3.0000	
Mode	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	3.00	3.00	3.00	2.00	2.00	1.00	4.00	4.00	2.00	1.00	5.00	3.00	3.00	3.00	
Std. Deviation	.7247	.7420	.6588	.8076	.6501	.6526	.7498	.6844	.7154	.8668	.7098	.8727	.6175	.8524	.6759	1.0454	1.1004	.9121	1.0413	.9474	.3024	.7082	2.2542	.6613	.3624	
Variance	.5252	.5506	.4340	.6523	.4227	.4259	.5621	.4684	.5117	.7514	.5038	.7616	.3813	.7265	.4569	1.0928	1.2109	.8319	1.0844	.8976	9.144E-02	.5016	5.0816	.4373	.1313	
Range	4.00	4.00	3.00	3.00	4.00	3.00	4.00	4.00	3.00	4.00	4.00	4.00	3.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00	1.00	3.00	8.00	2.00	3.00	
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.00
Maximum	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	2.00	6.00	9.00	4.00	4.00	
Sum	205.00	287.00	227.00	276.00	243.00	267.00	222.00	222.00	266.00	349.00	287.00	358.00	355.00	431.00	287.00	340.00	259.00	416.00	442.00	352.00	131.00	626.00	713.00	389.00	392.00	

**Australia – Military VSM Mean Scores**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.59</u>	<u>2.22</u>	<u>1.76</u>	<u>2.14</u>	<u>1.9</u>	<u>2.1</u>	<u>1.72</u>	<u>1.72</u>	<u>2.06</u>	<u>2.73</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.22</u>	<u>2.8</u>	<u>2.77</u>	<u>3.34</u>	<u>2.22</u>	<u>2.64</u>	<u>2</u>	<u>3.22</u>	<u>3.45</u>	<u>2.75</u>

### Australia – Military VSM Calculations

	Q3		Q6		Q14		Q17				
<b>PDI</b>	-35*( <u>1.76</u> )	35*( <u>2.1</u> )	25*( <u>3.34</u> )	-20*( <u>2</u> )							
	-61.6	+ 73.5	+ 83.5	+ -40	- 20	=					<b>35.4</b>
	Q1		Q2		Q4		Q8				
<b>IDV</b>	-50*( <u>1.59</u> )	30*( <u>2.22</u> )	20*( <u>2.14</u> )	-25*( <u>1.72</u> )							
	-79.5	+ 66.6	+ 42.8	+ -43	+ 130	=					<b>116.9</b>
	Q5		Q7		Q15		Q20				
<b>MAS</b>	60*( <u>1.9</u> )	-20*( <u>1.72</u> )	20*( <u>2.22</u> )	-70*( <u>2.75</u> )							
	114	+ -34.4	+ 44.4	+ -192.5	+ 100	=					<b>31.5</b>
	Q13		Q16		Q18		Q19				
<b>UAI</b>	25*( <u>2.77</u> )	20*( <u>2.64</u> )	-50*( <u>3.22</u> )	-15*( <u>3.45</u> )							
	69.25	+ 52.8	+ -161	+ -51.75	+ 120	=					<b>29.3</b>
	Q9		Q10		Q11		Q12				
<b>LTO</b>	45*( <u>2.06</u> )	-30*( <u>2.73</u> )	-35*( <u>2.22</u> )	15*( <u>2.8</u> )							
	92.7	+ -81.9	+ -77.7	+ 42	+ 67	=					<b>42.1</b>

### Australia - Navy VSM Statistics

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	27	27	27	27	27	27	27	27	27	27	27	27	26	27	27	27	27	27	27	27	24	27	26	27	27
Missing	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	1	0	0
Mean	1.6667	2.1852	1.8148	2.2593	2.0370	2.3333	1.7407	1.7037	2.2593	2.5185	2.2963	2.8889	2.6923	3.6296	2.0741	2.5926	2.0000	3.1852	3.7778	2.7037	1.0833	4.8889	4.8846	2.0000	3.0370
Median	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000	3.0000	3.0000	4.0000	2.0000	2.0000	2.0000	3.0000	4.0000	3.0000	1.0000	5.0000	3.5000	2.0000	3.0000
Mode	1.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	3.00	2.00	3.00	3.00	4.00	2.00	2.00	1.00	4.00	4.00	2.00	1.00	5.00	3.00	2.00	3.00
Std. Deviation	.6794	.7357	.6815	.8130	.5175	.7338	.7121	.7240	.7642	.8024	.6086	.6405	.6794	.9260	.4744	.9711	1.1435	.9623	.7511	.9533	.2823	.8473	2.1969	.0000	.1925
Variance	.4615	.5413	.4644	.6610	.2678	.5385	.5071	.5242	.5840	.6439	.3704	.4103	.4615	.8575	.2251	.9430	1.3077	.9259	.5641	.9088	7.971E-02	.7179	4.8262	.0000	3.704E-02
Range	2.00	3.00	3.00	3.00	2.00	3.00	2.00	2.00	3.00	3.00	2.00	2.00	3.00	3.00	3.00	3.00	4.00	4.00	3.00	3.00	1.00	3.00	6.00	.00	1.00
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	3.00	3.00	2.00	3.00
Maximum	3.00	4.00	4.00	4.00	3.00	4.00	3.00	3.00	4.00	4.00	3.00	4.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	4.00	2.00	6.00	9.00	2.00	4.00
Sum	45.00	59.00	49.00	61.00	55.00	63.00	47.00	46.00	61.00	68.00	62.00	78.00	70.00	98.00	56.00	70.00	54.00	86.00	102.00	73.00	26.00	132.00	127.00	54.00	82.00

### Australia – Navy VSM Mean Scores

<b>Q1</b> <u>1.66</u>	<b>Q2</b> <u>2.18</u>	<b>Q3</b> <u>1.81</u>	<b>Q4</b> <u>2.26</u>	<b>Q5</b> <u>2.04</u>	<b>Q6</b> <u>2.33</u>	<b>Q7</b> <u>1.74</u>	<b>Q8</b> <u>1.7</u>	<b>Q9</b> <u>2.26</u>	<b>Q10</b> <u>2.52</u>
<b>Q11</b> <u>2.3</u>	<b>Q12</b> <u>2.89</u>	<b>Q13</b> <u>2.69</u>	<b>Q14</b> <u>3.63</u>	<b>Q15</b> <u>2.07</u>	<b>Q16</b> <u>2.59</u>	<b>Q17</b> <u>2</u>	<b>Q18</b> <u>3.18</u>	<b>Q19</b> <u>3.78</u>	<b>Q20</b> <u>2.7</u>

**Australia – Navy VSM Calculations**

<b>PDI</b>	-35*(	<u>Q3</u> <u>1.81</u>	)	35*(	<u>Q6</u> <u>2.33</u>	)	25*(	<u>Q14</u> <u>3.63</u>	)	-20*(	<u>Q17</u> <u>2</u>	)	-40	-	20	=	<b>48.95</b>
		-63.35		+	81.55		+	90.75		+	-40						
<b>IDV</b>	-50*(	<u>Q1</u> <u>1.66</u>	)	30*(	<u>Q2</u> <u>2.18</u>	)	20*(	<u>Q4</u> <u>2.26</u>	)	-25*(	<u>Q8</u> <u>1.7</u>	)	-42.5	+	130	=	<b>115.1</b>
		-83		+	65.4		+	45.2		+	-42.5						
<b>MAS</b>	60*(	<u>Q5</u> <u>2.04</u>	)	-20*(	<u>Q7</u> <u>1.74</u>	)	20*(	<u>Q15</u> <u>2.07</u>	)	-70*(	<u>Q20</u> <u>2.7</u>	)	-189	+	100	=	<b>40</b>
		122.4		+	-34.8		+	41.4		+	-189						
<b>UAI</b>	25*(	<u>Q13</u> <u>2.69</u>	)	20*(	<u>Q16</u> <u>2.59</u>	)	-50*(	<u>Q18</u> <u>3.18</u>	)	-15*(	<u>Q19</u> <u>3.78</u>	)	-56.7	+	120	=	<b>23.35</b>
		67.25		+	51.8		+	-159		+	-56.7						
<b>LTO</b>	45*(	<u>Q9</u> <u>2.26</u>	)	-30*(	<u>Q10</u> <u>2.52</u>	)	-35*(	<u>Q11</u> <u>2.3</u>	)	15*(	<u>Q12</u> <u>2.89</u>	)	43.35	+	67	=	<b>55.95</b>
		101.7		+	-75.6		+	-80.5		+	43.35						

**Australia - Army VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	73	73	73	73	72	71	73	73	73	72	73	72	73	73	73	73	73	73	72	72	68	73	73	73	73
Missing	0	0	0	0	1	2	0	0	0	1	0	1	0	0	0	0	0	0	1	1	5	0	0	0	0
Mean	1.5753	2.2740	1.7945	2.1096	1.9306	2.0845	1.6712	1.7260	1.9452	2.8472	2.1370	2.8333	2.8082	3.3014	2.3288	2.6849	1.9863	3.2329	3.3472	2.6944	1.1324	4.6849	5.7808	3.0000	3.1096
Median	1.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	2.0000	2.0000	2.0000	4.0000	4.0000	2.0000	1.0000	5.0000	6.0000	3.0000	3.0000
Mode	1.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	2.00	3.00	2.00	3.00	3.00	3.00	2.00	2.00	1.00	4.00	4.00	2.00	1.00	5.00	3.00	3.00	3.00
Std. Deviation	.7438	.7314	.6446	.8090	.6782	.6035	.7464	.6511	.6850	.9293	.7325	.9494	.5930	.8610	.7082	1.1289	1.0992	.9208	1.1026	.9137	.3414	.6428	2.2928	.0000	.3145
Variance	.5533	.5350	.4155	.6545	.4599	.3642	.5571	.4239	.4692	.8637	.5365	.9014	.3516	.7412	.5015	1.2744	1.2081	.8478	1.2158	.8349	.1165	.4132	5.2568	.0000	9.893E-02
Range	4.00	4.00	3.00	3.00	4.00	3.00	4.00	4.00	3.00	4.00	4.00	4.00	3.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00	1.00	2.00	8.00	.00	1.00
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	4.00	1.00	3.00	3.00
Maximum	5.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	4.00	5.00	5.00	5.00	5.00	5.00	2.00	6.00	9.00	3.00	4.00
Sum	115.00	166.00	131.00	154.00	139.00	148.00	122.00	126.00	142.00	205.00	156.00	204.00	205.00	241.00	170.00	196.00	145.00	236.00	241.00	194.00	77.00	342.00	422.00	219.00	227.00

**Australia – Army VSM Mean Scores**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<b><u>1.57</u></b>	<b><u>2.27</u></b>	<b><u>1.79</u></b>	<b><u>2.11</u></b>	<b><u>1.93</u></b>	<b><u>2.08</u></b>	<b><u>1.67</u></b>	<b><u>1.73</u></b>	<b><u>1.94</u></b>	<b><u>2.85</u></b>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<b><u>2.14</u></b>	<b><u>2.83</u></b>	<b><u>2.81</u></b>	<b><u>3.3</u></b>	<b><u>2.33</u></b>	<b><u>2.68</u></b>	<b><u>1.99</u></b>	<b><u>3.23</u></b>	<b><u>3.35</u></b>	<b><u>2.69</u></b>

**Australia – Army VSM Calculations**

<b>PDI</b>	-35*(	<u><b>1.79</b></u>	)	35*(	<u><b>2.08</b></u>	)	25*(	<u><b>3.3</b></u>	)	-20*(	<u><b>1.99</b></u>	)								
		-62.65		+	72.8		+	82.5		+	-39.8		-	20	=	<b>32.85</b>				
<b>IDV</b>	-50*(	<u><b>1.57</b></u>	)	30*(	<u><b>2.27</b></u>	)	20*(	<u><b>2.11</b></u>	)	-25*(	<u><b>1.73</b></u>	)								
		-78.5		+	68.1		+	42.2		+	-43.25		+	130	=	<b>118.55</b>				
<b>MAS</b>	60*(	<u><b>1.93</b></u>	)	-20*(	<u><b>1.67</b></u>	)	20*(	<u><b>2.33</b></u>	)	-70*(	<u><b>2.69</b></u>	)								
		115.8		+	-33.4		+	46.6		+	-188.3		+	100	=	<b>40.7</b>				
<b>UAI</b>	25*(	<u><b>2.81</b></u>	)	20*(	<u><b>2.68</b></u>	)	-50*(	<u><b>3.23</b></u>	)	-15*(	<u><b>3.35</b></u>	)								
		70.25		+	53.6		+	-161.5		+	-50.25		+	120	=	<b>32.1</b>				
<b>LTO</b>	45*(	<u><b>1.94</b></u>	)	-30*(	<u><b>2.85</b></u>	)	-35*(	<u><b>2.14</b></u>	)	15*(	<u><b>2.83</b></u>	)								
		87.3		+	-85.5		+	-74.9		+	42.45		+	67	=	<b>36.35</b>				



### Australia – Air Force VSM Statistics

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	27	29	29	29	29
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
Mean	1.55172	1.1379	1.6207	2.1034	1.6897	1.9310	1.8276	1.7241	2.1724	2.6207	2.3793	2.6207	2.7586	3.1724	2.1034	2.5517	2.0690	3.2414	3.4138	2.9310	1.0370	5.2414	5.6552	4.0000	2.8621
Median	1.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	2.0000	2.0000	2.0000	3.0000	4.0000	3.0000	1.0000	5.0000	6.0000	4.0000	3.0000
Mode	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	3.00	3.00	2.00	2.00	1.00	3.00	4.00	2.00	1.00	5.00	3.00	4.00	3.00
Std. Deviation	.7361	.7894	.6769	.8170	.6603	.6509	.8048	.7510	.7106	.7277	.7277	.8625	.6356	.7106	.7243	.9097	1.0997	.8724	1.0862	1.0327	.1925	.5766	2.1593	.0000	.5158
Variance	.5419	.6232	.4581	.6675	.4360	.4236	.6478	.5640	.5049	.5296	.5296	.7438	.4039	.5049	.5246	.8276	1.2094	.7611	1.1798	1.0665	3.704E-02	.3325	4.6626	.0000	.2660
Range	3.00	3.00	3.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	4.00	4.00	4.00	1.00	2.00	6.00	.00	2.00
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	4.00	3.00	4.00	1.00
Maximum	4.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	5.00	5.00	2.00	6.00	9.00	4.00	3.00
Sum	45.00	62.00	47.00	61.00	49.00	56.00	53.00	50.00	63.00	76.00	69.00	76.00	80.00	92.00	61.00	74.00	60.00	94.00	99.00	85.00	28.00	152.00	164.00	116.00	83.00

### Australia – Air Force VSM Mean Scores

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.55</u>	<u>2.14</u>	<u>1.62</u>	<u>2.1</u>	<u>1.69</u>	<u>1.93</u>	<u>1.83</u>	<u>1.72</u>	<u>2.17</u>	<u>2.62</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.38</u>	<u>2.62</u>	<u>2.76</u>	<u>3.17</u>	<u>2.1</u>	<u>2.55</u>	<u>2.07</u>	<u>3.24</u>	<u>3.41</u>	<u>2.93</u>

**Australia – Air Force VSM**

<b>PDI</b>	Q3		Q6		Q14		Q17				
	-35*( <u>1.62</u> )	35*( <u>1.93</u> )	25*( <u>3.17</u> )	-20*( <u>2.07</u> )							
	-56.7	+	67.55	+	79.25	+	-41.4	-	20	=	<b>28.7</b>
<b>IDV</b>	Q1		Q2		Q4		Q8				
	-50*( <u>1.55</u> )	30*( <u>2.14</u> )	20*( <u>2.1</u> )	-25*( <u>1.72</u> )							
	-77.5	+	64.2	+	42	+	-43	+	130	=	<b>115.7</b>
<b>MAS</b>	Q5		Q7		Q15		Q20				
	60*( <u>1.69</u> )	-20*( <u>1.83</u> )	20*( <u>2.1</u> )	-70*( <u>2.93</u> )							
	101.4	+	-36.6	+	42	+	-205.1	+	100	=	<b>1.7</b>
<b>UAI</b>	Q13		Q16		Q18		Q19				
	25*( <u>2.76</u> )	20*( <u>2.55</u> )	-50*( <u>3.24</u> )	-15*( <u>3.41</u> )							
	69	+	51	+	-162	+	-51.15	+	120	=	<b>26.85</b>
<b>LTO</b>	Q9		Q10		Q11		Q12				
	45*( <u>2.17</u> )	-30*( <u>2.62</u> )	-35*( <u>2.38</u> )	15*( <u>2.62</u> )							
	97.65	+	-78.6	+	-83.3	+	39.3	+	67	=	<b>42.05</b>

**Australia - Navy VSM Recorded Responses**

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
23/11/00/7	1	2	2	1	2	3	2	2	3	3	2	2	3	4	2	2	1	1	3	4	1	6	9	2	3
29/09/00/15	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3	2	4	4	5	2	1	4	8	2	3
29/09/00/14	3	1	1	1	2	2	2	1	3	1	1	4	3	2	2	2	5	4	4	3	1	4	6	2	3
12/9/1/46	1	3	2	1	3	3	1	2	2	3	3	2	2	5	2	2	1	3	4	3	1	5	8	2	3
12/9/1/45	1	2	1	3	2	2	2	2	3	2	2	3	2	2	2	2	2	3	3	4	2	4	8	2	3
12/9/1/44	1	3	2	2	2	2	1	3	2	4	3	3	2	4	2	2	2	4	4	3	1	5	3	2	3
12/9/1/43	1	2	2	2	2	2	2	2	2	3	2	3	3	4	2	4	2	3	2	2	1	5	6	2	3
12/9/1/42	2	2	2	1	2	2	1	1	1	3	2	2	3	3	2	4	3	3	4	2	1	5	3	2	3
12/9/1/40	2	2	1	1	2	2	1	1	2	2	2	2	3	4	2	2	2	4	4	2	1	6	3	2	3
12/9/1/39	2	2	3	2	2	3	2	1	2	2	3	3	3	3	2	3	2	4	4	3	1	3	3	2	3
12/9/1/38	1	2	1	2	2	2	2	1	3	3	3	4	3	4	2	4	2	3	4	4	1	4	7	2	3
12/9/1/37	1	2	2	3	2	2	1	1	2	3	2	3	3	3	2	4	1	3	4	2	0	4	8	2	3
12/9/1/36	1	3	2	3	2	3	3	2	2	2	3	3	2	4	1	2	4	4	4	2	1	5	8	2	3
12/9/1/35	2	2	1	2	1	2	2	3	1	3	3	4	3	5	2	2	1	2	4	4	1	6	6	2	4
12/9/1/34	3	3	2	3	2	3	2	1	4	3	2	3	3	2	2	2	4	4	4	2	1	4	3	2	3
12/9/1/33	1	2	2	4	1	1	2	2	1	1	3	4	1	2	2	2	1	3	4	1	1	5	3	2	3
12/9/1/32	1	4	4	2	3	4	3	1	3	2	2	2	2	5	2	5	1	2	4	3	1	6	5	2	3
12/9/1/31	1	1	1	2	2	3	2	1	1	1	2	3	3	5	4	2	2	4	4	3	1	5	3	2	3
12/9/1/30	2	2	2	3	3	2	3	3	2	3	2	3	4	4	2	2	1	2	5	4	1	5	3	2	3
12/9/1/29	3	2	2	2	1	1	1	1	3	2	1	2	2	4	2	2	1	4	2	2	1	4	3	2	3
12/9/1/28	2	2	2	2	2	3	2	2	2	3	3	3	2	3	2	4	2	2	3	2	0	5	5	2	3
12/9/1/27	2	2	2	3	3	2	3	3	2	3	2	3	2	3	2	2	2	4	4	4	2	5	3	2	3
12/9/1/26	1	1	1	2	2	1	1	2	2	2	2	3	3	4	2	2	2	2	4	4	1	6	0	2	3
12/9/1/25	2	3	2	3	2	2	1	1	2	3	2	3	3	4	2	4	3	2	3	3	1	5	4	2	3
12/9/1/24	2	1	1	3	2	3	1	1	3	4	2	2	3	4	2	2	1	5	5	1	0	4	3	2	3
12/9/1/23	2	3	2	3	2	3	1	2	3	2	3	3	0	4	2	2	1	4	4	2	1	6	3	2	3
12/9/1/22	2	3	2	3	2	3	1	2	3	2	3	3	4	4	2	2	1	3	3	2	1	6	3	2	3

**Australia - Army VSM Recorded Responses**

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
23/11/00/5	1	1	1	1	1	1	1	1	2	2	3	2	3	5	2	2	1	3	2	2	1	5	9	3	3
08/01/01/4	5	4	4	4	5	3	5	5	3	2	5	5	2	3	3	4	2	3	2	2	2	5	7	3	4
08/01/01/3	3	3	2	3	2	2	1	1	1	3	1	3	3	4	2	1	3	4	4	2	1	5	8	3	3
04/10/00/5	1	2	2	2	2	2	2	2	2	4	2	4	2	3	2	4	4	4	4	2	1	4	7	3	4
20/09/00/3	2	3	3	3	3	3	3	3	3	3	3	3	3	2	2	4	2	4	4	4	1	5	9	3	4
20/09/00/2	2	1	2	3	2	1	1	2	2	3	2	4	3	4	2	3	3	3	5	4	1	4	6	3	4
20/09/00/1	2	2	2	3	1	2	2	2	1	3	2	3	3	4	2	2	2	2	0	0	1	5	9	3	3
18/09/00/29	1	3	2	2	2	2	1	2	2	3	2	3	3	3	4	4	2	3	4	3	1	5	8	3	4
18/09/00/28	1	3	1	1	2	2	2	1	1	1	1	3	3	4	2	1	1	1	5	4	1	6	3	3	3
18/09/00/27	1	3	2	2	2	2	2	2	3	3	2	3	3	2	2	4	4	2	4	2	1	5	7	3	3
18/09/00/26	1	2	1	1	1	2	1	1	2	2	2	1	3	3	2	4	1	2	1	3	1	5	7	3	4
18/09/00/25	1	2	1	3	1	2	1	1	2	4	1	2	2	3	2	1	5	4	2	4	1	5	8	3	3
18/09/00/24	2	2	2	2	2	2	3	2	2	3	3	3	3	3	2	4	3	4	4	3	2	4	7	3	3
18/09/00/23	2	2	2	3	2	1	1	2	2	2	2	3	2	3	2	1	2	4	3	2	1	6	3	3	3
18/09/00/22	1	2	2	2	1	2	1	2	2	1	1	2	4	4	2	2	1	4	4	2	1	5	9	3	3
18/09/00/21	2	2	2	3	1	2	2	2	4	4	2	2	3	3	4	2	3	4	4	3	1	5	9	3	3
18/09/00/20	2	2	3	1	2	2	2	1	2	3	2	0	3	2	3	4	2	3	4	4	1	6	6	3	3
18/09/00/19	2	2	1	3	2	2	2	2	2	3	1	4	3	4	2	1	1	2	4	4	2	4	7	3	3
18/09/00/18	2	2	2	2	2	2	1	2	2	3	2	3	3	4	4	2	2	4	2	2	1	5	9	3	3
18/09/00/17	1	2	2	2	1	2	2	1	2	5	2	3	3	4	2	1	2	4	4	3	1	5	5	3	3
18/09/00/16	1	2	2	1	2	2	2	2	1	3	3	3	3	3	2	2	5	4	3	4	2	5	6	3	4
18/09/00/15	2	2	1	2	2	2	2	2	2	3	2	2	3	3	3	2	2	4	4	2	2	5	9	3	3
18/09/00/14	1	2	1	3	2	3	2	2	3	0	4	4	2	3	4	3	1	4	2	2	1	5	9	3	3
18/09/00/13	2	2	1	1	1	0	1	2	2	2	2	1	3	4	4	3	2	2	3	3	1	5	8	3	3
25/03/01/28	2	2	1	2	2	1	1	1	2	2	2	3	3	3	3	3	1	2	4	3	1	4	8	3	3

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
25/03/01/27	2	4	3	1	1	3	3	2	1	3	2	2	3	3	2	2	2	2	4	2	1	4	3	3	3
25/03/01/26	2	2	2	2	1	1	1	2	1	2	2	2	3	3	2	2	2	2	1	3	1	5	3	3	3
25/03/01/25	1	2	2	2	2	2	2	2	3	5	3	4	1	3	2	4	2	4	3	2	0	5	3	3	3
25/03/01/24	1	2	2	4	2	2	1	2	2	3	2	3	3	5	4	2	3	4	4	2	1	4	6	3	3
25/03/01/23	1	2	1	3	1	2	1	2	2	3	2	3	2	3	2	2	1	4	4	1	1	5	6	3	3
25/03/01/22	1	2	3	2	2	2	2	1	2	3	3	5	3	3	2	2	1	3	4	2	1	4	8	3	3
25/03/01/21	2	3	1	3	2	1	1	1	2	3	1	3	4	3	1	2	1	4	5	2	1	4	8	3	3
25/03/01/20	2	3	2	1	1	3	3	2	1	3	2	1	3	4	2	2	1	1	1	2	1	4	3	3	3
25/03/01/19	2	3	1	3	2	2	2	1	2	2	2	2	2	4	2	4	2	3	4	4	1	4	5	3	3
25/03/01/18	2	2	2	2	2	0	1	1	2	3	2	3	2	4	3	1	2	4	4	4	1	5	5	3	3
25/03/01/17	2	2	1	2	2	2	2	1	2	2	2	3	3	4	3	5	1	2	4	2	1	5	7	3	3
25/03/01/16	2	2	2	2	2	2	2	2	2	4	2	3	3	3	2	3	1	2	3	3	1	5	3	3	3
25/03/01/15	2	3	2	3	3	3	3	2	3	3	3	2	2	4	2	2	2	4	4	2	1	4	3	3	3
25/03/01/14	1	2	2	1	2	2	1	2	1	3	3	4	4	4	2	4	2	4	4	4	1	4	3	3	3
25/03/01/13	1	2	2	2	2	4	1	2	2	2	2	3	3	5	2	4	1	3	1	4	1	4	3	3	3
25/03/01/12	1	1	1	2	2	1	1	2	1	4	2	2	3	3	2	4	3	4	4	2	1	4	3	3	3
25/03/01/11	1	1	1	1	1	2	1	1	1	2	1	1	2	2	3	2	1	2	3	4	2	6	3	3	3
25/03/01/10	1	2	2	2	2	2	1	1	2	3	2	3	4	4	2	2	2	4	4	4	1	4	7	3	3
25/03/01/9	2	2	2	2	2	3	1	2	2	2	2	1	3	4	2	2	1	4	2	2	1	5	3	3	3
25/03/01/8	1	3	2	3	3	3	2	1	2	2	2	4	3	4	3	1	4	4	3	4	1	4	5	3	3
25/03/01/7	1	2	2	1	2	2	2	2	2	4	2	2	3	3	2	4	1	4	1	2	1	4	3	3	3
25/03/01/6	1	3	2	2	3	3	2	2	2	4	3	3	2	3	2	2	2	4	2	2	1	5	8	3	3
25/03/01/5	2	2	2	1	2	2	1	1	2	3	2	2	3	4	2	3	2	4	2	2	1	5	7	3	3
25/03/01/4	1	2	2	3	2	2	3	3	1	3	2	3	3	3	2	4	1	4	4	3	1	4	3	3	3
25/03/01/3	1	2	2	2	2	2	2	2	1	3	2	2	2	2	4	2	2	2	4	1	1	5	3	3	3
25/03/01/2	1	2	1	1	3	2	2	2	1	2	2	2	3	3	2	2	1	4	4	5	1	5	3	3	3
25/03/01/1	1	2	2	2	2	2	1	2	1	2	2	2	3	3	1	4	1	4	2	3	1	4	5	3	3
12/9/1/21	1	2	1	3	2	2	1	1	2	1	2	1	2	2	2	2	3	3	4	2	1	4	3	3	3
12/9/1/20	1	3	1	3	2	2	2	1	1	2	2	4	4	4	2	2	1	3	5	2	1	5	6	3	3

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
12/9/1/19	1	2	1	3	2	2	1	2	2	1	2	4	3	2	2	2	2	4	4	2	2	5	6	3	3
12/9/1/18	2	1	1	1	0	2	1	2	2	2	1	2	3	4	3	4	1	2	3	2	1	5	8	3	3
12/9/1/17	2	3	2	2	2	3	1	2	3	4	3	3	3	4	2	4	2	3	4	2	2	4	8	3	3
12/9/1/16	3	5	1	2	1	1	1	2	2	3	1	3	2	1	2	1	1	3	4	3	2	5	7	3	3
12/9/1/15	2	3	3	2	3	3	2	2	2	4	3	5	3	3	2	4	2	3	3	2	0	4	3	3	3
12/9/1/14	1	2	3	2	1	2	2	2	2	3	2	3	2	1	2	2	1	4	5	2	0	5	3	3	3
12/9/1/13	1	2	2	1	2	2	2	2	1	1	1	2	4	5	4	2	4	3	2	2	1	5	8	3	3
12/9/1/12	2	3	2	3	3	3	2	2	2	4	2	3	3	3	3	2	4	4	2	3	1	4	8	3	3
12/9/1/11	1	1	2	1	2	2	1	2	1	3	3	4	3	5	2	3	1	2	4	4	0	4	5	3	3
12/9/1/10	1	2	2	2	2	1	1	1	2	3	2	3	3	3	2	2	2	2	4	2	1	5	8	3	3
12/9/1/9	1	1	1	2	2	2	2	2	2	2	2	3	2	3	2	2	1	2	1	2	1	6	8	3	4
12/9/1/8	2	2	1	3	2	3	2	2	2	3	3	4	3	3	2	2	4	3	4	3	1	5	5	3	3
12/9/1/7	2	3	2	3	1	2	2	1	3	3	2	3	2	2	2	1	1	4	4	2	1	4	6	3	3
12/9/1/6	4	3	2	3	2	2	2	2	3	4	2	3	3	3	2	4	5	2	3	3	0	4	8	3	3
12/9/1/5	1	3	2	1	2	2	2	1	2	2	2	3	3	4	2	4	1	4	2	2	1	4	3	3	3
12/9/1/4	1	2	2	1	2	2	1	1	3	3	2	3	3	3	2	4	2	4	4	4	1	4	3	3	3
12/9/1/3	1	2	2	2	2	2	1	1	1	5	2	3	3	3	2	4	2	3	4	2	1	4	3	3	3
12/9/1/2	2	3	2	2	2	2	2	1	3	4	4	2	2	4	2	4	1	5	4	2	1	6	1	3	3
12/9/1/1	2	3	2	2	3	2	2	2	3	3	2	4	3	3	2	4	2	3	4	4	1	6	7	3	3

**Australia – Air Force VSM Recorded Responses**

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
23/11/00/14	2	3	2	3	1	2	3	1	2	1	2	2	3	4	2	1	3	4	5	4	1	6	9	4	3
23/11/00/13	4	3	4	4	4	3	4	4	4	3	4	4	2	3	3	3	4	4	3	3	1	6	8	4	3
23/11/00/11	2	1	1	3	2	2	1	1	3	3	2	4	3	3	2	2	4	4	4	4	1	5	7	4	3
23/11/00/10	1	2	2	2	1	2	3	3	2	2	2	2	2	3	1	2	1	3	4	3	1	5	5	4	3
23/11/00/9	2	2	1	1	1	2	2	2	2	3	3	3	3	4	2	3	4	3	4	2	1	5	9	4	1
23/11/00/2	1	2	1	4	2	1	3	2	2	3	2	2	4	5	3	4	1	3	4	2	1	5	4	4	3
23/11/00/3	2	3	2	2	1	2	2	2	3	3	2	3	2	4	3	2	3	3	1	3	1	5	7	4	3
11/11/00/3	1	2	2	2	2	2	1	2	3	3	3	4	2	3	2	4	3	3	3	2	1	5	8	4	3
23/11/00/1	2	3	1	2	1	1	3	1	2	3	1	3	3	3	2	2	4	2	4	5	1	6	6	4	1
12/9/1/66	1	3	2	3	2	2	2	1	2	3	2	3	4	2	2	1	1	3	4	3	1	5	6	4	3
12/9/1/65	2	2	2	2	2	3	2	2	2	3	3	2	2	2	1	2	1	3	4	4	1	4	6	4	3
12/9/1/64	1	2	1	3	1	2	1	1	2	3	2	3	3	4	2	3	2	1	1	1	1	5	8	4	3
12/9/1/63	2	4	2	1	1	2	2	2	2	2	2	4	3	3	2	2	1	4	3	4	1	5	3	4	3
12/9/1/62	1	1	1	1	2	1	1	1	1	1	1	1	2	2	4	4	1	4	1	1	1	5	3	4	3
12/9/1/61	2	2	1	2	2	2	2	2	2	2	2	2	3	4	2	3	1	2	4	2	1	5	3	4	3
12/9/1/60	1	2	2	2	2	1	2	1	2	2	2	2	3	3	1	2	1	4	4	2	1	5	3	4	3
12/9/1/59	2	2	2	2	1	2	1	2	2	3	2	2	2	3	2	2	2	4	2	3	1	4	4	4	3
12/9/1/58	1	1	1	1	1	1	1	1	3	4	3	3	2	3	2	2	2	4	4	4	0	6	3	4	3
12/9/1/57	2	3	1	2	1	2	1	2	2	4	2	1	3	3	2	2	2	3	4	2	1	5	3	4	3
12/9/1/56	1	2	1	2	1	2	2	1	2	3	3	3	3	2	1	2	1	2	4	4	1	6	8	4	3
12/9/1/55	1	2	2	2	2	3	2	2	1	2	4	3	3	3	2	3	2	3	3	4	1	5	8	4	3
12/9/1/54	1	3	2	1	2	2	2	1	3	2	3	4	2	3	2	2	2	4	4	2	1	6	7	4	3
12/9/1/53	1	1	2	2	2	2	2	2	1	2	2	2	4	4	2	4	2	2	3	4	1	6	7	4	3
12/9/1/52	1	1	1	1	2	1	1	2	2	3	3	2	3	3	4	4	2	3	4	4	2	5	3	4	3
12/9/1/51	3	3	2	2	2	3	2	1	3	2	2	3	2	3	2	4	2	3	4	3	1	5	6	4	3
12/9/1/50	1	2	1	3	2	1	1	2	1	2	2	2	3	3	2	2	1	4	3	2	1	6	7	4	3

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
12/9/1/49	1	1	1	2	2	2	1	2	2	3	2	2	3	3	2	2	1	4	4	2	1	5	3	4	3
12/9/1/48	2	2	2	2	2	2	1	1	2	3	3	3	3	4	2	3	4	5	5	3	0	5	7	4	3
12/9/1/47	1	2	2	2	2	3	2	3	3	3	3	2	3	3	2	2	2	3	2	3	1	6	3	4	3



**ANNEX I – BRITAIN VSM DATA**

**Military VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	89	89	89	89	89	88	89	89	89	86	88	89	89	89	89	89	89	89	89	89	89	89	89	89	89
Missing	0	0	0	0	0	1	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	1.7191	2.3708	1.8876	2.1685	2.0000	2.3182	1.6966	1.5843	2.2360	3.0349	2.2841	2.7753	2.6629	3.2472	2.4157	2.4157	2.3146	3.4382	3.3596	2.9438	1.0674	4.6292	6.2360	3.0674	3.0337
Median	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	1.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	2.0000	2.0000	2.0000	4.0000	4.0000	3.0000	1.0000	4.0000	7.0000	3.0000	3.0000
Mode	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	3.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	4.00	4.00	2.00	1.00	4.00	7.00	3.00	3.00
Std. Deviation	.7384	.7889	.7299	.6612	.6396	.6529	.7599	.7509	.7389	.8464	.7420	.8495	.5629	.8697	.8092	.9270	1.0401	.7971	.9444	.9458	.2522	.7743	2.1428	.7198	.4115
Variance	.5452	.6223	.5327	.4372	.4091	.4263	.5774	.5638	.5460	.7164	.5505	.7217	.3169	.7564	.6547	.8593	1.0817	.6353	.8920	.8945	6.359E-02	.5996	4.5914	.5181	.1693
Range	4.00	4.00	4.00	3.00	3.00	3.00	4.00	4.00	3.00	4.00	4.00	4.00	3.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	1.00	4.00	8.00	2.00	3.00
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	1.00	2.00	1.00
Maximum	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	5.00	2.00	7.00	9.00	4.00	4.00
Sum	153.00	211.00	168.00	193.00	178.00	204.00	151.00	141.00	199.00	261.00	201.00	247.00	237.00	289.00	215.00	215.00	206.00	306.00	299.00	262.00	95.00	412.00	555.00	273.00	270.00

**Britain – Military VSM Mean Scores**

<b><u>Q1</u></b>	<b><u>Q2</u></b>	<b><u>Q3</u></b>	<b><u>Q4</u></b>	<b><u>Q5</u></b>	<b><u>Q6</u></b>	<b><u>Q7</u></b>	<b><u>Q8</u></b>	<b><u>Q9</u></b>	<b><u>Q10</u></b>
<b><u>1.72</u></b>	<b><u>2.38</u></b>	<b><u>1.88</u></b>	<b><u>2.17</u></b>	<b><u>2</u></b>	<b><u>2.32</u></b>	<b><u>1.69</u></b>	<b><u>1.58</u></b>	<b><u>2.24</u></b>	<b><u>3.03</u></b>
<b><u>Q11</u></b>	<b><u>Q12</u></b>	<b><u>Q13</u></b>	<b><u>Q14</u></b>	<b><u>Q15</u></b>	<b><u>Q16</u></b>	<b><u>Q17</u></b>	<b><u>Q18</u></b>	<b><u>Q19</u></b>	<b><u>Q20</u></b>
<b><u>2.28</u></b>	<b><u>2.77</u></b>	<b><u>2.66</u></b>	<b><u>3.25</u></b>	<b><u>2.42</u></b>	<b><u>2.42</u></b>	<b><u>2.31</u></b>	<b><u>3.44</u></b>	<b><u>3.36</u></b>	<b><u>2.94</u></b>

**Britain – Military VSM Calculations**

<b>PDI</b>	Q3		Q6		Q14		Q17					
	-35*( <u>1.88</u> )		35*( <u>2.32</u> )		25*( <u>3.25</u> )		-20*( <u>2.31</u> )					
	-65.8	+	81.2	+	81.25	+	-46.2	-	20	=	<b>30.45</b>	
<b>IDV</b>	Q1		Q2		Q4		Q8					
	-50*( <u>1.72</u> )		30*( <u>2.38</u> )		20*( <u>2.17</u> )		-25*( <u>1.58</u> )					
	-86	+	71.4	+	43.4	+	-39.5	+	130	=	<b>119.3</b>	
<b>MAS</b>	Q5		Q7		Q15		Q20					
	60*( <u>2</u> )		-20*( <u>1.69</u> )		20*( <u>2.42</u> )		-70*( <u>2.94</u> )					
	120	+	-33.8	+	48.4	+	-205.8	+	100	=	<b>28.8</b>	
<b>UAI</b>	Q13		Q16		Q18		Q19					
	25*( <u>2.66</u> )		20*( <u>2.42</u> )		-50*( <u>3.44</u> )		-15*( <u>3.36</u> )					
	66.5	+	48.4	+	-172	+	-50.4	+	120	=	<b>12.5</b>	
<b>LTO</b>	Q9		Q10		Q11		Q12					
	45*( <u>2.24</u> )		-30*( <u>3.03</u> )		-35*( <u>2.28</u> )		15*( <u>2.77</u> )					
	100.8	+	-90.9	+	-79.8	+	41.55	+	67	=	<b>38.65</b>	

**Britain - Navy VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	1.8500	2.4000	1.9500	2.3000	1.9000	2.4000	1.5500	1.5000	2.2500	3.1000	2.2500	2.7000	2.7500	3.4000	2.2500	2.5500	2.6500	3.4500	3.3000	3.3500	1.1000	4.8500	6.0500	2.0000	3.1500
Median	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	1.5000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	2.0000	2.0000	2.0000	4.0000	3.0000	3.5000	1.0000	5.0000	6.5000	2.0000	3.0000
Mode	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	3.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	4.00	3.00	4.00	1.00	5.00	4.00	2.00	3.00
Std. Deviation	.5871	.6806	.6048	.6569	.6407	.5026	.5104	.5130	.6387	.7182	.7164	.7327	.6387	.7539	.7164	.9445	1.0894	.7592	1.0311	.8751	.3078	.9333	2.5231	.0000	.6708
Variance	.3447	.4632	.3658	.4316	.4105	.2526	.2605	.2632	.4079	.5158	.5132	.5368	.4079	.5684	.5132	.8921	1.1868	.5763	1.0632	.7658	9.474E-02	.8711	6.3658	.0000	.4500
Range	2.00	3.00	2.00	3.00	2.00	1.00	1.00	1.00	2.00	2.00	2.00	3.00	2.00	3.00	3.00	3.00	4.00	2.00	4.00	3.00	1.00	4.00	8.00	.00	3.00
Minimum	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	3.00	1.00	2.00	1.00
Maximum	3.00	4.00	3.00	4.00	3.00	3.00	2.00	2.00	3.00	4.00	3.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	5.00	5.00	2.00	7.00	9.00	2.00	4.00
Sum	37.00	48.00	39.00	46.00	38.00	48.00	31.00	30.00	45.00	62.00	45.00	54.00	55.00	68.00	45.00	51.00	53.00	69.00	66.00	67.00	22.00	97.00	121.00	40.00	63.00

**UK – Navy VSM Mean Scores**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.85</u>	<u>2.4</u>	<u>1.95</u>	<u>2.3</u>	<u>1.9</u>	<u>2.4</u>	<u>1.55</u>	<u>1.5</u>	<u>2.25</u>	<u>3.1</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.25</u>	<u>2.7</u>	<u>2.75</u>	<u>3.4</u>	<u>2.25</u>	<u>2.55</u>	<u>2.65</u>	<u>3.45</u>	<u>3.3</u>	<u>3.35</u>

**Britain – Navy VSM Calculations**

		Q3		Q6		Q14		Q17					
<b>PDI</b>	-35*(	<u>1.95</u>	)	35*(	<u>2.4</u>	)	25*(	<u>3.4</u>	)	-20*(	<u>2.65</u>	)	
		-68.25		+	84		+	85		+	-53		- 20 = <b>27.75</b>
		Q1		Q2		Q4		Q8					
<b>IDV</b>	-50*(	<u>1.85</u>	)	30*(	<u>2.4</u>	)	20*(	<u>2.3</u>	)	-25*(	<u>1.5</u>	)	
		-92.5		+	72		+	46		+	-37.5		+ 130 = <b>118</b>
		Q5		Q7		Q15		Q20					
<b>MAS</b>	60*(	<u>1.9</u>	)	-20*(	<u>1.55</u>	)	20*(	<u>2.25</u>	)	-70*(	<u>3.35</u>	)	
		114		+	-31		+	45		+	-234.5		+ 100 = <b>-6.5</b>
		Q13		Q16		Q18		Q19					
<b>UAI</b>	25*(	<u>2.75</u>	)	20*(	<u>2.55</u>	)	-50*(	<u>3.45</u>	)	-15*(	<u>3.3</u>	)	
		68.75		+	51		+	-172.5		+	-49.5		+ 120 = <b>17.75</b>
		Q9		Q10		Q11		Q12					
<b>LTO</b>	45*(	<u>2.25</u>	)	-30*(	<u>3.1</u>	)	-35*(	<u>2.25</u>	)	15*(	<u>2.7</u>	)	
		101.25		+	-93		+	-78.75		+	40.5		+ 67 = <b>37</b>

**Britain - Army VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	43	43	43	43	43	42	43	43	43	42	42	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Missing	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	1.6977	2.4884	1.9302	2.2093	2.0000	2.4048	1.8372	1.5814	2.3953	3.1429	2.3333	2.7209	2.5581	3.3023	2.3488	2.3256	2.1628	3.3721	3.4419	2.6047	1.0465	4.1163	6.7674	3.0000	3.0233
Median	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	1.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	2.0000	2.0000	2.0000	4.0000	4.0000	2.0000	1.0000	4.0000	7.0000	3.0000	3.0000
Mode	1.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	3.00	2.00	3.00	3.00	4.00	2.00	2.00	2.00	4.00	4.00	2.00	1.00	4.00	7.00	3.00	3.00
Std. Deviation	.8873	.9605	.8279	.7091	.6901	.7005	.9240	.9318	.7603	.8991	.8458	.9083	.5478	.9138	.8131	.8652	.9494	.8172	1.0072	.8206	.2131	.3909	1.6738	.0000	.1525
Variance	.7874	.9225	.6855	.5028	.4762	.4907	.8538	.8682	.5781	.8084	.7154	.8250	.3001	.8350	.6611	.7486	.9014	.6678	1.0144	.6733	4.540E-02	.1528	2.8018	.0000	2.326E-02
Range	4.00	4.00	4.00	3.00	3.00	3.00	4.00	4.00	3.00	4.00	4.00	4.00	2.00	4.00	3.00	3.00	4.00	4.00	4.00	3.00	1.00	2.00	6.00	.00	1.00
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	4.00	3.00	3.00	3.00
Maximum	5.00	5.00	5.00	4.00	4.00	4.00	5.00	5.00	4.00	5.00	5.00	5.00	3.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	2.00	6.00	9.00	3.00	4.00
Sum	73.00	107.00	83.00	95.00	86.00	101.00	79.00	68.00	103.00	132.00	98.00	117.00	110.00	142.00	101.00	100.00	93.00	145.00	148.00	112.00	45.00	177.00	291.00	129.00	130.00

**Britain – Army VSM Mean Scores**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.69</u>	<u>2.49</u>	<u>1.93</u>	<u>2.2</u>	<u>2</u>	<u>2.4</u>	<u>1.84</u>	<u>1.58</u>	<u>2.39</u>	<u>3.14</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.33</u>	<u>2.72</u>	<u>2.56</u>	<u>3.3</u>	<u>2.35</u>	<u>2.32</u>	<u>2.16</u>	<u>3.37</u>	<u>3.44</u>	<u>2.6</u>

**Britain – Army VSM Calculations**

<b>PDI</b>	-35*(	<u><b>1.93</b></u>	)	35*(	<u><b>2.4</b></u>	)	25*(	<u><b>3.3</b></u>	)	-20*(	<u><b>2.16</b></u>	)							
		-67.55		+	84		+	82.5		+	-43.2		-	20		=			<b>35.75</b>
<b>IDV</b>	-50*(	<u><b>1.69</b></u>	)	30*(	<u><b>2.49</b></u>	)	20*(	<u><b>2.2</b></u>	)	-25*(	<u><b>1.58</b></u>	)							
		-84.5		+	74.7		+	44		+	-39.5		+	130		=			<b>124.7</b>
<b>MAS</b>	60*(	<u><b>2</b></u>	)	-20*(	<u><b>1.84</b></u>	)	20*(	<u><b>2.35</b></u>	)	-70*(	<u><b>2.6</b></u>	)							
		120		+	-36.8		+	47		+	-182		+	100		=			<b>48.2</b>
<b>UAI</b>	25*(	<u><b>2.56</b></u>	)	20*(	<u><b>2.32</b></u>	)	-50*(	<u><b>3.37</b></u>	)	-15*(	<u><b>3.44</b></u>	)							
		64		+	46.4		+	-168.5		+	-51.6		+	120		=			<b>10.3</b>
<b>LTO</b>	45*(	<u><b>2.39</b></u>	)	-30*(	<u><b>3.14</b></u>	)	-35*(	<u><b>2.33</b></u>	)	15*(	<u><b>2.72</b></u>	)							
		107.55		+	-94.2		+	-81.55		+	40.8		+	67		=			<b>39.6</b>

**Britain – Air Force VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	26	26	26	26	26	26	26	26	26	24	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Missing	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	1.6538	2.1538	1.7692	2.0000	2.0769	2.1154	1.5769	1.6538	1.9615	2.7917	2.2308	2.9231	2.7692	3.0385	2.6538	2.4615	2.3077	3.5385	3.2692	3.1923	1.0769	5.3077	5.5000	4.0000	2.9615
Median	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	2.0000	2.0000	2.0000	4.0000	3.0000	3.0000	1.0000	5.0000	5.0000	4.0000	3.0000
Mode	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	4.00	4.00	4.00	1.00	5.00	4.00	4.00	3.00
Std. Deviation	.5616	.4641	.6516	.5657	.5602	.6528	.5778	.5616	.7200	.8330	.5870	.8449	.5144	.8709	.8458	1.0288	1.1232	.8115	.7776	1.0206	.2717	.4707	2.3537	.0000	.4455
Variance	.3154	.2154	.4246	.3200	.3138	.4262	.3338	.3154	.5185	.6938	.3446	.7138	.2646	.7585	.7154	1.0585	1.2615	.6585	.6046	1.0415	7.385E-02	.2215	5.5400	.0000	.1985
Range	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	3.00	2.00	3.00	3.00	3.00	4.00	3.00	2.00	4.00	1.00	1.00	8.00	.00	3.00
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	5.00	1.00	4.00	1.00
Maximum	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	4.00	3.00	5.00	3.00	5.00	5.00	4.00	5.00	5.00	4.00	5.00	2.00	6.00	9.00	4.00	4.00
Sum	43.00	56.00	46.00	52.00	54.00	55.00	41.00	43.00	51.00	67.00	58.00	76.00	72.00	79.00	69.00	64.00	60.00	92.00	85.00	83.00	28.00	138.00	143.00	104.00	77.00

**Britain – Air Force VSM Mean Scores**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.65</u>	<u>2.15</u>	<u>1.77</u>	<u>2</u>	<u>2.08</u>	<u>2.11</u>	<u>1.58</u>	<u>1.65</u>	<u>1.96</u>	<u>2.79</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.23</u>	<u>2.92</u>	<u>2.77</u>	<u>3.04</u>	<u>2.65</u>	<u>2.46</u>	<u>2.3</u>	<u>3.54</u>	<u>3.27</u>	<u>3.19</u>

**Britain – Air Force VSM Calculations**

<b>PDI</b>	-35*(	<u>Q3</u> <u>1.77</u>	)	+ 35*(	<u>Q6</u> <u>2.11</u>	)	+ 25*(	<u>Q14</u> <u>3.04</u>	)	+ -20*(	<u>Q17</u> <u>2.3</u>	)	- 20	=	<b>21.9</b>
		-61.95			73.85			76			-46				
<b>IDV</b>	-50*(	<u>Q1</u> <u>1.65</u>	)	+ 30*(	<u>Q2</u> <u>2.15</u>	)	+ 20*(	<u>Q4</u> <u>2</u>	)	+ -25*(	<u>Q8</u> <u>1.65</u>	)	+ 130	=	<b>110.75</b>
		-82.5			64.5			40			-41.25				
<b>MAS</b>	60*(	<u>Q5</u> <u>2.08</u>	)	+ -20*(	<u>Q7</u> <u>1.58</u>	)	+ 20*(	<u>Q15</u> <u>2.65</u>	)	+ -70*(	<u>Q20</u> <u>3.19</u>	)	+ 100	=	<b>22.9</b>
		124.8			-31.6			53			-223.3				
<b>UAI</b>	25*(	<u>Q13</u> <u>2.77</u>	)	+ 20*(	<u>Q16</u> <u>2.46</u>	)	+ -50*(	<u>Q18</u> <u>3.54</u>	)	+ -15*(	<u>Q19</u> <u>3.27</u>	)	+ 120	=	<b>12.4</b>
		69.25			49.2			-177			-49.05				
<b>LTO</b>	45*(	<u>Q9</u> <u>1.96</u>	)	+ -30*(	<u>Q10</u> <u>2.79</u>	)	+ -35*(	<u>Q11</u> <u>2.23</u>	)	+ 15*(	<u>Q12</u> <u>2.92</u>	)	+ 67	=	<b>37.25</b>
		88.2			-83.7			-78.05			43.8				



**Britain – Navy VSM Recorded Responses**

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	
01/10/00/8	2	4	3	2	1	2	1	1	2	4	3	2	2	3	2	2	2	3	4	3	1	5	5	2	3	
01/10/00/1	1	2	2	2	2	2	2	1	2	2	1	3	3	3	2	3	3	3	4	3	1	5	6	2	3	
29/09/00/8	2	2	2	2	2	3	2	1	2	3	2	2	2	3	2	2	1	3	4	4	1	6	9	2	1	
29/09/00/3	3	3	2	2	1	2	1	1	3	3	2	3	2	4	2	2	2	4	3	3	1	5	8	2	3	
28/09/00/9	1	2	2	3	2	2	1	2	3	4	3	3	3	3	3	2	3	2	5	2	1	4	9	2	3	
27/09/00/4	2	2	2	2	3	3	2	2	3	4	2	2	2	4	2	4	3	3	4	2	1	5	4	2	3	
08/01/01/2	2	2	2	3	2	3	2	1	3	3	3	3	3	3	2	2	2	4	3	2	2	4	2	2	4	
08/01/01/1	2	1	2	4	2	2	2	1	2	4	1	4	3	5	2	1	5	4	5	4	1	6	8	2	4	
16/12/00/2	2	2	2	2	2	3	2	2	2	3	2	3	2	3	2	3	2	3	3	3	1	7	7	2	4	
16/12/00/1	3	3	1	3	2	2	2	1	2	2	2	2	4	4	2	2	1	4	2	5	1	6	1	2	4	
11/12/00/1	2	2	1	3	1	2	2	1	3	3	2	3	3	2	2	4	2	4	3	4	2	3	9	2	4	
18/10/00/15	2	3	1	3	2	2	1	2	3	3	2	4	3	3	2	4	2	4	3	2	1	4	9	2	3	
18/10/00/12	1	3	2	2	2	3	1	2	2	4	3	3	3	3	2	2	4	4	3	4	1	4	8	2	3	
18/10/00/5	2	3	3	2	2	2	1	2	2	3	3	3	2	3	2	2	2	2	4	4	1	5	6	2	3	
04/10/00/4	2	2	3	2	3	3	2	2	2	2	1	2	3	3	2	4	2	4	2	4	1	5	4	2	3	
03/10/00/5	2	2	2	2	2	3	2	2	3	4	3	3	3	4	3	2	2	4	3	4	1	5	4	2	3	
03/10/00/3	1	3	1	1	1	3	1	1	1	3	3	1	4	5	4	4	4	4	4	2	3	1	4	7	2	3
03/10/00/1	2	3	2	2	3	2	2	2	2	2	2	3	2	4	4	2	3	4	4	4	1	5	4	2	3	
02/10/00/5	2	2	2	2	2	2	1	2	2	3	3	3	3	3	2	2	4	2	1	3	1	4	3	2	3	
02/10/00/3	1	2	2	2	1	2	1	1	1	3	2	2	3	3	1	2	4	4	4	4	1	5	8	2	3	

**Britain – Army VSM Recorded Responses**

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
01/10/00/7	1	2	2	2	2	2	1	1	2	4	2	2	3	4	2	2	2	4	2	2	1	4	7	3	3
01/10/00/5	2	4	2	2	2	3	2	2	3	4	4	4	2	1	2	2	2	3	4	2	1	4	4	3	3
29/09/00/23	1	2	2	2	2	2	1	1	2	4	2	2	3	4	2	2	2	4	2	2	1	4	7	3	3
29/09/00/22	2	4	1	4	2	2	1	1	2	5	1	5	2	3	3	2	2	2	4	2	1	4	5	3	3
29/09/00/21	1	3	3	2	2	2	3	2	3	3	2	4	3	4	2	2	2	3	2	3	1	5	4	3	3
29/09/00/20	1	2	2	2	2	2	2	1	3	4	2	3	2	3	2	1	2	4	4	3	1	4	6	3	3
29/09/00/18	1	2	2	2	3	3	1	2	2	2	3	4	2	4	2	2	2	4	4	3	1	4	5	3	3
10/01/01/1	2	2	1	1	2	2	2	1	2	3	2	2	3	2	4	2	2	4	5	2	1	4	9	3	3
29/09/00/7	1	3	2	3	2	2	1	1	3	4	3	3	2	4	1	2	3	4	4	2	1	4	8	3	3
29/09/00/5	2	2	2	2	1	3	2	1	3	3	2	2	3	3	4	1	4	2	4	3	1	5	3	3	3
29/09/00/1	1	1	1	1	1	3	1	1	1	3	1	2	3	4	2	2	1	3	5	2	1	4	9	3	3
28/09/00/19	1	2	2	3	3	2	2	2	3	4	2	3	3	3	2	4	3	4	3	3	1	4	6	3	3
28/09/00/18	1	1	1	2	1	3	1	1	4	2	2	2	3	4	2	2	2	3	4	3	1	4	6	3	3
28/09/00/17	2	3	2	3	2	3	2	2	2	4	3	3	2	3	2	2	2	4	4	2	1	4	8	3	3
28/09/00/15	2	3	1	2	1	4	2	1	4	5	3	3	2	3	1	1	2	3	4	2	1	4	7	3	3
28/09/00/10	2	2	2	2	2	3	1	2	2	3	3	3	2	4	2	4	1	4	2	2	1	4	9	3	3
28/09/00/8	2	2	2	2	2	3	2	2	1	3	2	2	2	3	2	2	3	4	4	2	1	4	7	3	3
28/09/00/5	2	2	1	2	2	2	1	1	2	2	2	3	3	2	2	2	1	3	4	3	1	4	5	3	3
10/01/01/2	1	3	2	3	2	2	2	2	3	4	2	3	2	4	2	2	4	4	2	4	1	4	5	3	3
28/09/00/02	1	2	2	2	2	2	1	1	3	0	0	3	3	2	2	2	1	3	4	2	1	4	9	3	3
27/09/00/7	2	3	2	2	2	2	2	2	2	3	2	3	3	4	3	2	2	2	4	3	1	4	8	3	3
27/09/00/5	1	1	1	2	1	1	1	1	2	4	2	3	3	4	2	2	2	3	5	2	1	4	7	3	3
27/09/00/3	5	3	4	4	4	3	5	5	3	3	5	3	2	4	3	4	5	3	2	2	1	4	7	3	3
11/09/00/8	3	3	2	2	2	3	2	1	2	1	2	3	3	2	2	2	1	3	3	2	1	6	7	3	4
13/11/00/2	2	2	2	2	2	1	1	1	2	3	1	4	3	5	2	2	3	4	2	2	2	5	5	3	3
13/11/00/1	1	1	1	1	1	2	2	1	1	3	1	1	3	3	3	2	1	3	4	2	1	4	8	3	3

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
18/10/00/19	2	3	3	3	2	2	2	1	3	3	3	2	3	2	4	3	4	4	4	4	1	4	9	3	3
18/10/00/17	1	3	2	2	2	3	3	3	2	3	2	2	3	3	2	3	2	4	1	4	1	4	8	3	3
18/10/00/16	3	4	2	3	2	0	3	1	3	2	2	3	2	4	2	2	2	4	2	2	1	4	5	3	3
18/10/00/13	1	2	2	2	2	3	2	3	2	3	3	2	3	2	4	4	1	2	3	2	1	4	7	3	3
18/10/00/11	2	3	1	2	2	2	2	1	2	2	2	2	3	4	2	4	2	4	3	4	1	4	7	3	3
18/10/00/10	1	2	2	1	3	2	2	3	3	3	3	3	2	3	2	2	2	4	4	4	1	4	5	3	3
18/10/00/8	1	4	1	2	1	3	2	1	2	3	2	3	3	5	4	1	2	3	4	3	1	4	8	3	3
18/10/00/6	1	2	3	2	2	4	2	1	2	4	3	2	3	2	2	3	2	5	4	2	1	4	7	3	3
18/10/00/4	1	1	1	2	2	2	2	3	1	5	2	2	2	4	2	2	1	1	5	2	1	4	6	3	3
18/10/00/1	4	5	5	3	4	2	5	4	4	3	4	4	3	4	4	2	1	4	3	2	1	4	8	3	3
04/10/00/2	1	3	2	3	2	3	1	2	3	3	3	4	2	3	3	4	2	4	3	3	1	4	9	3	3
04/10/00/1	1	1	2	3	2	2	2	1	3	3	3	4	2	4	2	2	2	4	4	2	2	4	9	3	3
03/10/00/12	2	3	2	2	3	3	2	1	2	3	2	2	3	3	2	2	3	3	4	4	1	4	5	3	3
03/10/00/7	2	3	3	1	1	1	1	1	2	2	1	1	2	3	3	2	2	3	2	1	1	4	6	3	3
03/10/00/6	2	2	2	2	2	2	1	1	2	3	3	3	3	4	2	4	2	3	4	3	1	4	4	3	3
03/10/00/4	2	2	1	2	2	2	1	1	2	2	2	2	3	4	2	2	4	2	4	4	1	4	9	3	3
02/10/00/4	3	4	2	3	2	3	2	1	3	2	2	1	1	2	1	3	2	4	3	4	1	4	8	3	3

**Britain – Air Force VSM Recorded Responses**

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
01/10/00/10	2	2	1	2	2	3	1	1	2	3	3	3	3	2	3	4	1	4	3	3	1	5	4	4	3
01/10/00/9	2	2	2	2	2	2	2	2	3	3	2	3	3	3	4	2	1	3	3	3	1	5	5	4	3
01/10/00/6	2	2	1	1	2	2	2	3	1	2	2	3	3	3	2	2	2	3	3	4	1	6	1	4	1
01/10/00/2	2	2	2	2	2	2	2	2	2	3	3	4	2	3	2	2	3	4	4	3	1	5	9	4	3
29/09/00/19	1	2	2	2	1	2	1	2	2	4	2	5	1	5	5	2	4	4	4	4	1	5	2	4	3
29/09/00/16	2	2	2	2	3	2	2	2	2	4	3	3	3	3	2	2	2	4	4	2	1	6	9	4	3
29/09/00/4	1	2	2	3	2	2	1	1	3	1	2	2	3	3	3	4	2	4	2	3	1	5	6	4	3
28/09/00/20	1	1	1	2	2	1	1	1	2	2	3	2	3	2	2	2	1	3	3	3	1	5	5	4	3
28/09/00/14	2	3	1	2	2	2	2	2	2	3	2	2	2	3	3	2	2	3	4	2	1	5	4	4	3
28/09/00/12	1	2	3	2	2	2	2	1	2	0	2	4	3	4	2	1	2	4	2	2	1	5	2	4	3
28/09/00/11	2	2	2	2	2	3	2	2	2	2	2	3	3	3	2	1	2	3	3	4	1	6	6	4	3
28/09/00/6	2	2	2	2	2	2	2	2	3	3	2	2	3	4	3	2	4	4	4	2	2	6	9	4	3
27/09/00/2	1	2	2	2	2	2	1	1	2	3	2	2	3	4	2	2	3	3	4	3	1	5	7	4	3
11/11/00/5	1	2	2	1	2	2	3	2	1	3	2	3	3	4	2	4	2	2	4	2	1	6	4	4	3
11/11/00/1	2	3	1	2	1	1	1	1	1	1	1	2	3	4	2	1	5	5	3	5	1	5	7	4	3
08/11/00/1	1	3	3	3	3	3	2	2	3	3	2	4	3	2	3	2	3	4	4	3	1	5	9	4	3
06/11/00/2	2	2	3	2	3	3	2	2	3	4	3	3	3	3	2	4	2	4	2	4	1	5	4	4	3
18/10/00/18	2	2	1	2	2	1	1	2	1	2	2	2	2	3	2	4	3	4	2	4	1	6	4	4	3
18/10/00/14	3	2	2	3	2	2	2	2	2	4	2	3	3	4	3	3	1	2	2	4	2	5	7	4	4
18/10/00/9	2	2	2	2	2	2	1	1	1	2	3	3	3	2	2	2	1	3	3	4	1	5	8	4	3
18/10/00/2	2	2	1	2	2	3	1	1	2	3	3	3	3	2	3	4	1	4	3	3	1	5	4	4	3
03/10/00/10	1	2	2	1	3	3	2	2	1	3	2	2	3	2	3	4	4	3	4	4	1	6	4	4	3
03/10/00/9	2	2	1	2	1	1	1	1	1	3	1	2	3	4	2	2	2	4	4	2	1	5	7	4	3
03/10/00/8	1	2	2	2	2	2	1	1	2	3	2	3	3	2	4	2	3	5	4	5	1	6	3	4	3
03/10/00/2	2	3	1	1	3	2	1	2	2	0	2	4	2	2	4	2	1	4	3	1	1	5	5	4	3
02/10/00/1	1	3	2	3	2	3	2	2	3	3	3	4	3	3	2	2	3	2	4	4	1	5	8	4	3

**ANNEX J – CANADA VSM DATA**

**Military VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	67	67	67	67	67	67	67	67	67	67	66	66	67	67	67	67	66	67	66	67	67	66	67	67	67
Missing	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	1	0	0	0
Mean	1.5075	2.0000	1.9104	2.0746	1.9851	2.4478	2.0299	1.6418	1.9701	2.9254	2.1061	2.6667	2.6269	3.3433	2.1493	3.0000	1.9851	2.9242	2.8657	2.8507	1.0896	5.5606	8.0000	3.1045	3.1045
Median	1.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	1.0000	6.0000	9.0000	3.0000	3.0000
Mode	1.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	3.00	2.00	2.00	3.00	4.00	2.00	2.00	2.00	4.00	3.00	2.00	1.00	6.00	9.00	4.00	3.00
Std. Deviation	.8048	.8528	.7120	.8405	.8256	.7025	.7379	.7727	.7379	.8223	.8063	.9171	.5989	.7697	.7018	1.0299	.9613	.9657	.9676	.9415	.2877	.6109	1.3371	.8190	.3082
Variance	.6477	.7273	.5070	.7065	.6816	.4934	.5445	.5970	.5445	.6762	.6501	.8410	.3587	.5925	.4925	1.0606	.9240	.9326	.9362	.8865	8.277E-02	.3732	1.7879	.6707	9.498E-02
Range	4.00	4.00	3.00	4.00	4.00	3.00	3.00	4.00	4.00	3.00	3.00	4.00	3.00	3.00	3.00	4.00	4.00	3.00	4.00	4.00	1.00	3.00	5.00	2.00	1.00
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	4.00	4.00	2.00	3.00
Maximum	5.00	5.00	4.00	5.00	5.00	4.00	4.00	5.00	5.00	4.00	4.00	5.00	4.00	5.00	4.00	5.00	5.00	4.00	5.00	5.00	2.00	7.00	9.00	4.00	4.00
Sum	101.00	134.00	128.00	139.00	133.00	164.00	136.00	110.00	132.00	196.00	139.00	176.00	176.00	224.00	144.00	201.00	133.00	193.00	192.00	191.00	73.00	367.00	536.00	208.00	208.00

**Canada – Military VSM Mean Scores**

<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q5</u>	<u>Q6</u>	<u>Q7</u>	<u>Q8</u>	<u>Q9</u>	<u>Q10</u>
<u>1.5</u>	<u>2</u>	<u>1.91</u>	<u>2.07</u>	<u>1.98</u>	<u>2.45</u>	<u>2.03</u>	<u>1.64</u>	<u>1.97</u>	<u>2.92</u>
<u>Q11</u>	<u>Q12</u>	<u>Q13</u>	<u>Q14</u>	<u>Q15</u>	<u>Q16</u>	<u>Q17</u>	<u>Q18</u>	<u>Q19</u>	<u>Q20</u>
<u>2.1</u>	<u>2.67</u>	<u>2.63</u>	<u>3.34</u>	<u>2.15</u>	<u>3</u>	<u>1.98</u>	<u>2.92</u>	<u>2.86</u>	<u>2.85</u>

**Canada – Military VSM Calculations**

<b>PDI</b>		Q3		Q6		Q14		Q17				
	-35*(	<u>1.91</u>	)	35*(	<u>2.45</u>	)	25*(	<u>3.34</u>	)	-20*(	<u>1.98</u>	)
		-66.85	+	85.75	+	83.5	+	-39.6	-	20	=	<b>42.8</b>
<b>IDV</b>		Q1		Q2		Q4		Q8				
	-50*(	<u>1.5</u>	)	30*(	<u>2</u>	)	20*(	<u>2.07</u>	)	-25*(	<u>1.64</u>	)
		-75	+	60	+	41.4	+	-41	+	130	=	<b>115.4</b>
<b>MAS</b>		Q5		Q7		Q15		Q20				
	60*(	<u>1.98</u>	)	-20*(	<u>2.03</u>	)	20*(	<u>2.15</u>	)	-70*(	<u>2.85</u>	)
		118.8	+	-40.6	+	43	+	-199.5	+	100	=	<b>21.7</b>
<b>UAI</b>		Q13		Q16		Q18		Q19				
	25*(	<u>2.63</u>	)	20*(	<u>3</u>	)	-50*(	<u>2.92</u>	)	-15*(	<u>2.86</u>	)
		65.75	+	60	+	-146	+	-42.9	+	120	=	<b>56.85</b>
<b>LTO</b>		Q9		Q10		Q11		Q12				
	45*(	<u>1.97</u>	)	-30*(	<u>2.92</u>	)	-35*(	<u>2.1</u>	)	15*(	<u>2.67</u>	)
		88.65	+	-87.6	+	-73.5	+	40.05	+	67	=	<b>34.6</b>

**Canada - Navy VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	19	19	19	19	19	19	19	19	19	19	19	18	19	19	19	19	19	18	19	19	19	18	19	19	19
Missing	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0
Mean	1.5263	2.1053	2.0000	2.1579	2.1579	2.2632	2.2105	1.7368	2.1053	3.1053	2.3684	2.9444	2.4211	3.2632	2.0000	2.7895	2.0526	2.8889	3.2105	2.9474	1.0526	5.7222	7.5789	2.0000	3.3684
Median	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000	3.0000	2.0000	3.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	1.0000	6.0000	7.0000	2.0000	3.0000
Mode	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	3.00	2.00	2.00	2.00	2.00	4.00	3.00	1.00	6.00	7.00	2.00	3.00
Std. Deviation	.5130	.8093	.5774	.7647	.5015	.6534	.5353	.4524	.3153	.6578	.7609	1.1100	.5073	.7335	.3333	1.0842	.9703	1.0226	.9177	.8481	.2294	.6691	1.3871	.0000	.4956
Variance	.2632	.6550	.3333	.5848	.2515	.4269	.2865	.2047	9.942E-02	.4327	.5789	1.2320	.2573	.5380	.1111	1.1754	.9415	1.0458	.8421	.7193	5.263E-02	.4477	1.9240	.0000	.2456
Range	1.00	2.00	2.00	3.00	2.00	3.00	2.00	1.00	1.00	2.00	3.00	4.00	1.00	2.00	2.00	3.00	3.00	3.00	3.00	3.00	1.00	2.00	5.00	.00	1.00
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00	2.00	2.00	1.00	5.00	4.00	2.00	3.00
Maximum	2.00	3.00	3.00	4.00	3.00	4.00	3.00	2.00	3.00	4.00	4.00	5.00	3.00	4.00	3.00	4.00	4.00	4.00	5.00	5.00	2.00	7.00	9.00	2.00	4.00
Sum	29.00	40.00	38.00	41.00	41.00	43.00	42.00	33.00	40.00	59.00	45.00	53.00	46.00	62.00	38.00	53.00	39.00	52.00	61.00	56.00	20.00	103.00	144.00	38.00	64.00

**Canada – Navy VSM Mean Scores**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.53</u>	<u>2.1</u>	<u>2</u>	<u>2.16</u>	<u>2.16</u>	<u>2.26</u>	<u>2.21</u>	<u>1.74</u>	<u>2.1</u>	<u>3.1</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.37</u>	<u>2.94</u>	<u>2.42</u>	<u>3.26</u>	<u>2</u>	<u>2.79</u>	<u>2.05</u>	<u>2.89</u>	<u>3.21</u>	<u>2.95</u>

**Canada – Navy VSM Calculations**

		Q3		Q6		Q14		Q17				
<b>PDI</b>	-35*(	<u>2</u>	)	35*(	<u>2.26</u>	)	25*(	<u>3.26</u>	)	-20*(	<u>2.05</u>	)
		-70	+	79.1	+	81.5	+	-41	-	20	=	<b>29.6</b>
		Q1		Q2		Q4		Q8				
<b>IDV</b>	-50*(	<u>1.53</u>	)	30*(	<u>2.1</u>	)	20*(	<u>2.16</u>	)	-25*(	<u>1.74</u>	)
		-76.5	+	63	+	43.2	+	-43.5	+	130	=	<b>116.2</b>
		Q5		Q7		Q15		Q20				
<b>MAS</b>	60*(	<u>2.16</u>	)	-20*(	<u>2.21</u>	)	20*(	<u>2</u>	)	-70*(	<u>2.95</u>	)
		129.6	+	-44.2	+	40	+	-206.5	+	100	=	<b>18.9</b>
		Q13		Q16		Q18		Q19				
<b>UAI</b>	25*(	<u>2.42</u>	)	20*(	<u>2.79</u>	)	-50*(	<u>2.89</u>	)	-15*(	<u>3.21</u>	)
		60.5	+	55.8	+	-144.5	+	-48.15	+	120	=	<b>43.65</b>
		Q9		Q10		Q11		Q12				
<b>LTO</b>	45*(	<u>2.1</u>	)	-30*(	<u>3.1</u>	)	-35*(	<u>2.37</u>	)	15*(	<u>2.94</u>	)
		94.5	+	-93	+	-82.95	+	44.1	+	67	=	<b>29.65</b>



**Canada - Army VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	1.4091	1.9545	1.8182	1.7727	1.7273	2.5455	1.7273	1.5909	1.7273	2.8182	1.7727	2.1818	2.6818	3.4091	2.4545	3.3182	1.7727	2.9545	2.7273	2.8182	1.0000	5.4545	8.1818	3.0000	3.0000
Median	1.0000	2.0000	2.0000	2.0000	2.0000	3.0000	2.0000	1.0000	2.0000	3.0000	2.0000	2.0000	3.0000	4.0000	2.0000	4.0000	2.0000	3.0000	3.0000	2.0000	1.0000	5.5000	9.0000	3.0000	3.0000
Mode	1.00	2.00	2.00	2.00	1.00	3.00	2.00	1.00	1.00	3.00	1.00	2.00	3.00	4.00	2.00	4.00	2.00	2.00	3.00	2.00	1.00	6.00	9.00	3.00	3.00
Std. Deviation	.9081	.7854	.7950	.9223	.8270	.8004	.7025	.9591	.8270	1.0527	.8691	.7327	.6463	.9081	.9117	1.0861	.6853	.8985	1.0771	1.0970	.0000	.5958	1.1807	.0000	.0000
Variance	.8247	.6169	.6320	.8506	.6840	.6407	.4935	.9199	.6840	1.1082	.7554	.5368	.4177	.8247	.8312	1.1797	.4697	.8074	1.1602	1.2035	.0000	.3550	1.3939	.0000	.0000
Range	4.00	3.00	3.00	4.00	3.00	3.00	3.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00	3.00	4.00	.00	2.00	4.00	.00	.00
Minimum	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	4.00	5.00	3.00	3.00
Maximum	5.00	4.00	4.00	5.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	4.00	5.00	4.00	5.00	4.00	4.00	4.00	5.00	1.00	6.00	9.00	3.00	3.00
Sum	31.00	43.00	40.00	39.00	38.00	56.00	38.00	35.00	38.00	62.00	39.00	48.00	59.00	75.00	54.00	73.00	39.00	65.00	60.00	62.00	22.00	120.00	180.00	66.00	66.00

**Canada – Army VSM Mean Scores**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.4</u>	<u>1.95</u>	<u>1.82</u>	<u>1.77</u>	<u>1.73</u>	<u>2.54</u>	<u>1.73</u>	<u>1.59</u>	<u>1.73</u>	<u>2.82</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>1.77</u>	<u>2.18</u>	<u>2.68</u>	<u>3.41</u>	<u>2.45</u>	<u>3.32</u>	<u>1.77</u>	<u>2.95</u>	<u>2.73</u>	<u>2.82</u>

**Canada – Army VSM**

<b>PDI</b>	Q3		Q6		Q14		Q17					
	-35*( <u>1.82</u> )	35*( <u>2.54</u> )	25*( <u>3.41</u> )	-20*( <u>1.77</u> )								
	-63.7	+	88.9	+	85.25	+	-35.4	-	20	=	<b>55.05</b>	
<b>IDV</b>	Q1		Q2		Q4		Q8					
	-50*( <u>1.4</u> )	30*( <u>1.95</u> )	20*( <u>1.77</u> )	-25*( <u>1.59</u> )								
	-70	+	58.5	+	35.4	+	-39.75	+	130	=	<b>114.15</b>	
<b>MAS</b>	Q5		Q7		Q15		Q20					
	60*( <u>1.73</u> )	-20*( <u>1.73</u> )	20*( <u>2.45</u> )	-70*( <u>2.82</u> )								
	103.8	+	-34.6	+	49	+	-197.4	+	100	=	<b>20.8</b>	
<b>UAI</b>	Q13		Q16		Q18		Q19					
	25*( <u>2.68</u> )	20*( <u>3.32</u> )	-50*( <u>2.95</u> )	-15*( <u>2.73</u> )								
	67	+	66.4	+	-147.5	+	-40.95	+	120	=	<b>64.95</b>	
<b>LTO</b>	Q9		Q10		Q11		Q12					
	45*( <u>1.73</u> )	-30*( <u>2.82</u> )	-35*( <u>1.77</u> )	15*( <u>2.18</u> )								
	77.85	+	-84.6	+	-61.95	+	32.7	+	67	=	<b>31</b>	

**Canada – Air Force VSM Statistics**

	VAR1	VAR2	VAR3	VAR4	VAR5	VAR6	VAR7	VAR8	VAR9	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16	VAR17	VAR18	VAR19	VAR20	VAR21	VAR22	VAR23	VAR24	VAR25
N Valid	26	26	26	26	26	26	26	26	26	26	25	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Missing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	1.5769	1.9615	1.9231	2.2692	2.0769	2.5000	2.1538	1.6154	2.0769	2.8846	2.2000	2.8846	2.7308	3.3462	2.0000	2.8846	2.1154	2.9231	2.7308	2.8077	1.1923	5.5385	8.1538	4.0000	3.0000
Median	1.0000	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	1.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	2.0000	3.0000	2.0000	3.0000	3.0000	3.0000	1.0000	6.0000	9.0000	4.0000	3.0000
Mode	1.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00	3.00	2.00	3.00	3.00	3.00	2.00	2.00	2.00	4.00	2.00	2.00	1.00	6.00	9.00	4.00	3.00
Std. Deviation	.9021	.9584	.7442	.7776	.9767	.6481	.8339	.8038	.8449	.7114	.7071	.7656	.6038	.6895	.6325	.9089	1.1429	1.0168	.8744	.8953	.4019	.5818	1.4055	.0000	.0000
Variance	.8138	.9185	.5538	.6046	.9538	.4200	.6954	.6462	.7138	.5062	.5000	.5862	.3646	.4754	.4000	.8262	1.3062	1.0338	.7646	.8015	.1615	.3385	1.9754	.0000	.0000
Range	4.00	4.00	3.00	4.00	4.00	2.00	3.00	3.00	4.00	2.00	3.00	3.00	2.00	3.00	3.00	2.00	4.00	3.00	3.00	3.00	1.00	2.00	5.00	.00	.00
Minimum	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	4.00	4.00	4.00	3.00
Maximum	5.00	5.00	4.00	5.00	5.00	4.00	4.00	4.00	5.00	4.00	4.00	4.00	4.00	5.00	4.00	4.00	5.00	4.00	4.00	4.00	2.00	6.00	9.00	4.00	3.00
Sum	41.00	51.00	50.00	59.00	54.00	65.00	56.00	42.00	54.00	75.00	55.00	75.00	71.00	87.00	52.00	75.00	55.00	76.00	71.00	73.00	31.00	144.00	212.00	104.00	78.00

**Canada – Air Force VSM Mean Scores**

<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5</b>	<b>Q6</b>	<b>Q7</b>	<b>Q8</b>	<b>Q9</b>	<b>Q10</b>
<u>1.58</u>	<u>1.96</u>	<u>1.92</u>	<u>2.27</u>	<u>2.08</u>	<u>2.5</u>	<u>2.15</u>	<u>1.61</u>	<u>2.08</u>	<u>2.88</u>
<b>Q11</b>	<b>Q12</b>	<b>Q13</b>	<b>Q14</b>	<b>Q15</b>	<b>Q16</b>	<b>Q17</b>	<b>Q18</b>	<b>Q19</b>	<b>Q20</b>
<u>2.2</u>	<u>2.88</u>	<u>2.73</u>	<u>3.35</u>	<u>2</u>	<u>2.88</u>	<u>2.11</u>	<u>2.92</u>	<u>2.73</u>	<u>2.8</u>

**Canada – Air Force VSM**

<b>PDI</b>	Q3		Q6		Q14		Q17				
	-35*( <u>1.92</u> )	35*( <u>2.5</u> )	25*( <u>3.35</u> )	-20*( <u>2.11</u> )							
	-67.2	+	87.5	+	83.75	+	-42.2	-	20	=	<b>41.85</b>
<b>IDV</b>	Q1		Q2		Q4		Q8				
	-50*( <u>1.58</u> )	30*( <u>1.96</u> )	20*( <u>2.27</u> )	-25*( <u>1.61</u> )							
	-79	+	58.8	+	45.4	+	-40.25	+	130	=	<b>114.95</b>
<b>MAS</b>	Q5		Q7		Q15		Q20				
	60*( <u>2.08</u> )	-20*( <u>2.15</u> )	20*( <u>2</u> )	-70*( <u>2.8</u> )							
	124.8	+	-43	+	40	+	-196	+	100	=	<b>25.8</b>
<b>UAI</b>	Q13		Q16		Q18		Q19				
	25*( <u>2.73</u> )	20*( <u>2.88</u> )	-50*( <u>2.92</u> )	-15*( <u>2.73</u> )							
	68.25	+	57.6	+	-146	+	-40.95	+	120	=	<b>58.9</b>
<b>LTO</b>	Q9		Q10		Q11		Q12				
	45*( <u>2.08</u> )	-30*( <u>2.88</u> )	-35*( <u>2.2</u> )	15*( <u>2.88</u> )							
	93.6	+	-86.4	+	-77	+	43.2	+	67	=	<b>40.4</b>

**Canada – Navy VSM Recorded Responses**

ID	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25
7/2/1/12	2	3	3	2	2	2	3	2	2	3	2	2	2	4	2	3	2	2	4	3	1	7	7	2	4
7/2/1/5	2	3	2	1	2	3	2	2	2	3	3	3	2	3	2	2	1	4	2	2	1	0	9	2	4
7/2/1/47	1	2	2	2	3	3	2	2	2	2	3	0	3	4	3	3	2	4	3	3	1	5	7	2	3
7/2/1/40	2	2	2	3	3	3	3	2	2	3	2	2	2	2	2	2	1	4	2	2	1	5	6	2	3
7/2/1/39	1	3	2	2	2	2	2	2	2	3	3	3	2	3	2	3	2	3	2	3	1	5	9	2	3
7/2/1/37	2	3	1	2	2	2	2	2	2	3	1	3	3	3	2	4	2	4	3	3	1	6	8	2	3
7/2/1/36	1	1	1	3	2	2	2	2	2	2	3	4	2	4	2	2	2	4	3	2	1	6	7	2	4
7/2/1/35	1	1	2	2	2	3	3	2	2	3	2	3	3	4	2	4	1	2	4	3	1	6	7	2	3
7/2/1/29	1	1	2	1	2	2	2	2	2	4	2	5	2	4	2	4	2	2	4	4	1	6	4	2	4
7/2/1/32	2	2	3	2	2	2	2	2	2	3	2	3	2	2	2	2	1	1	3	3	1	5	6	2	3
7/2/1/31	2	3	2	2	2	2	1	1	3	4	2	3	3	3	1	1	4	4	3	2	1	6	7	2	3
7/2/1/30	1	3	2	2	2	2	3	1	2	3	2	2	2	4	2	2	2	0	4	2	1	6	7	2	4
10/10/00/4	1	1	2	3	2	2	2	1	2	3	2	4	3	3	2	4	2	3	4	3	1	5	9	2	4
24/2/1/24	1	2	2	4	3	1	2	1	2	4	3	5	2	3	2	1	2	4	5	5	1	6	9	2	3
7/2/1/23	2	2	2	2	2	2	2	2	2	4	4	2	2	4	2	4	2	2	4	3	1	5	7	2	3
7/2/1/21	2	1	1	1	1	2	2	1	2	2	1	1	3	2	2	4	1	2	4	2	1	5	9	2	3
7/2/1/20	1	2	2	2	2	2	2	2	2	3	2	2	2	3	2	2	4	2	3	4	1	6	9	2	3
7/2/1/2	2	2	2	3	2	2	3	2	2	3	3	4	3	4	2	4	2	2	2	3	1	7	8	2	3
17/2/1/1	2	3	3	2	3	4	2	2	3	4	3	2	3	3	2	2	4	3	2	4	2	6	9	2	4

**Canada – Army VSM Recorded Responses**

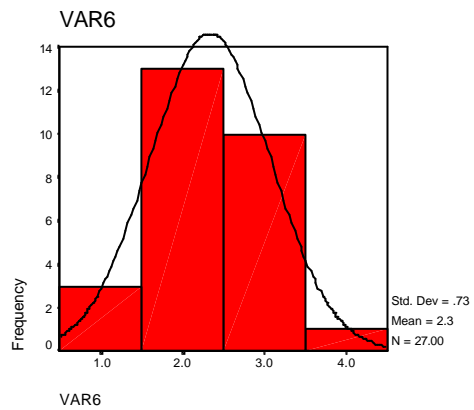
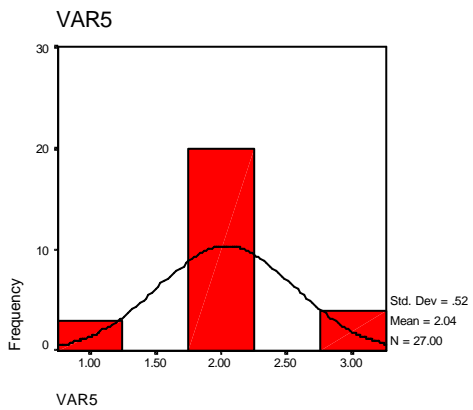
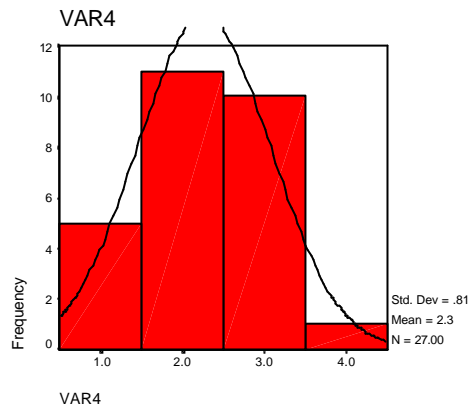
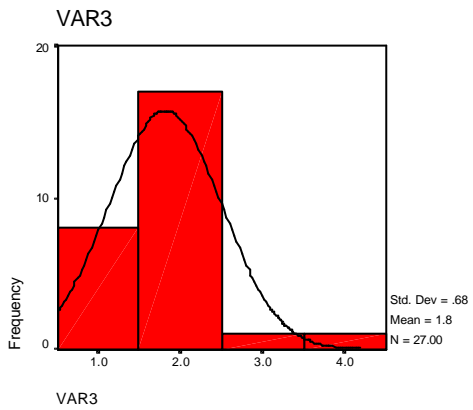
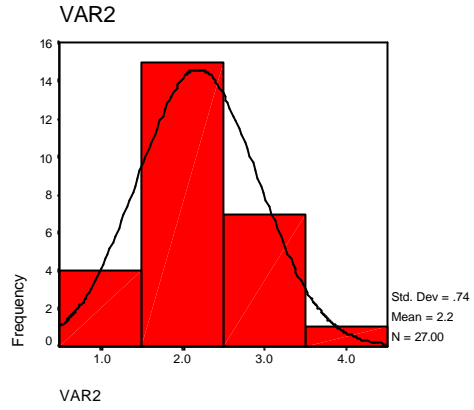
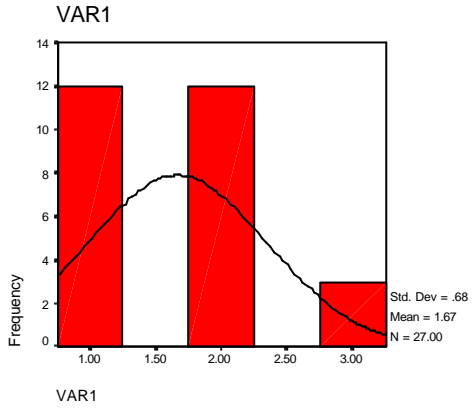
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7/2/1/64	1	2	1	1	1	3	1	1	1	1	1	1	3	2	4	5	1	4	1	2	1	5	6	3	3
7/2/1/62	2	2	2	2	1	2	2	1	2	4	1	2	3	4	1	2	2	2	4	2	1	6	9	3	3
7/2/1/57	1	1	1	2	1	2	1	1	3	2	2	3	3	3	3	4	2	3	3	4	1	6	9	3	3
7/2/1/50	2	1	2	2	2	4	2	2	1	2	2	2	3	4	2	4	2	2	1	1	1	6	7	3	3
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**Canada – Air Force VSM Recorded Responses**

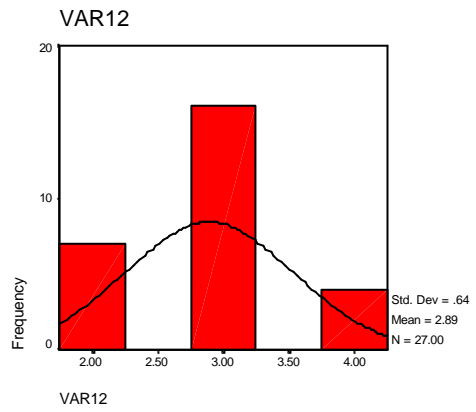
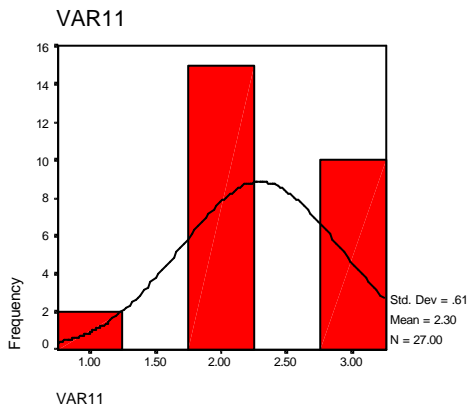
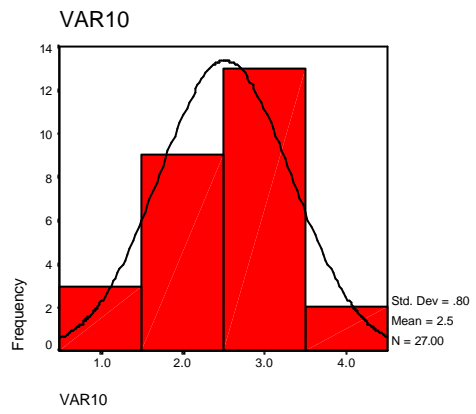
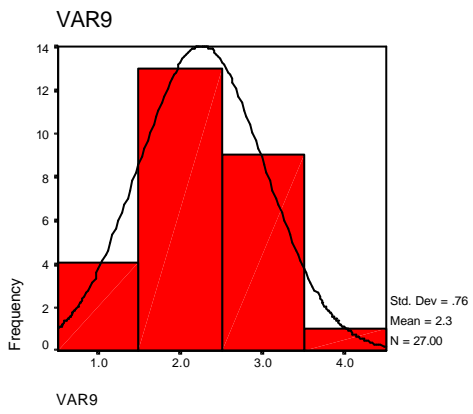
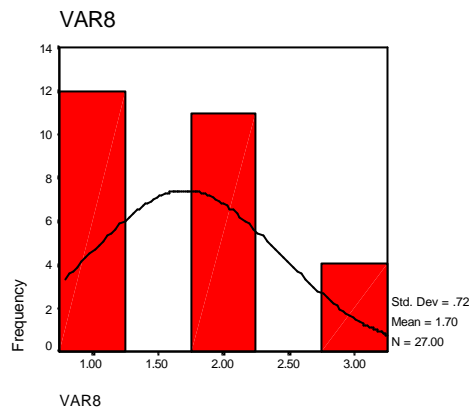
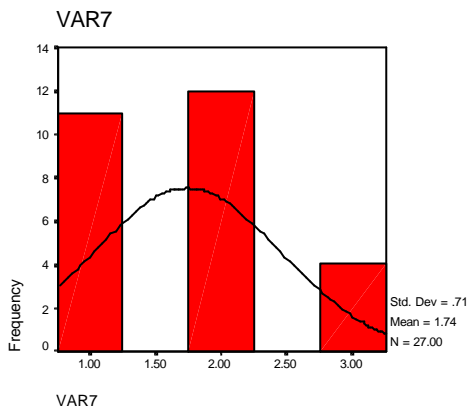
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7/2/1/60	1	3	1	2	3	2	2	1	3	2	2	4	4	3	2	4	2	3	2	4	1	6	8	4	3
7/2/1/59	2	3	2	2	2	3	3	2	2	3	2	4	3	2	2	3	1	2	4	2	1	6	7	4	3
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7/2/1/54	1	2	3	2	1	2	1	1	2	3	2	2	3	4	1	4	1	4	2	3	1	5	9	4	3
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7/2/1/52	2	2	1	2	2	2	2	1	2	3	3	3	2	3	2	2	4	4	3	4	1	6	9	4	3
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7/2/1/38	1	1	1	3	1	3	3	1	2	3	1	3	4	4	2	2	1	3	4	3	2	6	9	4	3
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7/2/1/28	3	3	2	2	1	3	4	3	2	2	1	4	3	4	1	2	2	2	2	2	1	6	8	4	3
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7/2/1/19	1	3	2	2	2	2	1	2	2	4	2	3	3	4	2	3	1	3	3	2	1	5	9	4	3
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12/2/1/3	2	1	2	2	2	2	2	1	2	3	3	3	2	3	2	2	2	2	2	2	2	6	6	4	3
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17/2/1/3	1	1	2	3	2	2	3	3	2	4	3	3	3	4	2	2	2	4	2	3	1	6	9	4	3
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17/2/1/5	2	2	3	2	2	3	2	2	2	3	2	4	3	5	2	2	3	4	2	4	1	5	9	4	3
24/2/1/5	1	1	1	2	1	2	2	1	3	4	2	2	3	3	1	2	1	4	3	2	1	5	4	4	3
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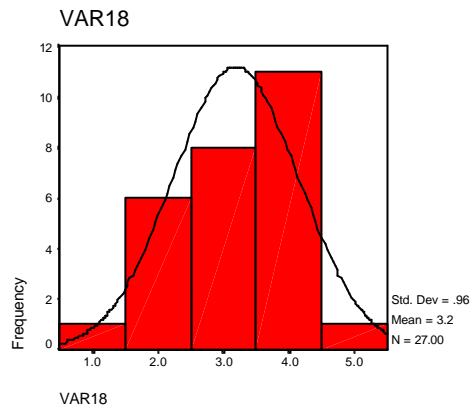
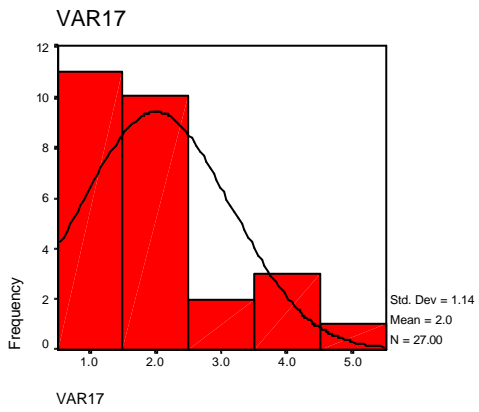
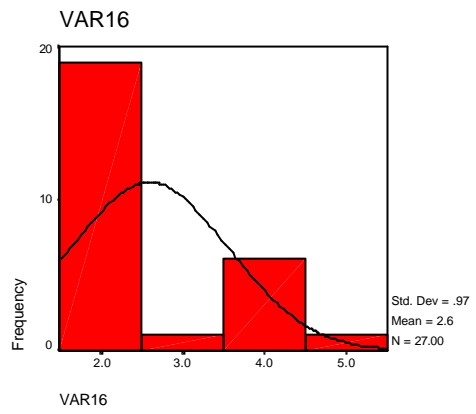
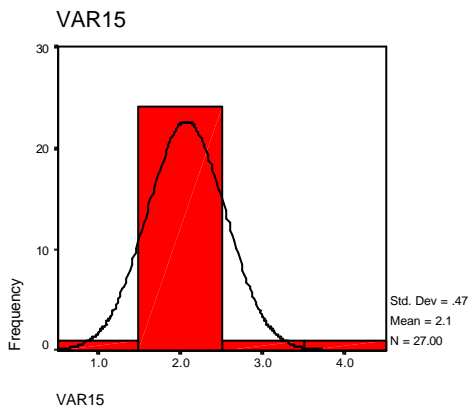
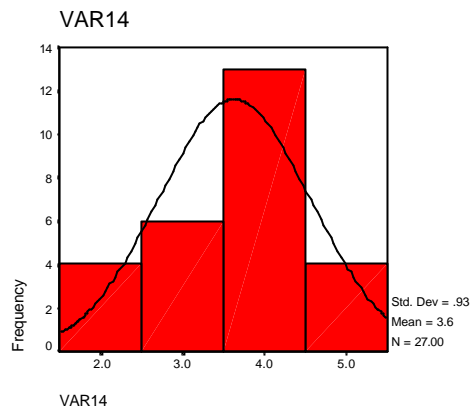
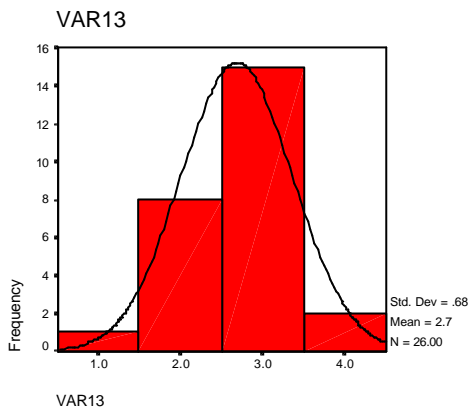
# ANNEX K - HISTOGRAMS FOR AUSTRALIA

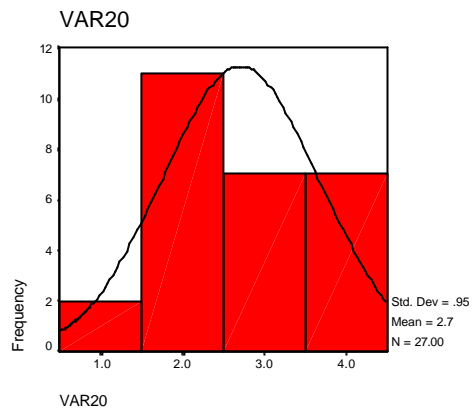
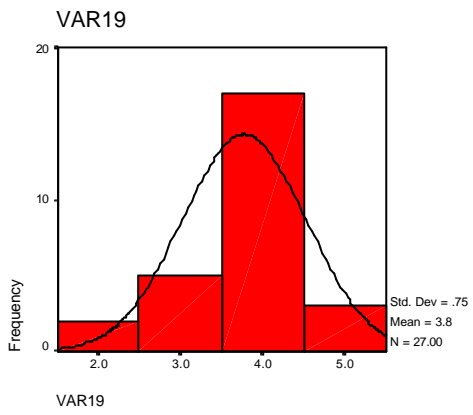
## Navy



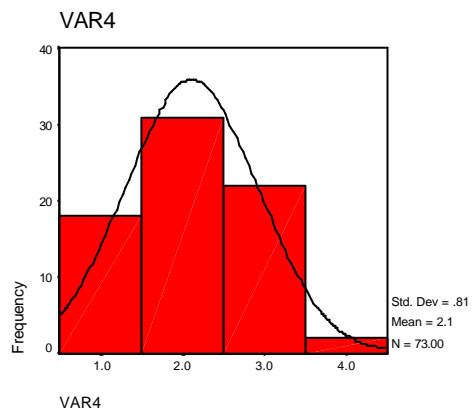
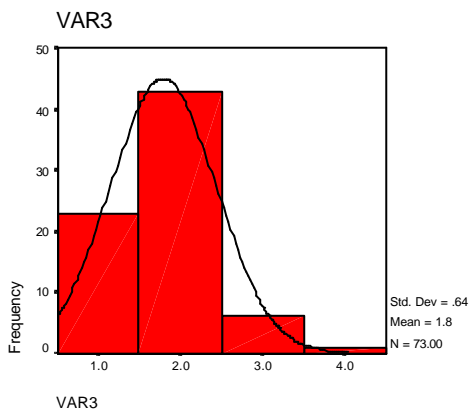
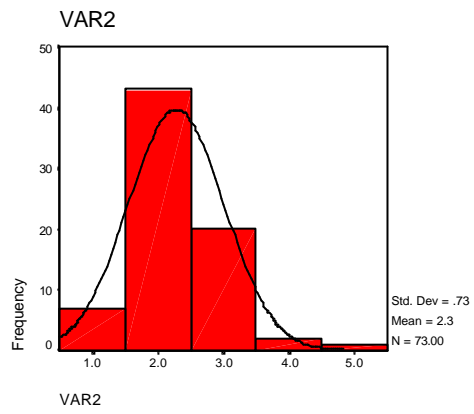
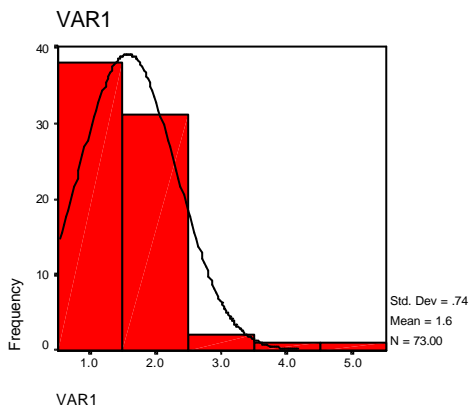


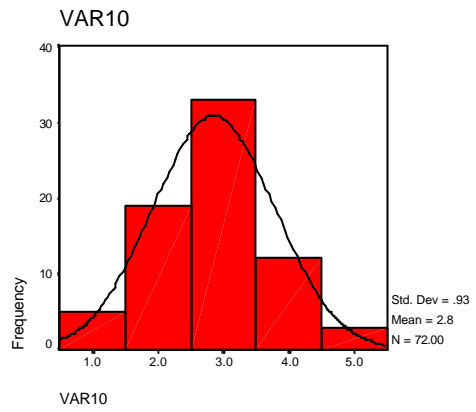
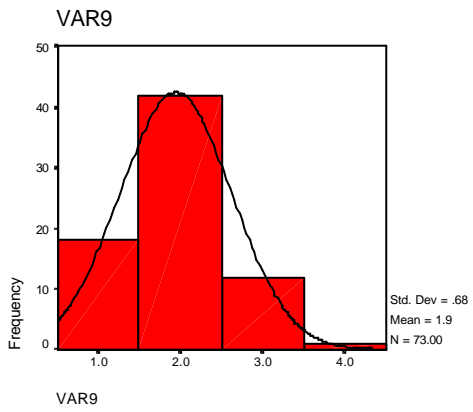
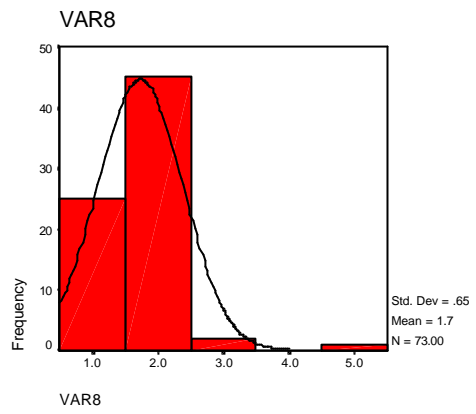
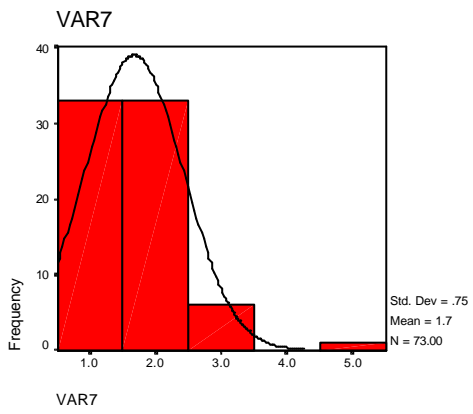
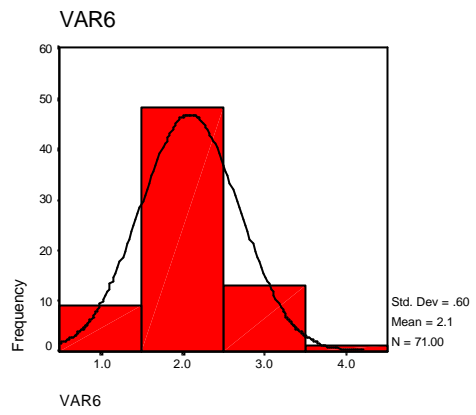
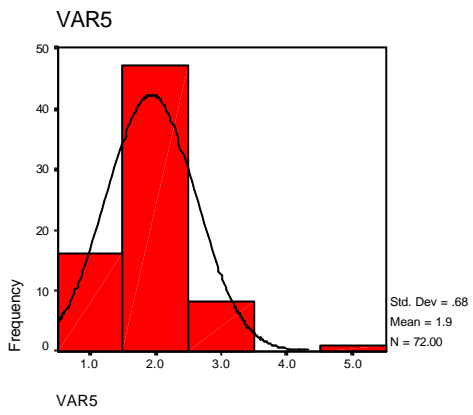


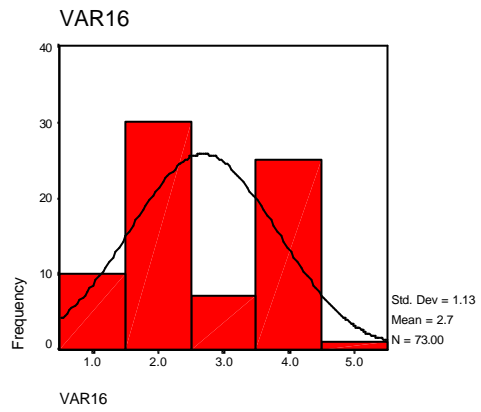
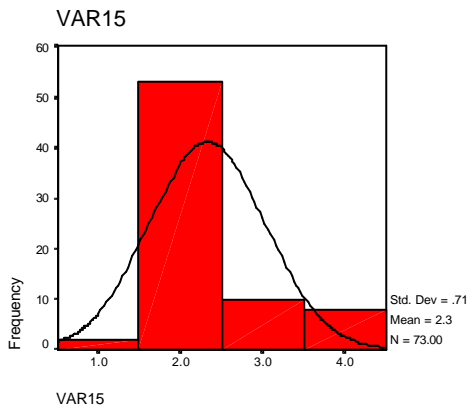
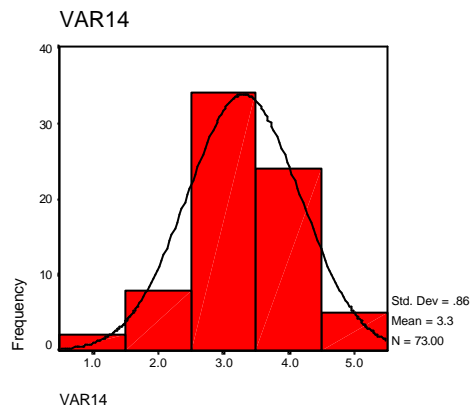
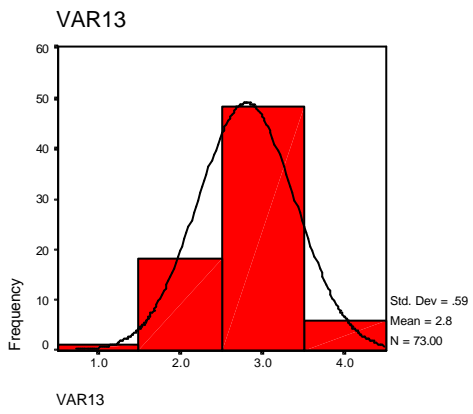
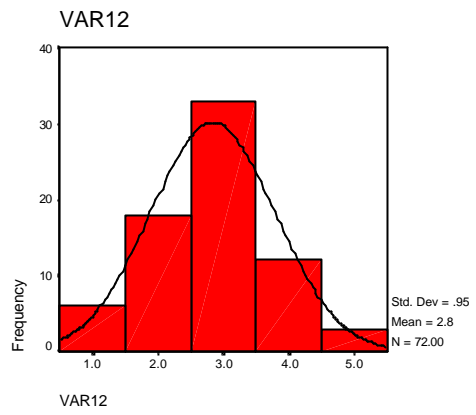
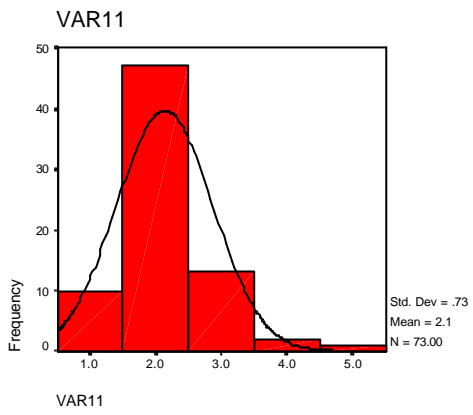


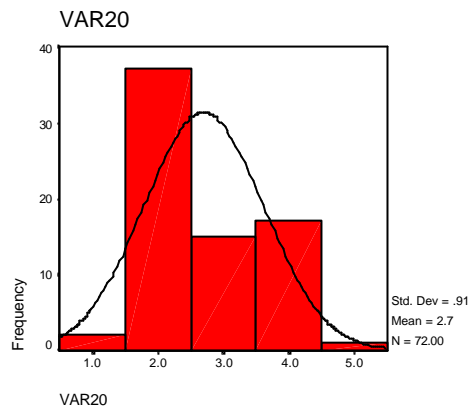
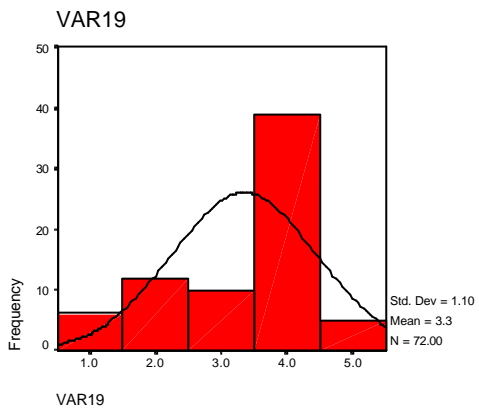
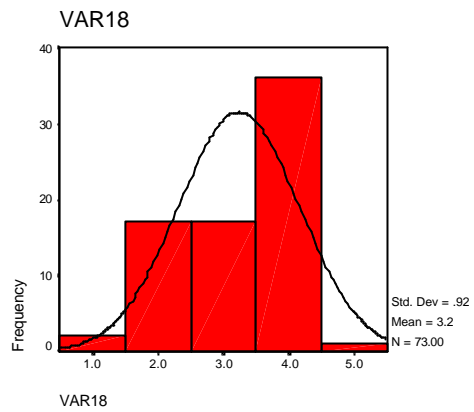
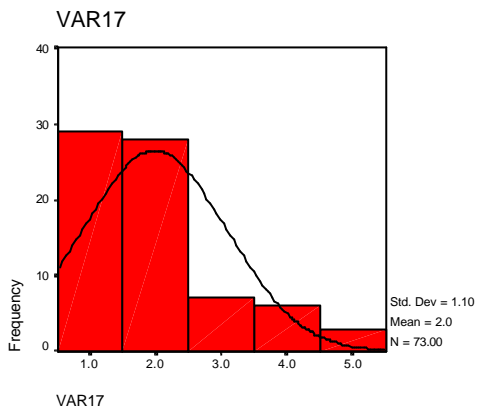


## Histograms for Australia - Army

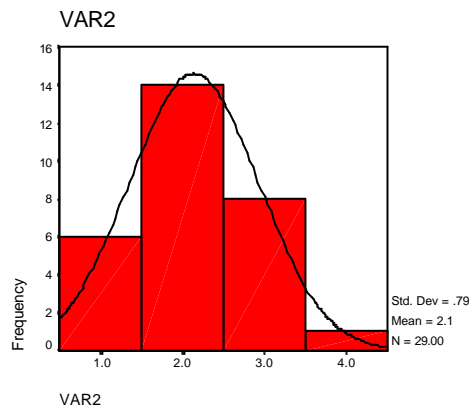
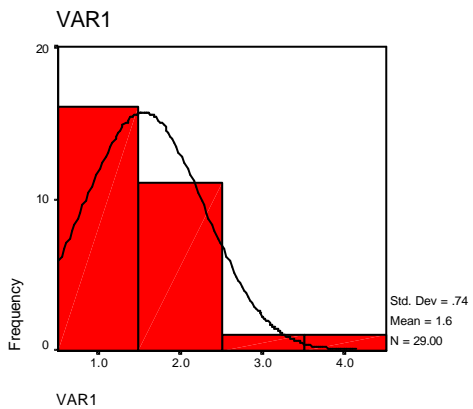


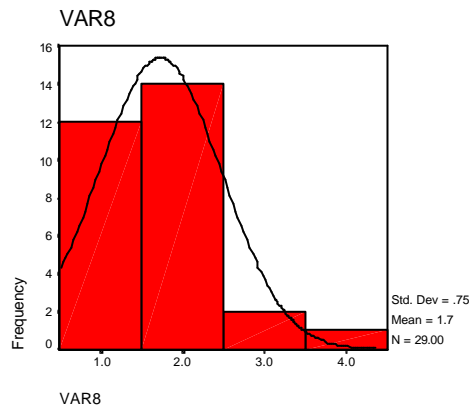
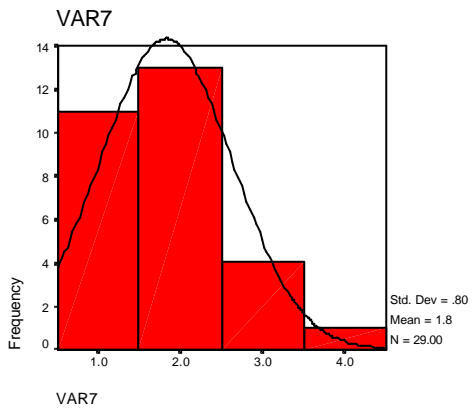
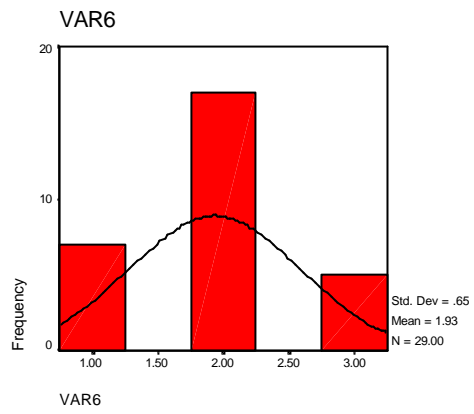
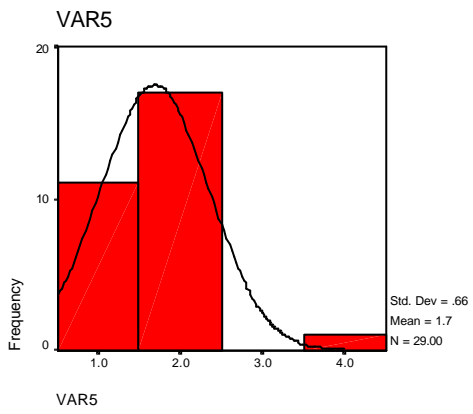
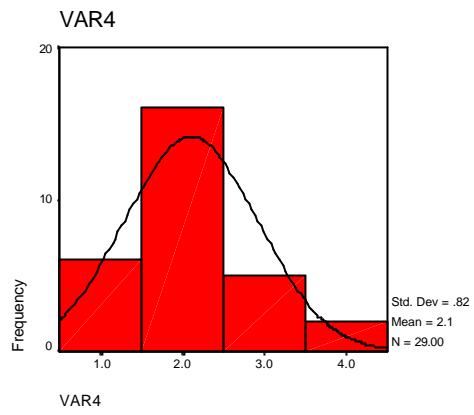
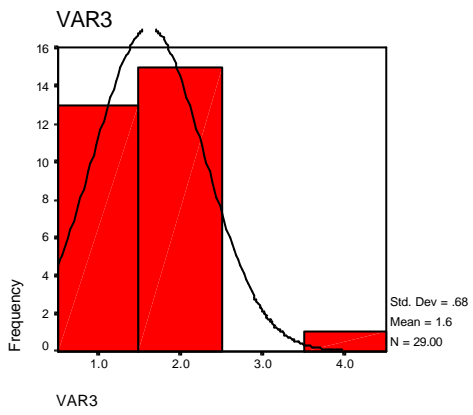


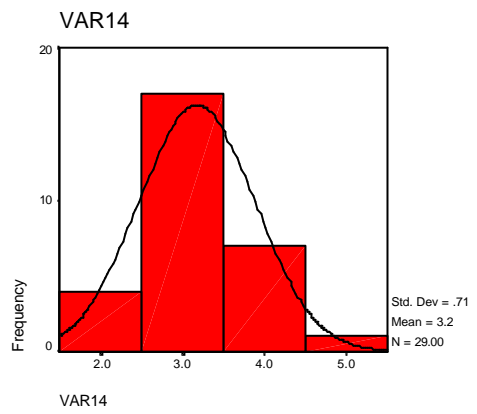
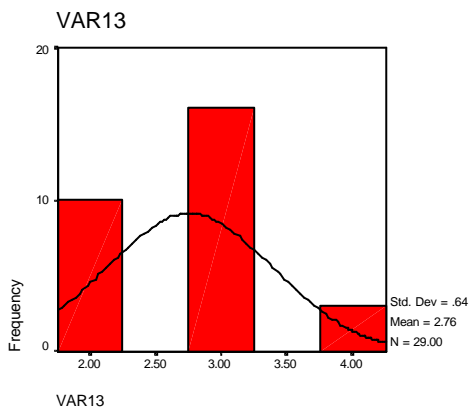
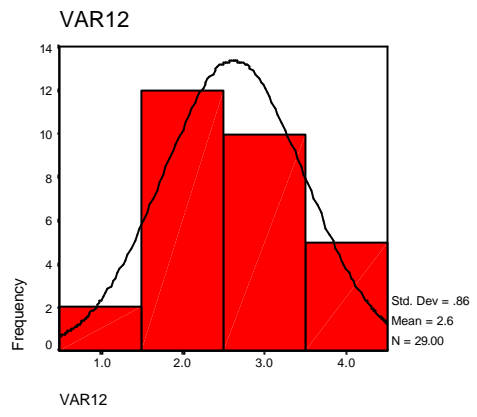
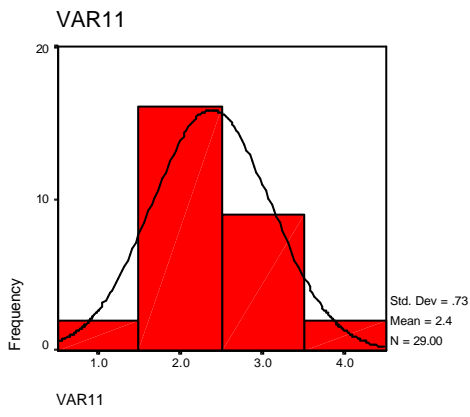
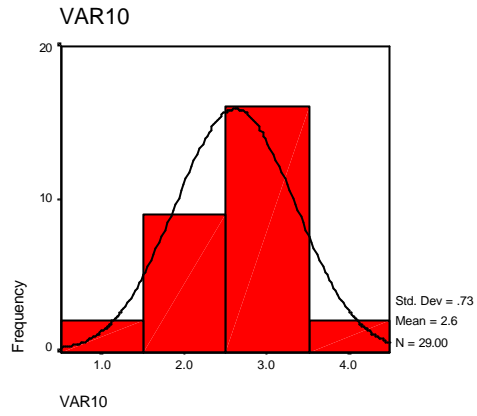
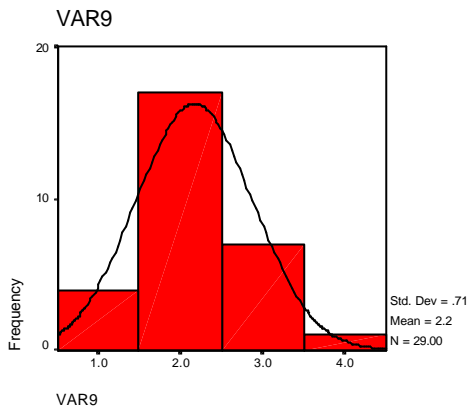




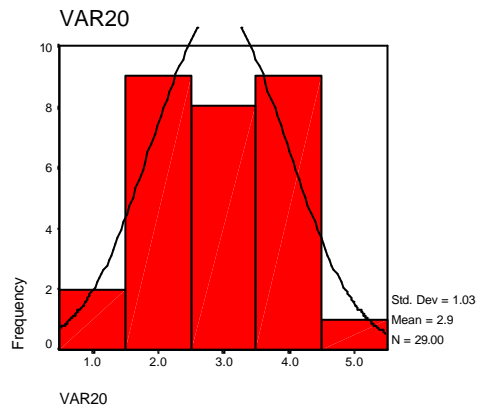
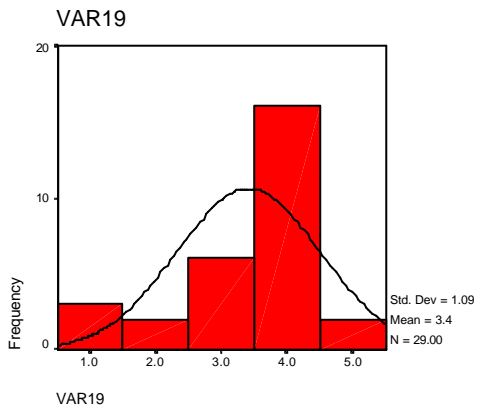
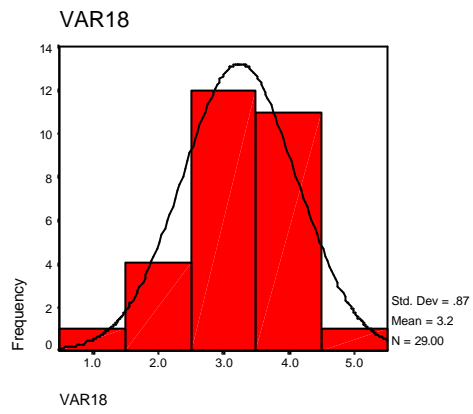
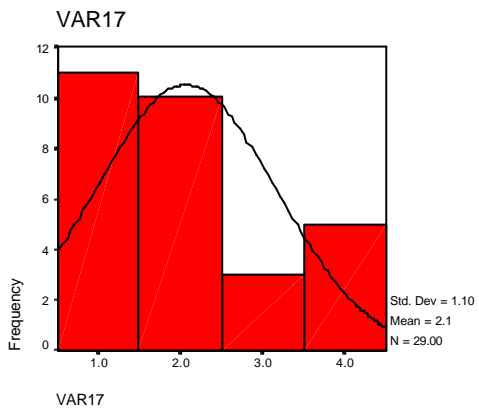
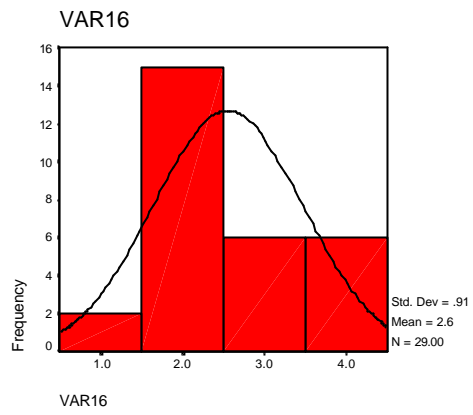
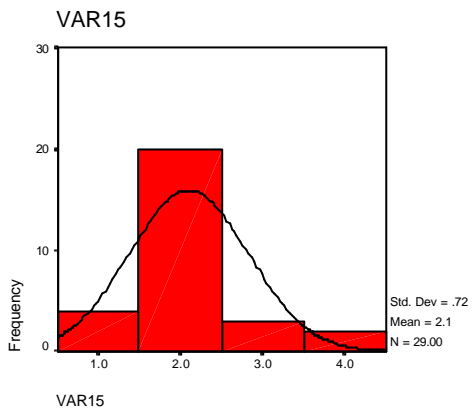
## Histograms for Australia - Air Force





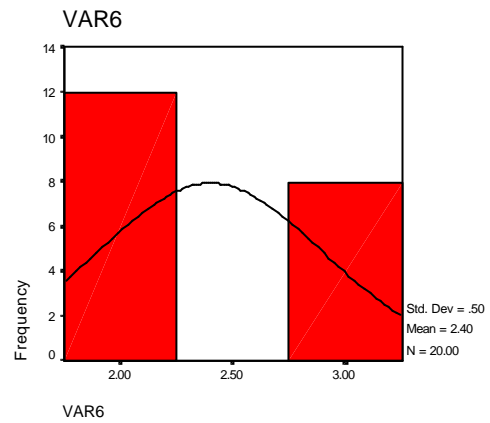
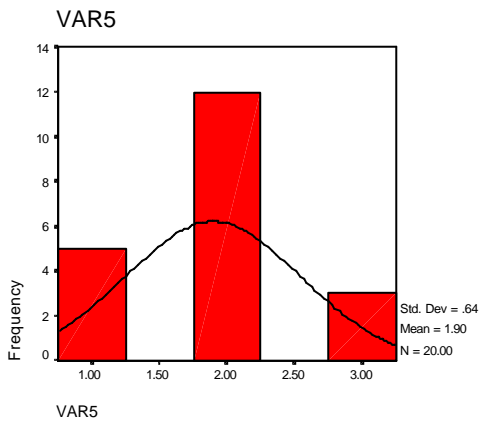
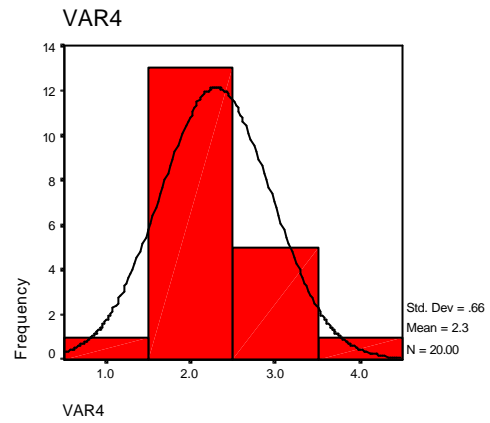
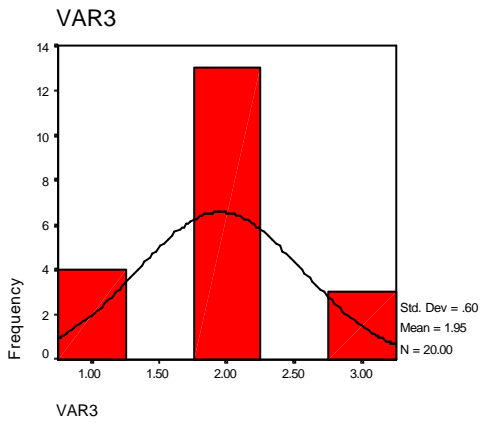
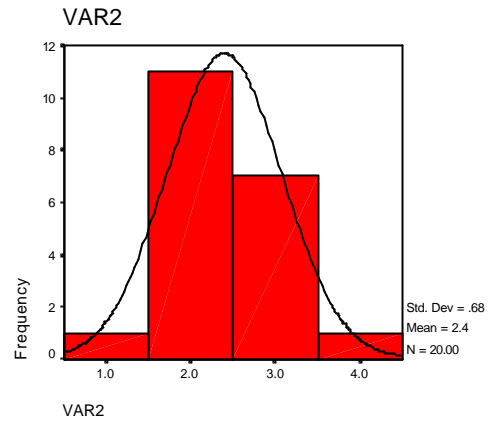
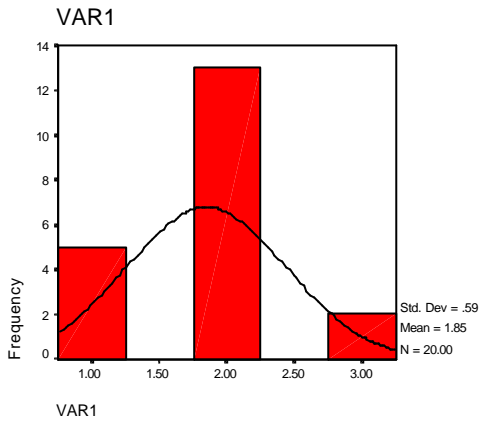


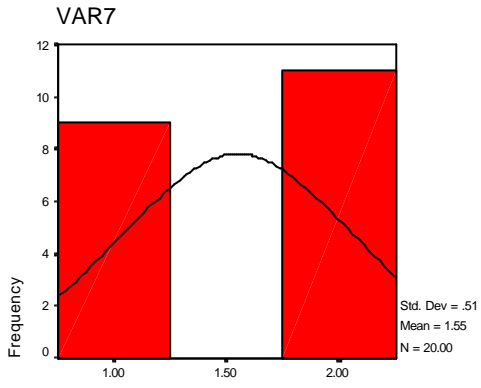




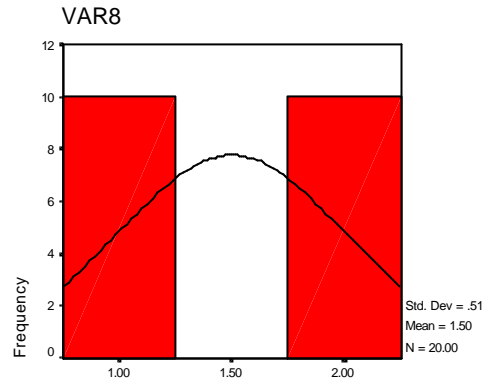
# ANNEX L - HISTOGRAMS FOR BRITAIN

## Navy

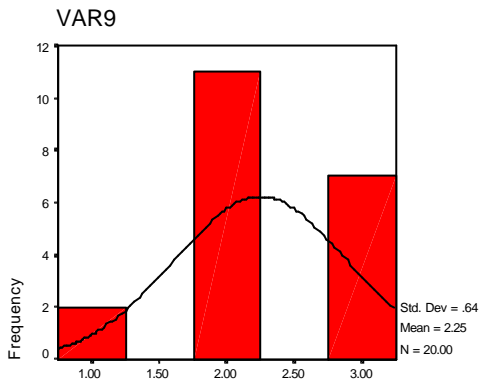




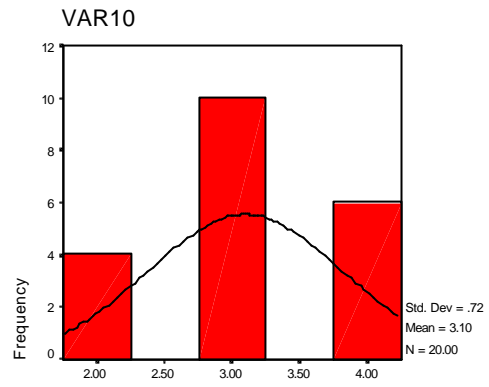
VAR7



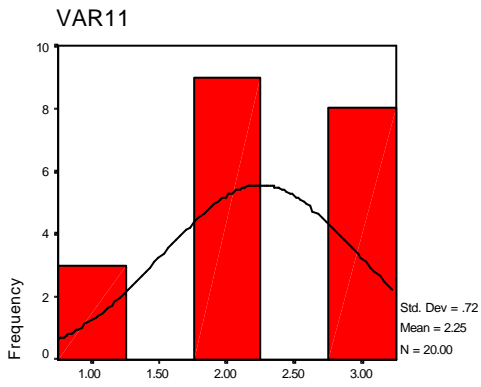
VAR8



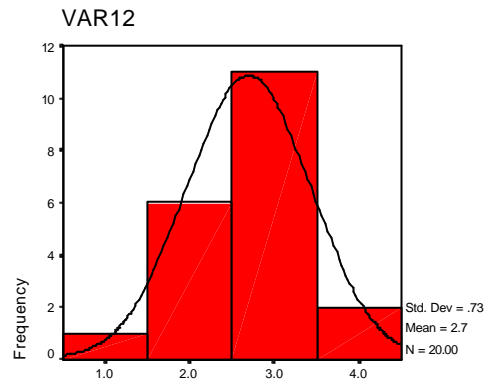
VAR9



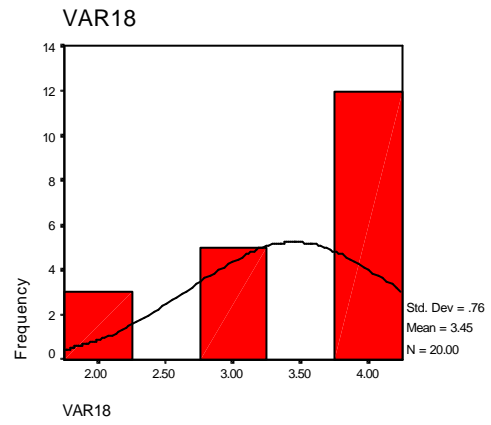
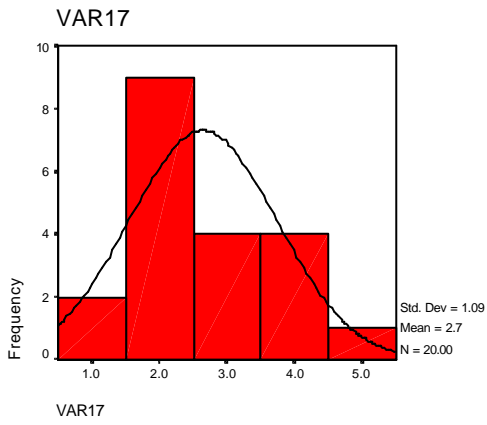
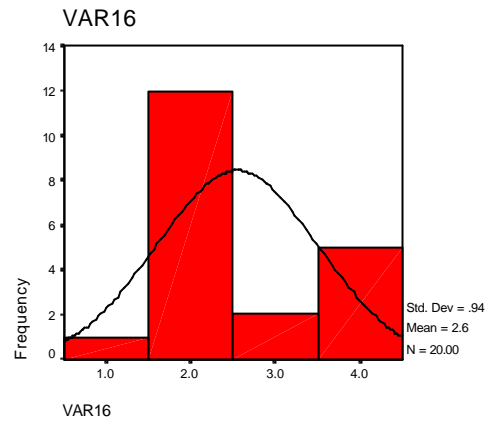
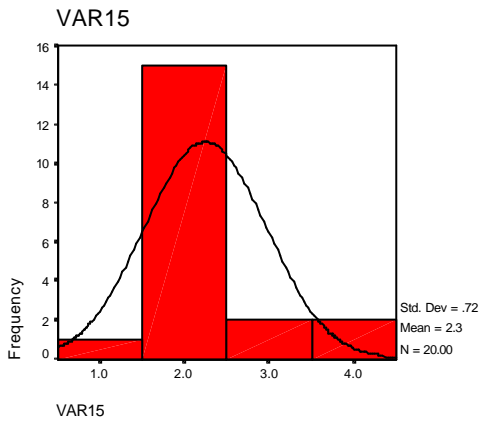
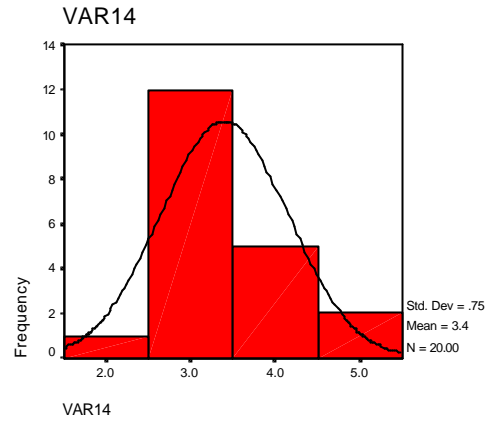
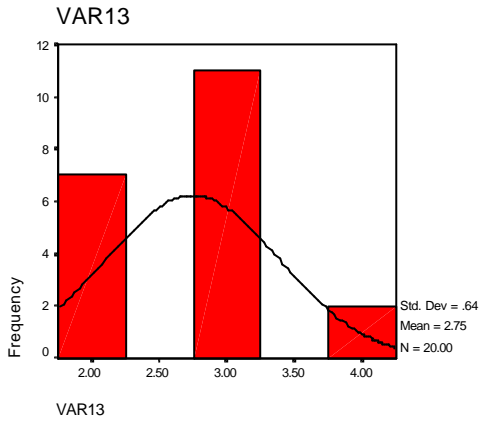
VAR10

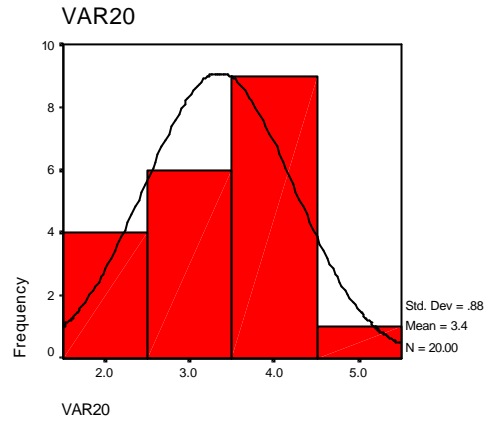
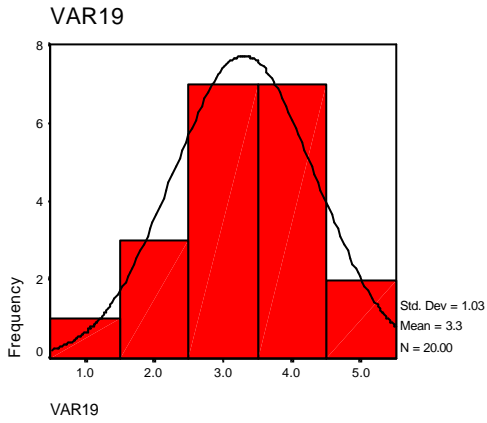


VAR11

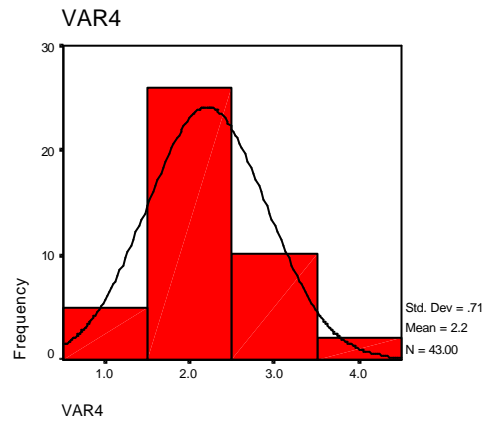
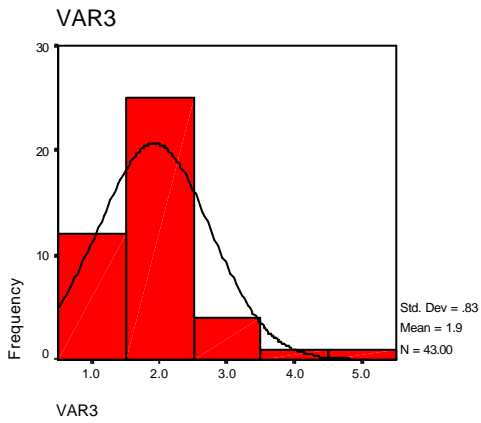
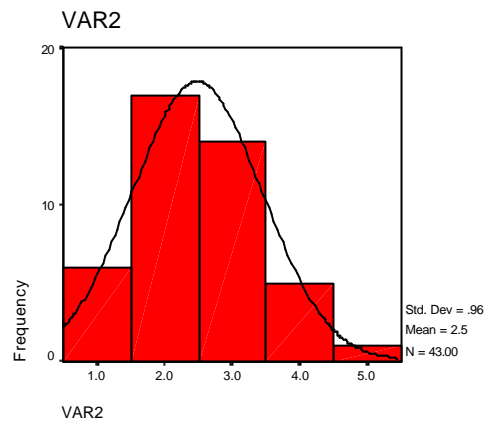
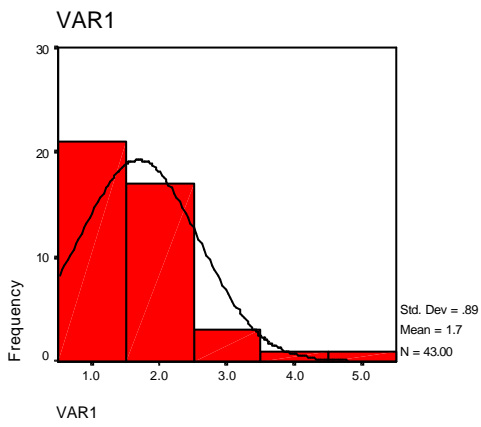


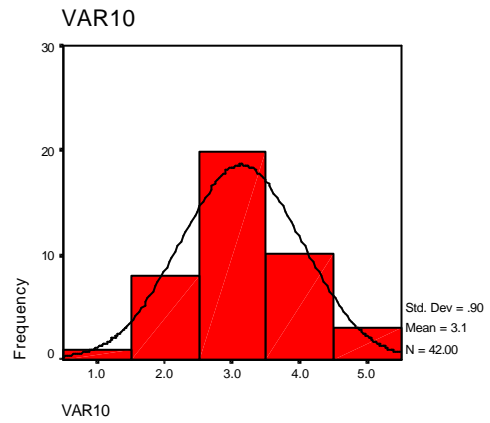
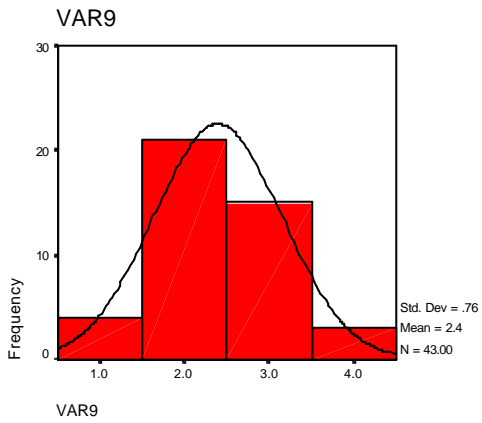
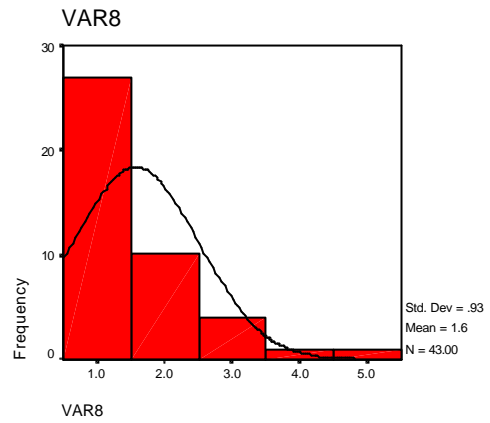
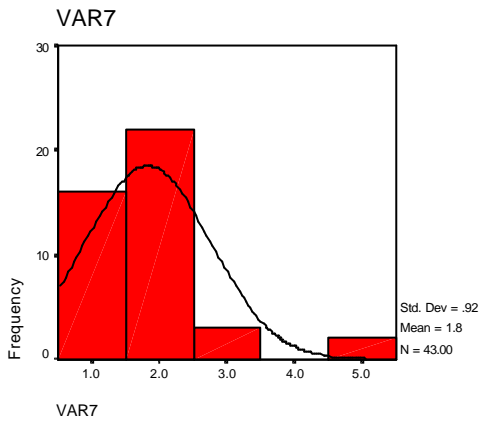
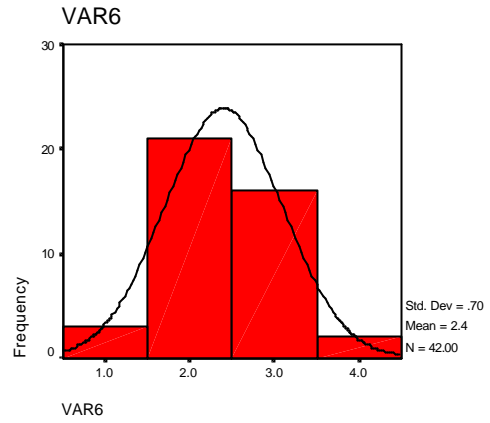
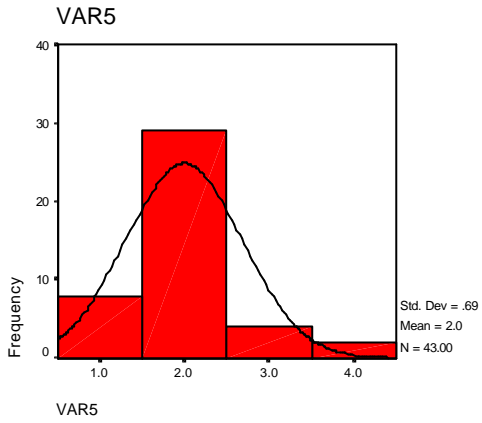
VAR12

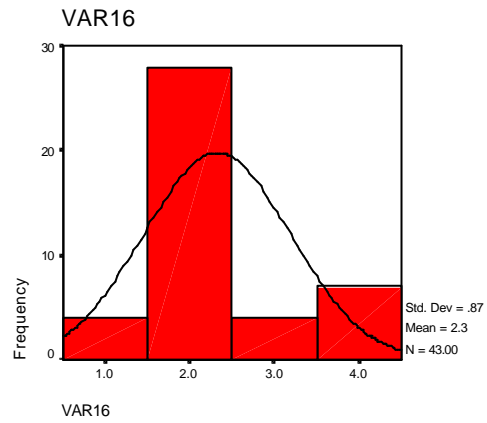
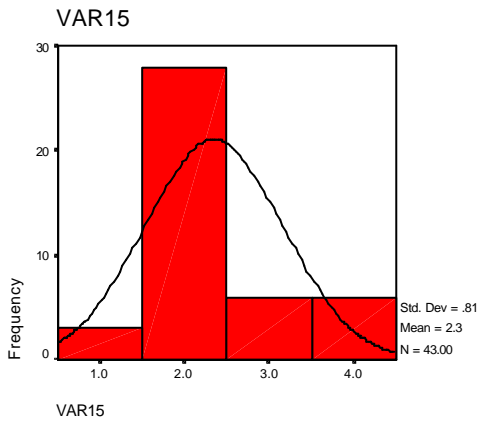
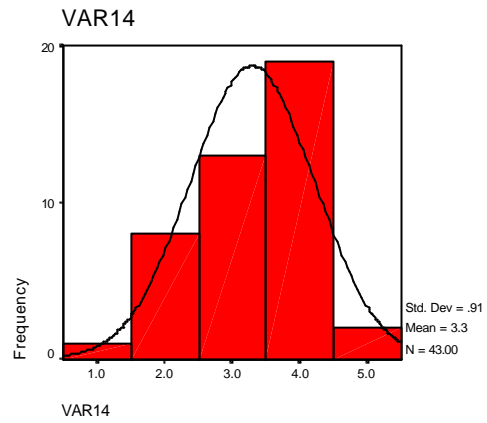
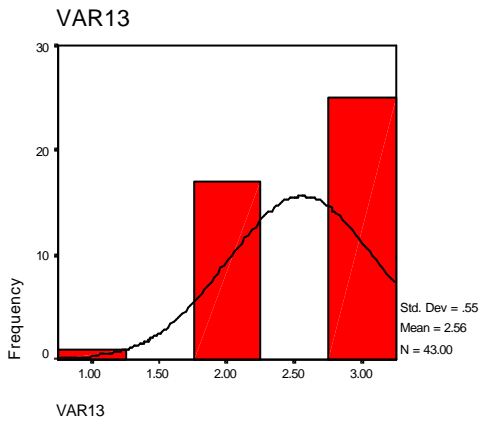
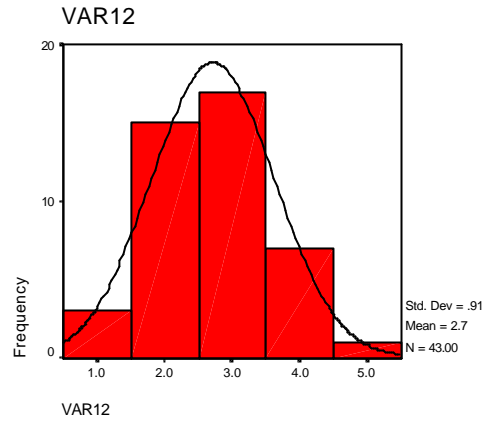
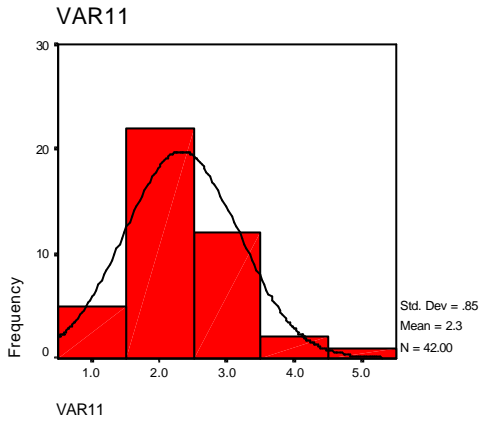


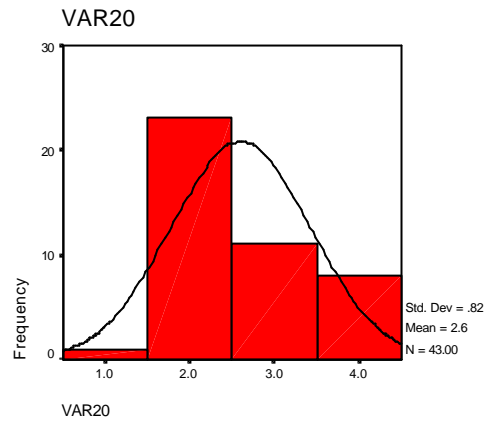
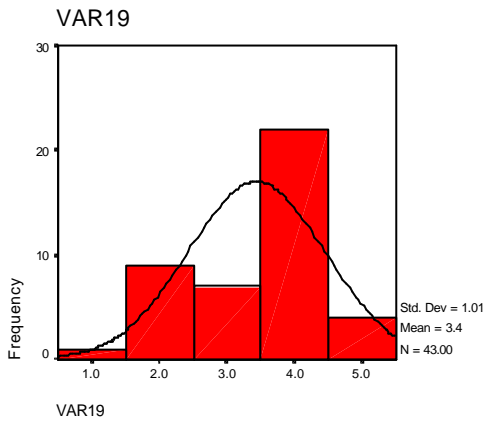
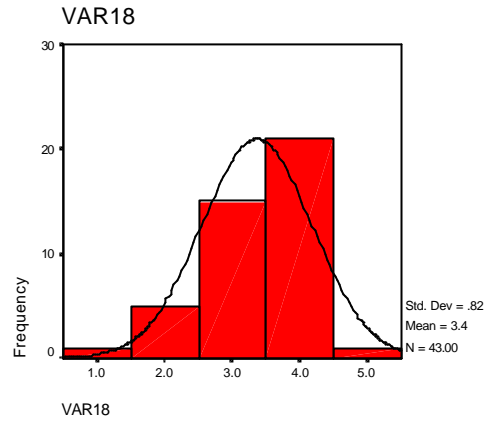
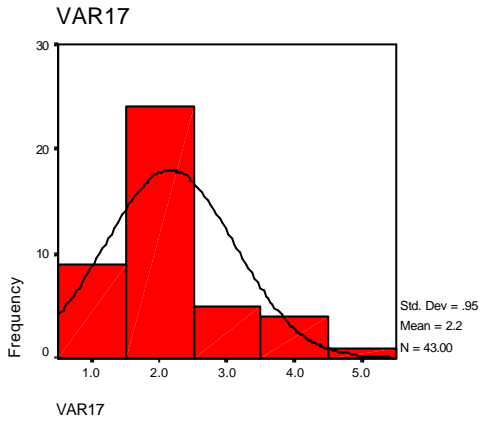


## Histograms for Britain - Army

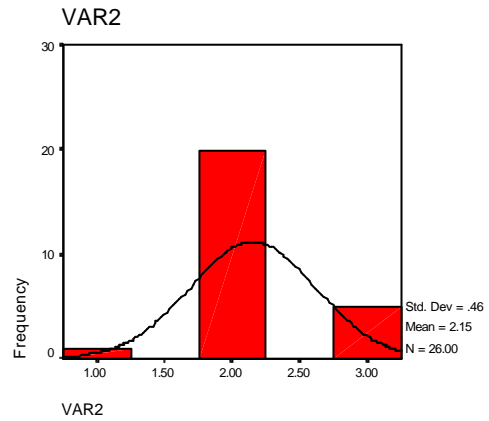
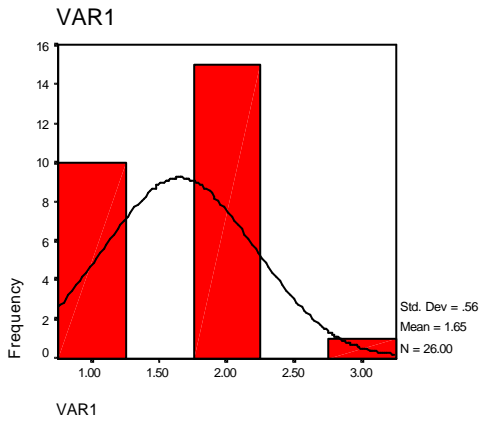




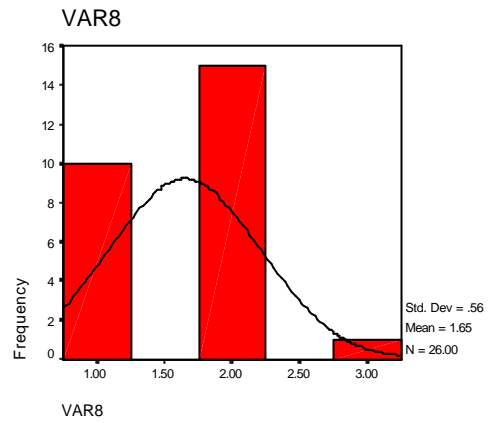
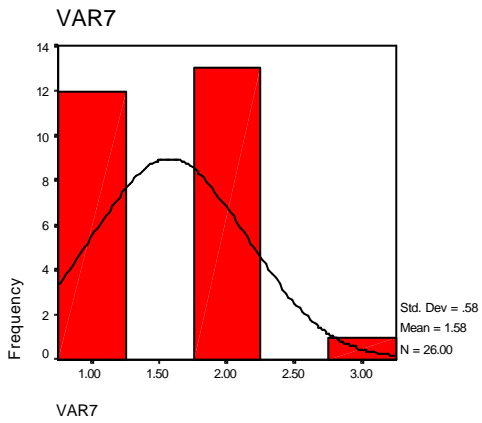
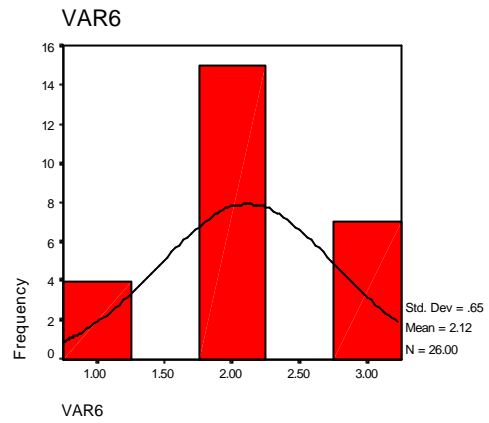
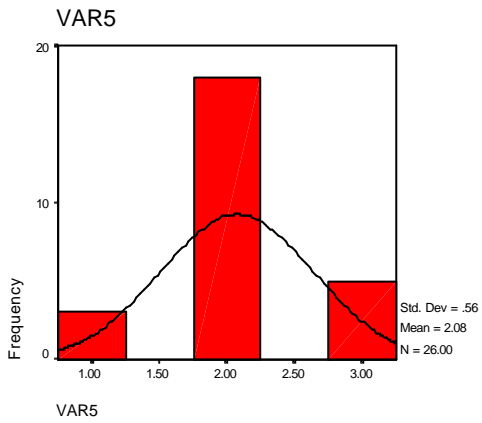
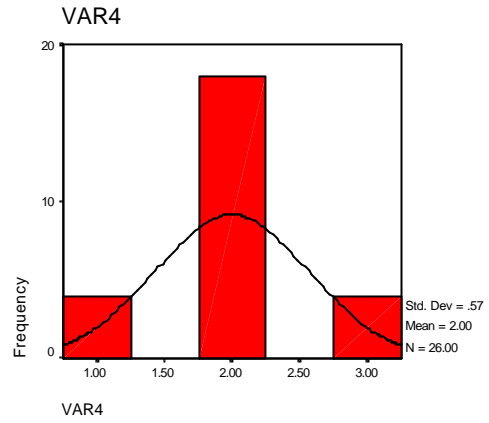
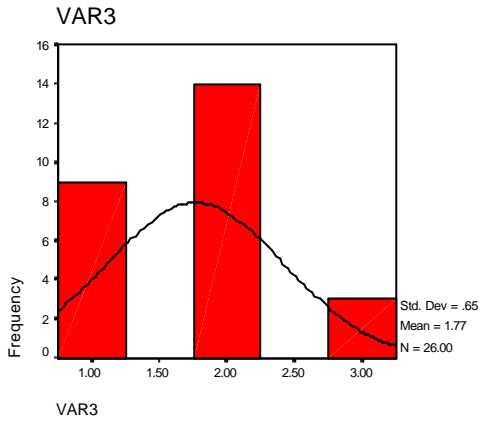


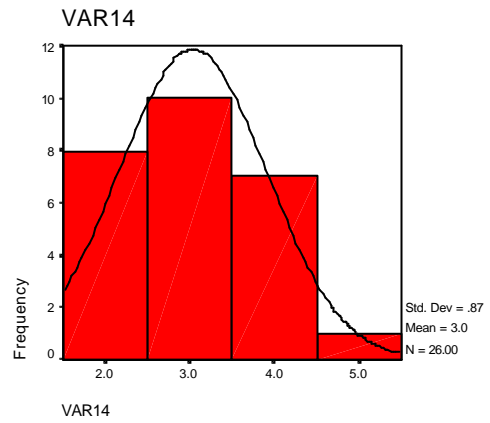
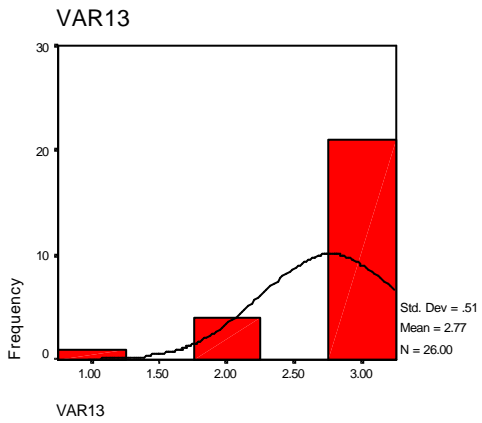
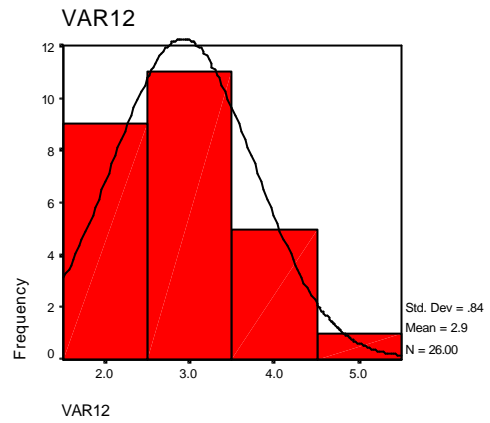
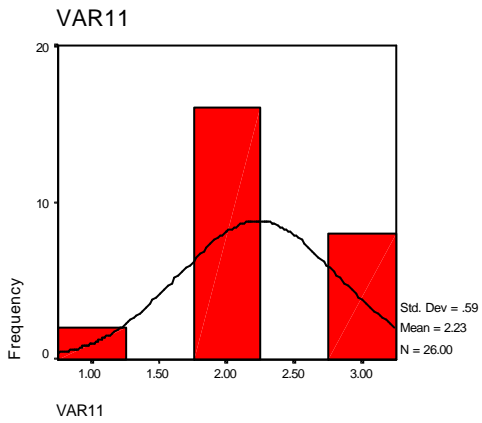
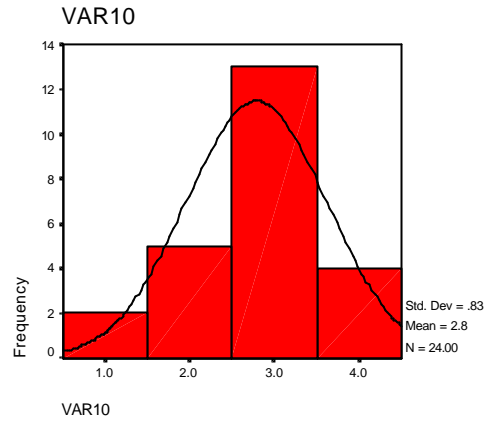
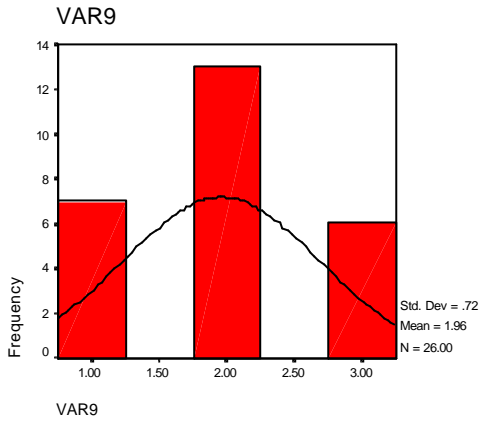


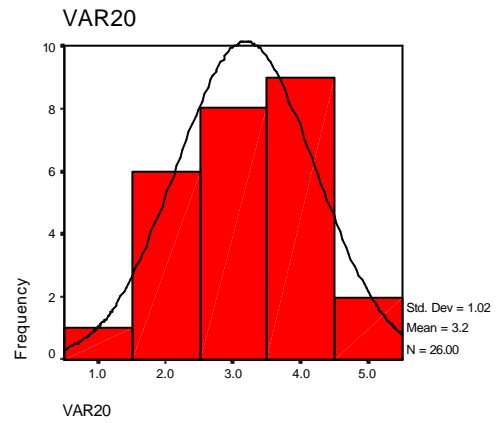
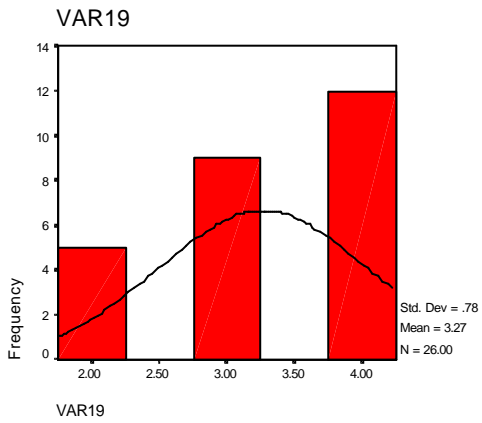
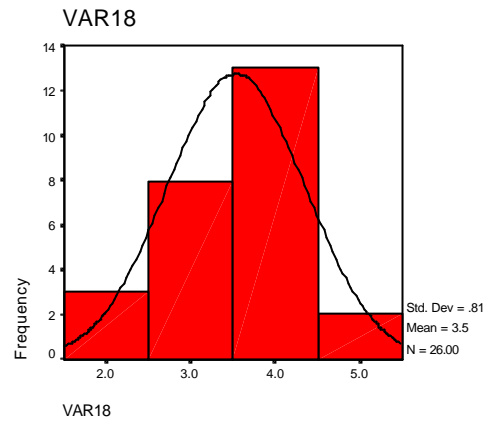
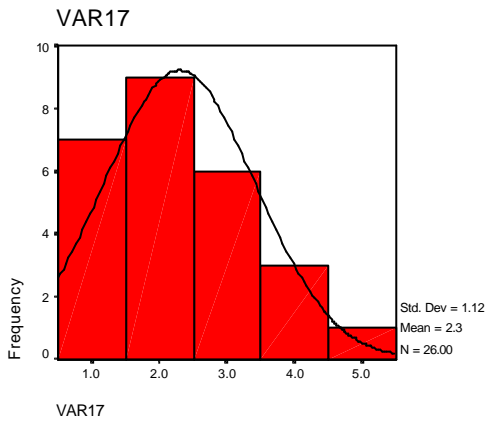
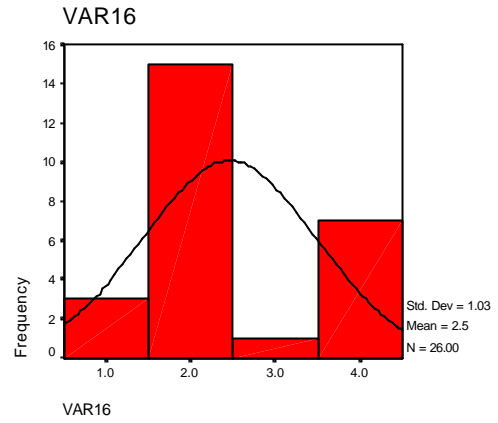
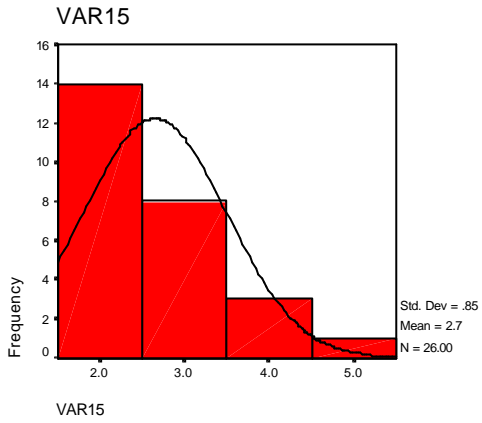
## Histograms for Britain - Air Force





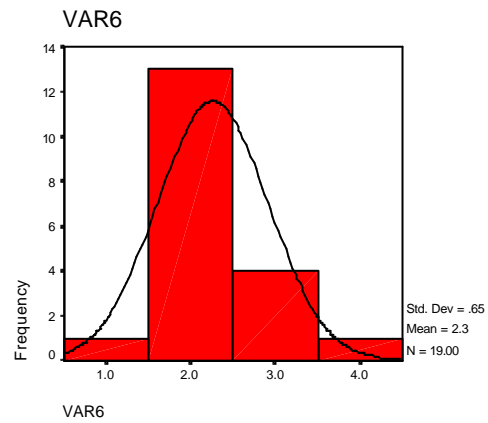
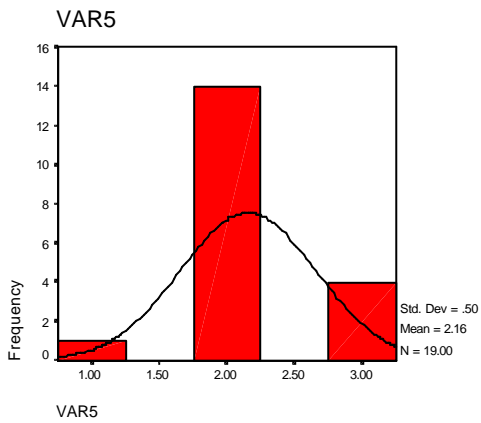
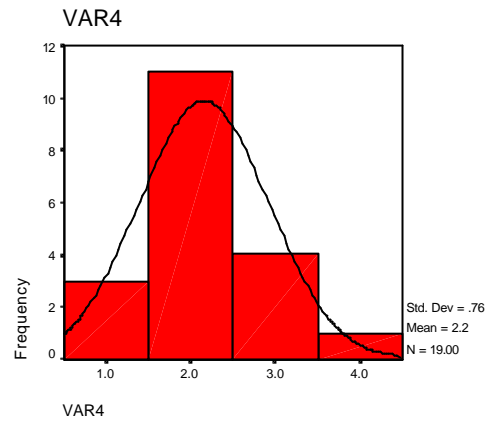
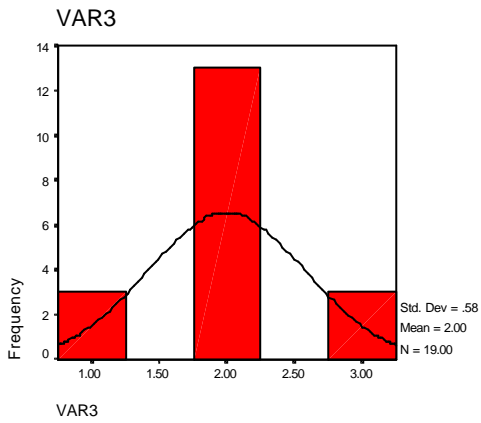
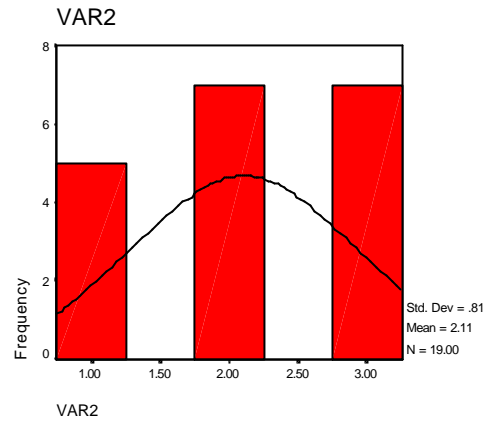
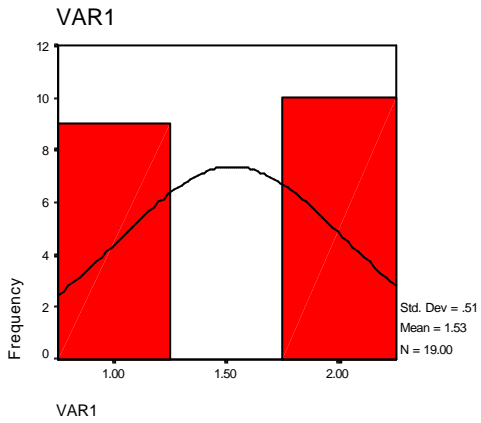


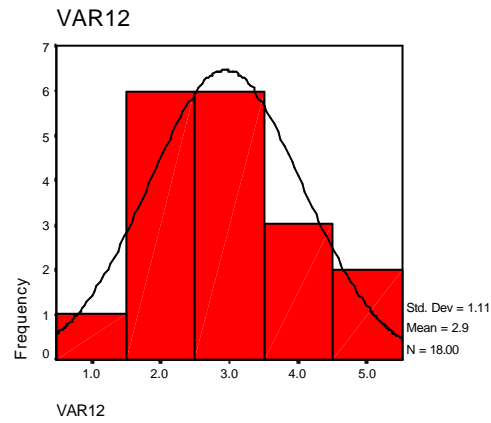
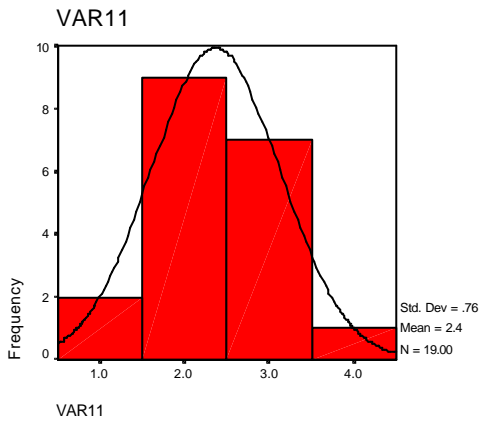
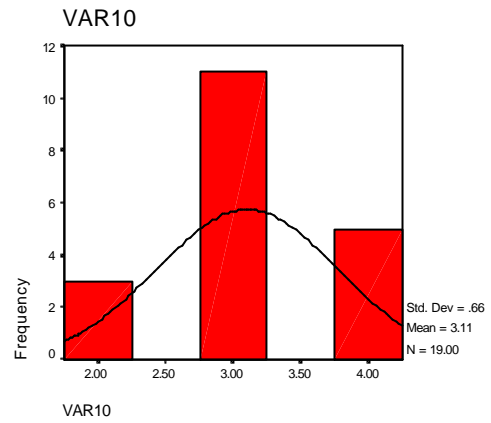
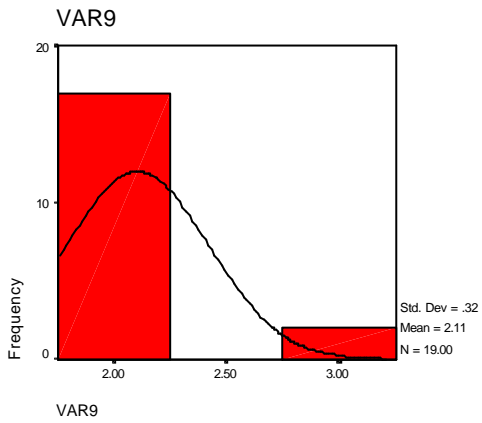
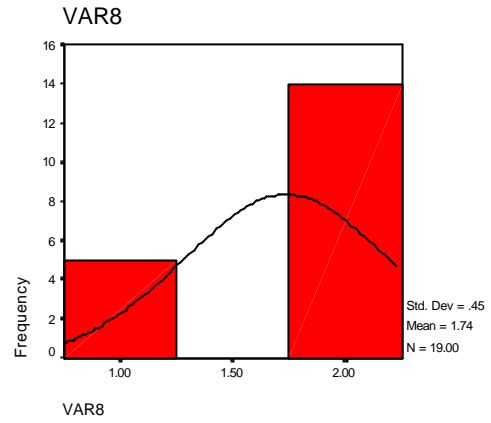
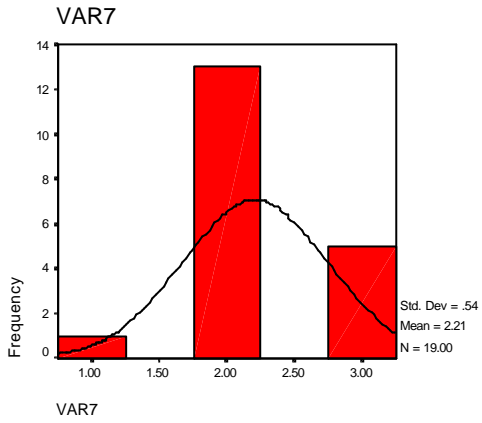


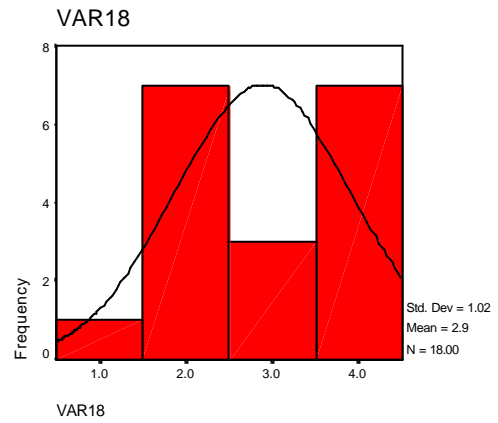
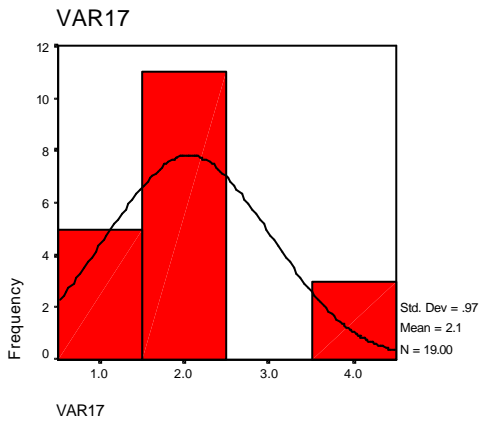
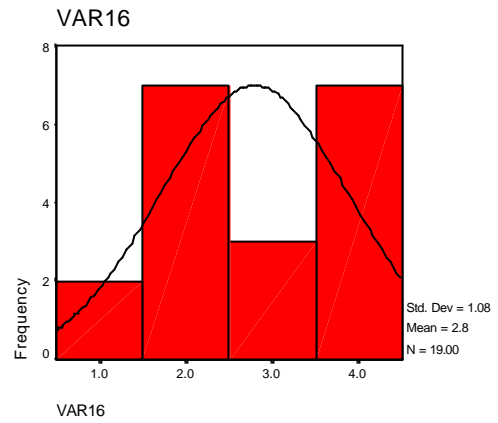
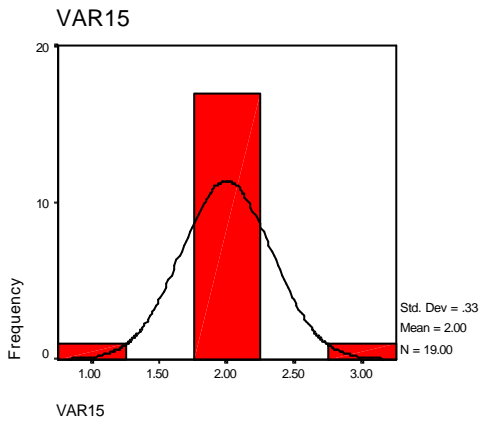
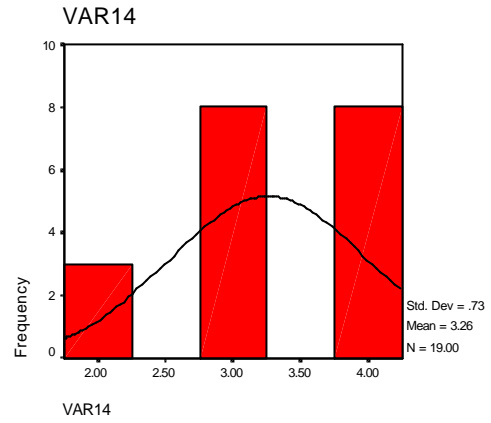
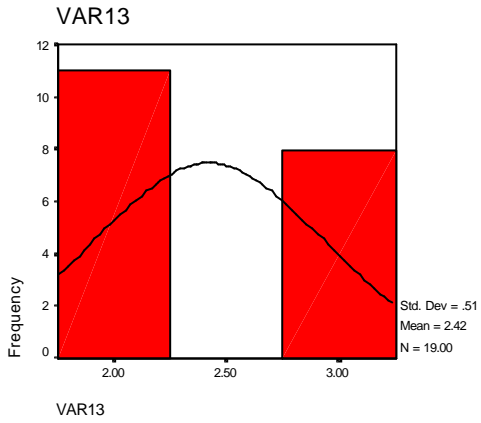


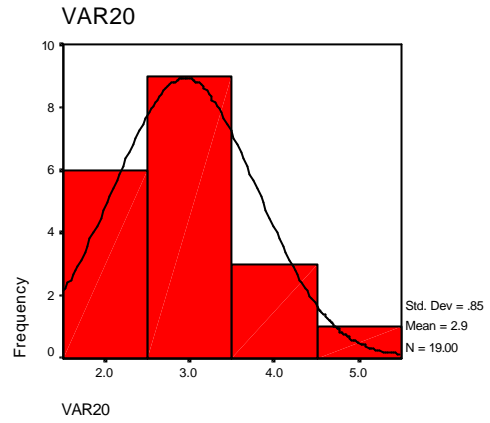
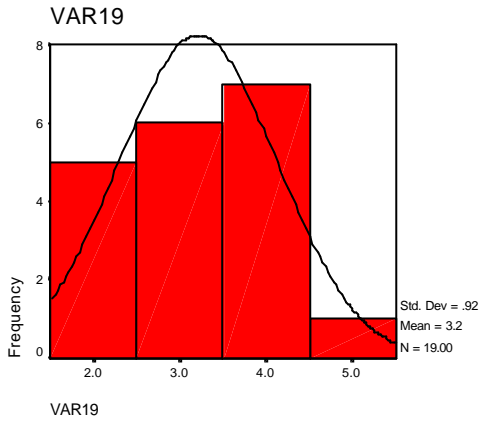
# ANNEX M - HISTOGRAMS FOR CANADA

## Navy

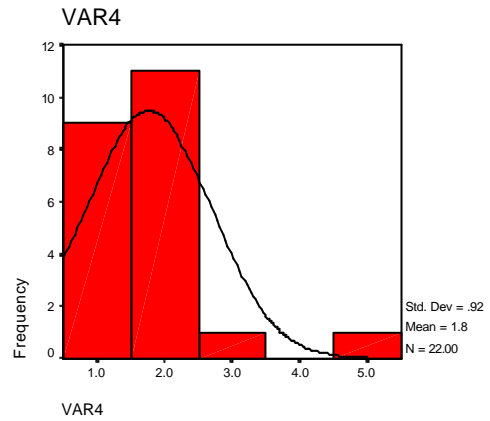
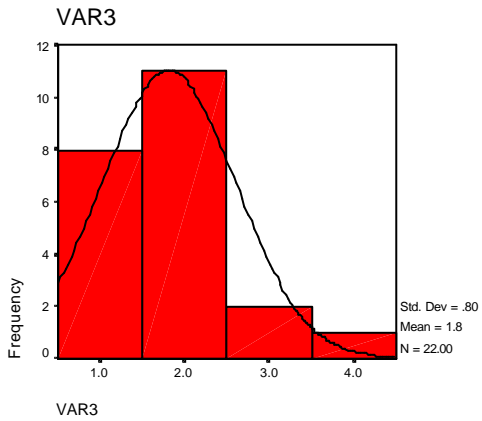
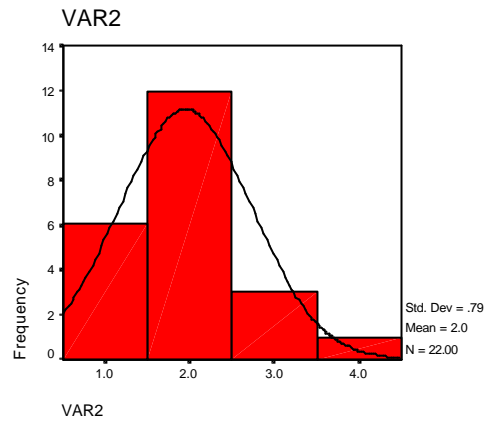
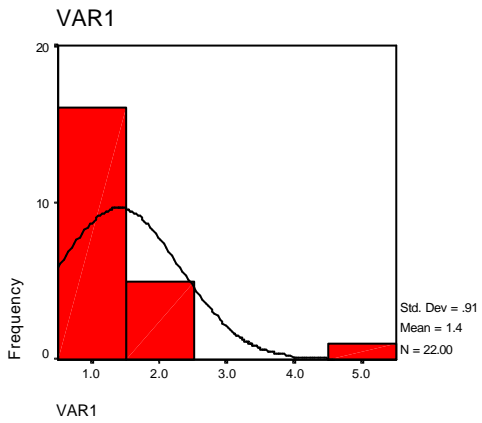


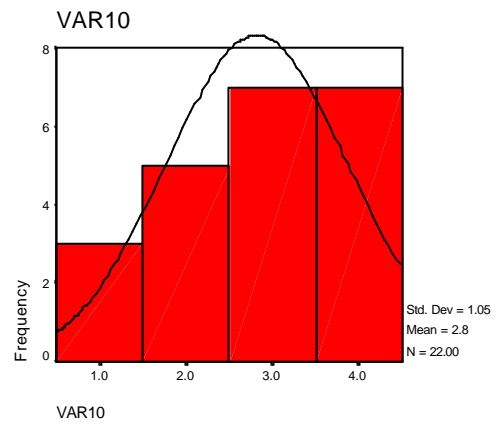
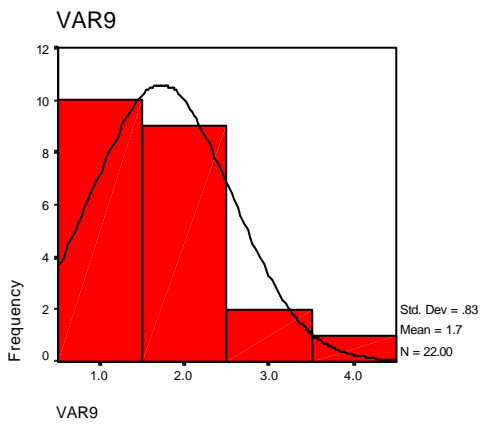
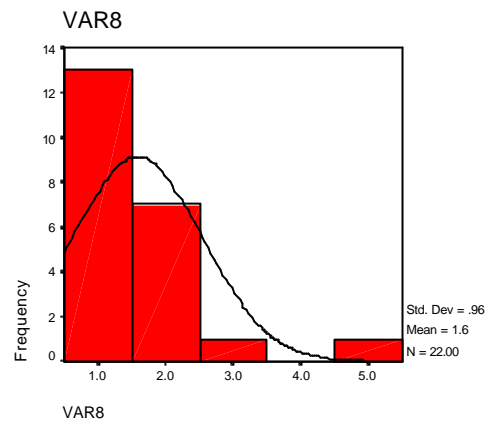
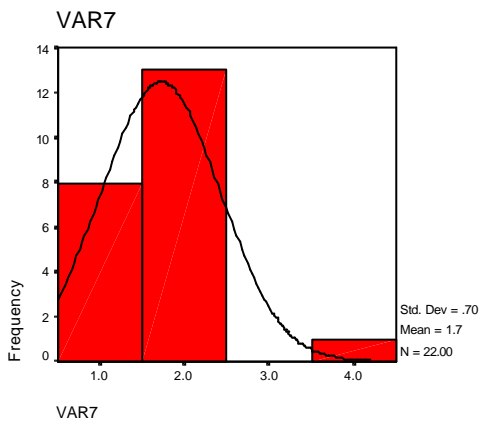
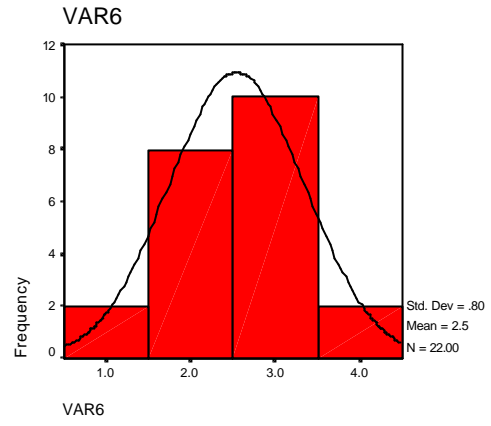
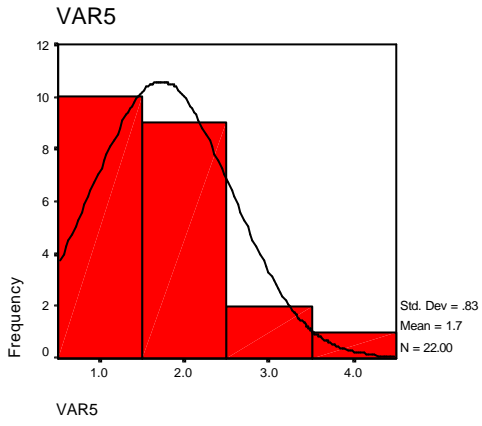




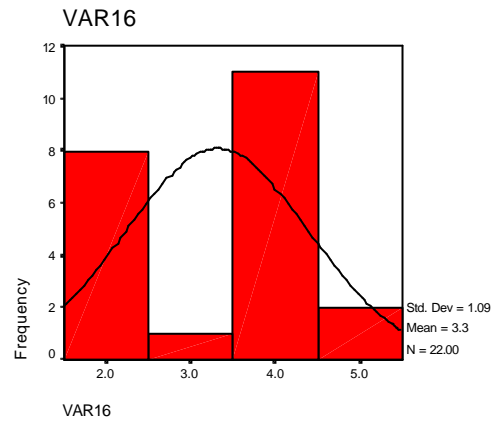
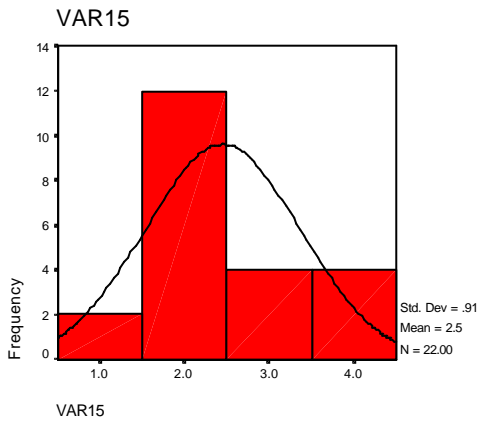
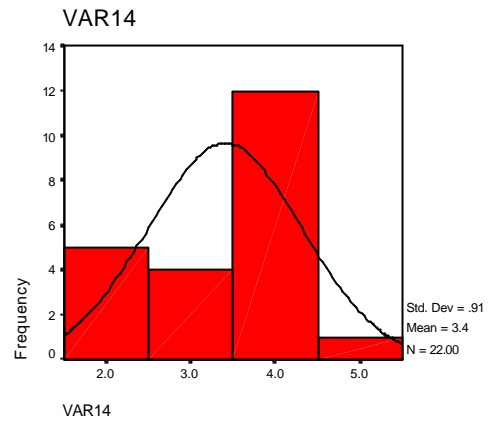
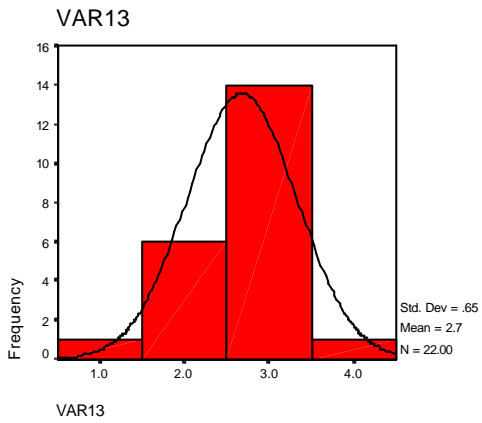
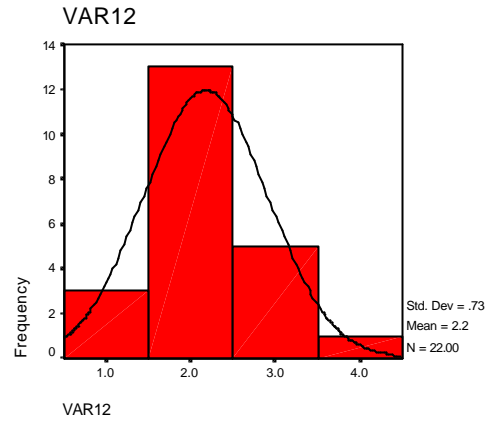
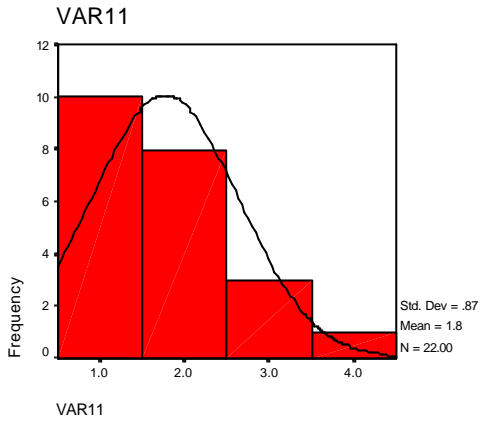


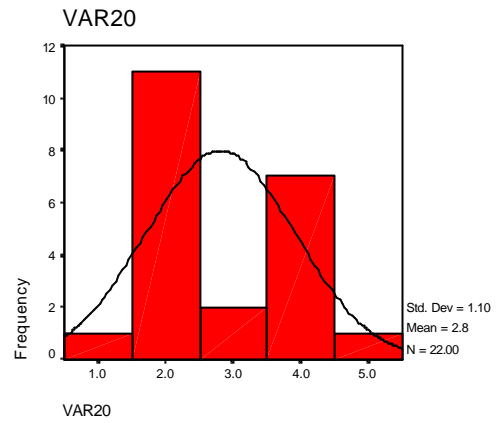
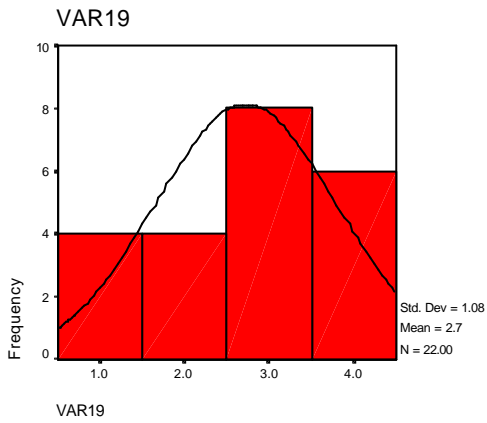
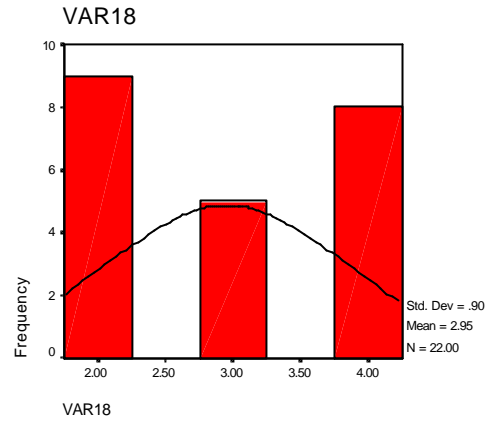
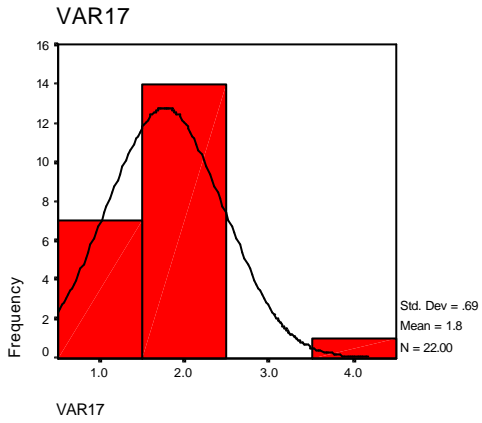
## Histograms for Canada - Army



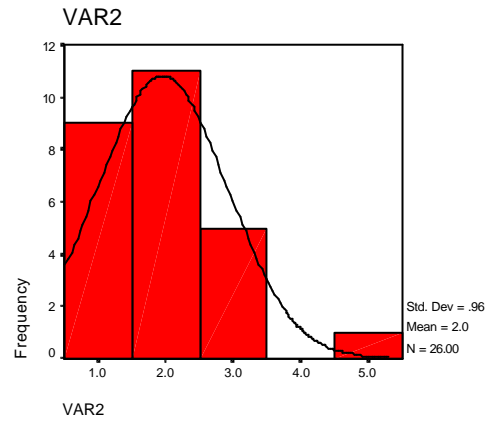
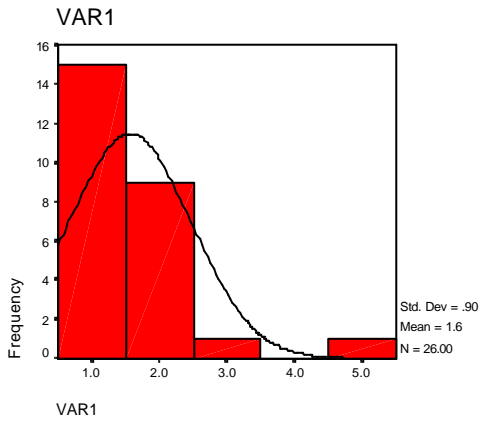


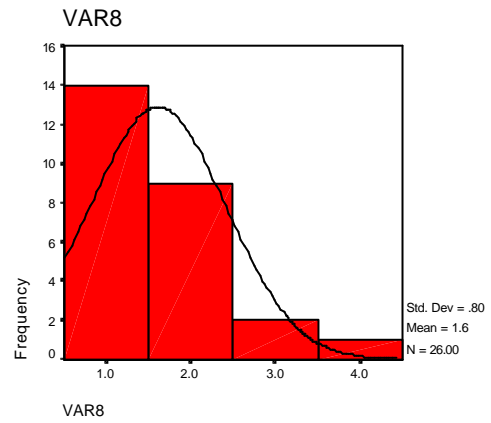
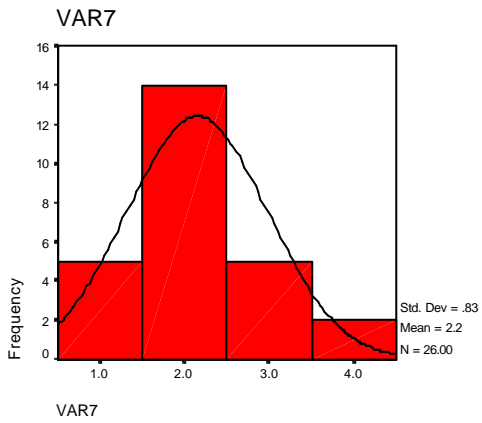
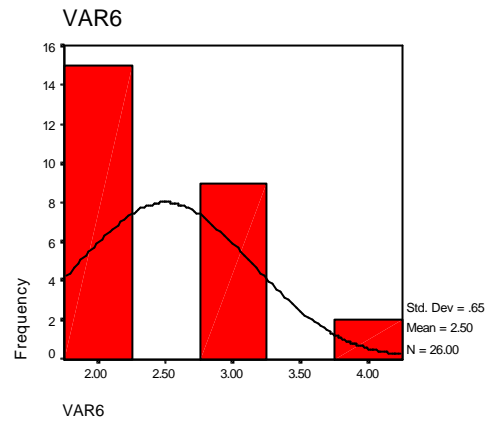
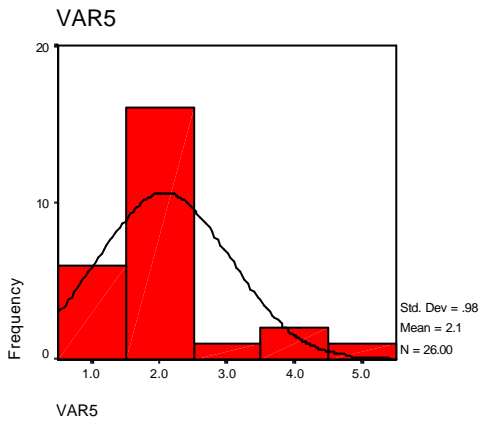
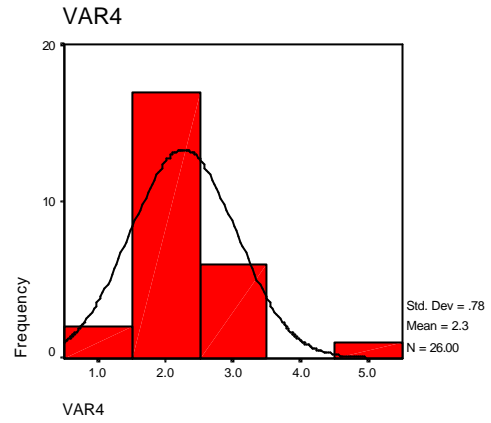
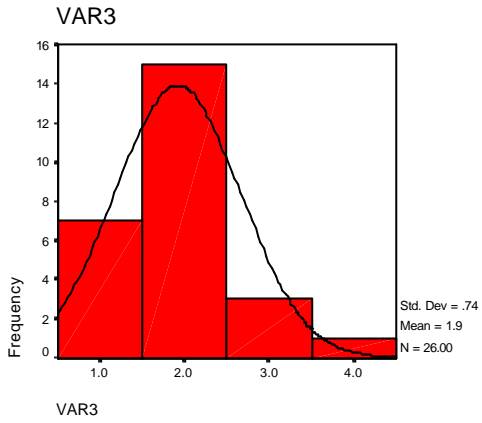


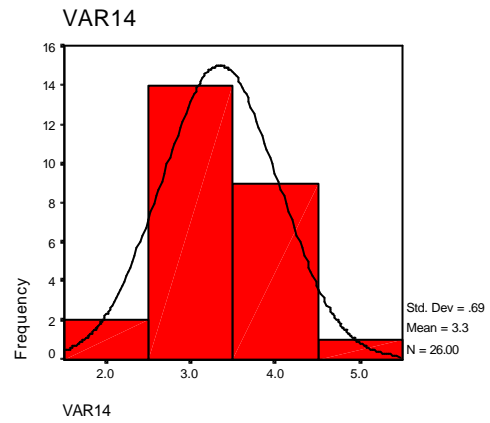
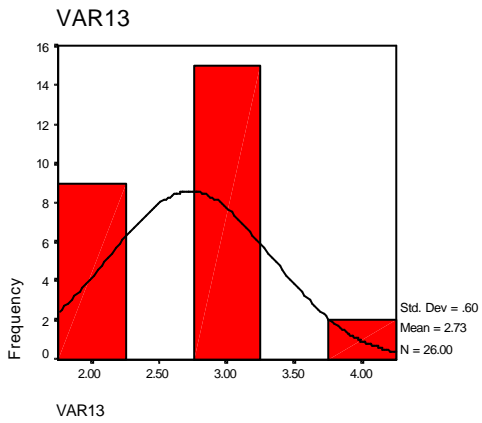
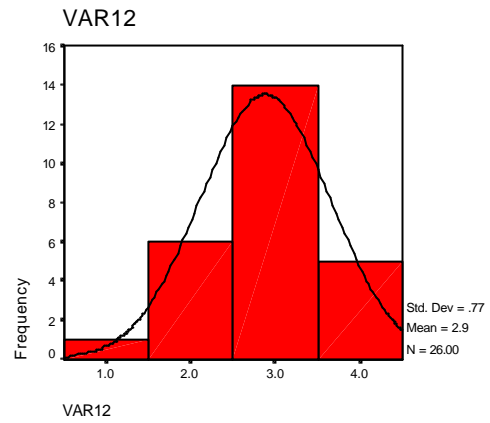
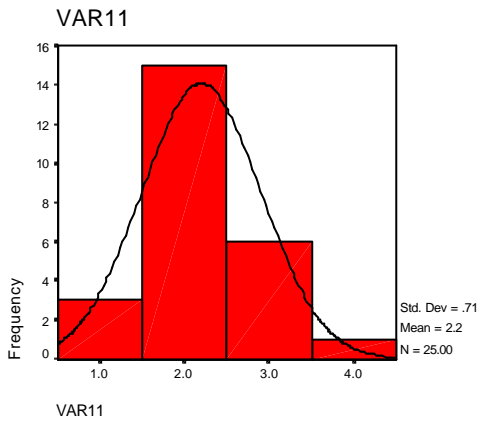
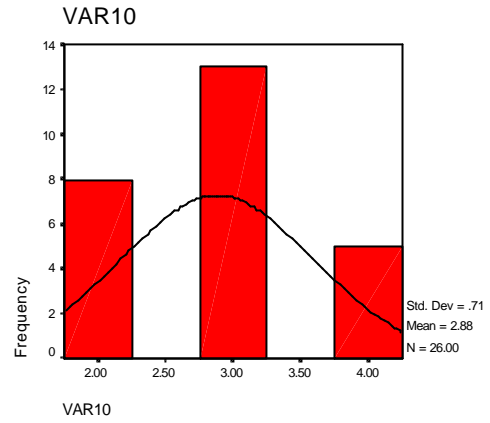
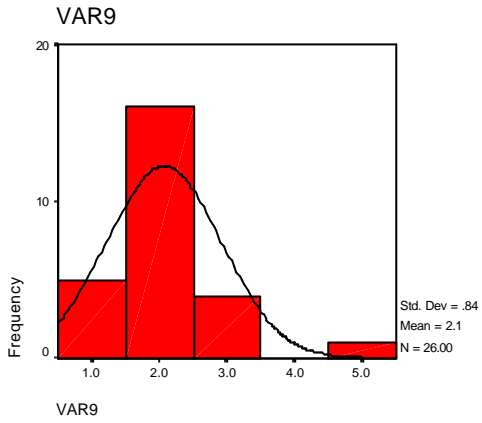


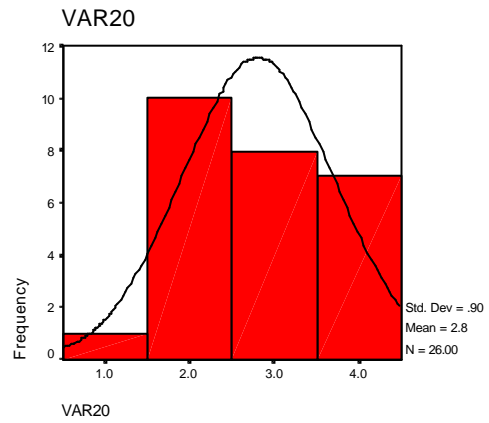
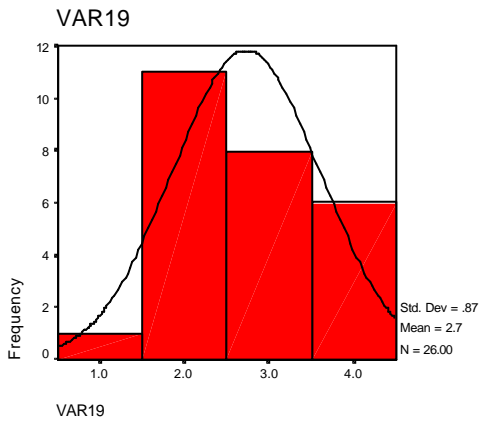
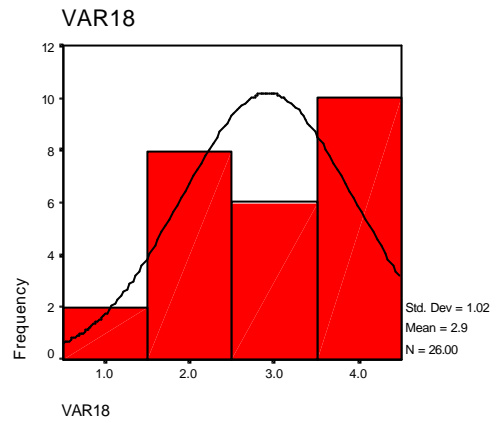
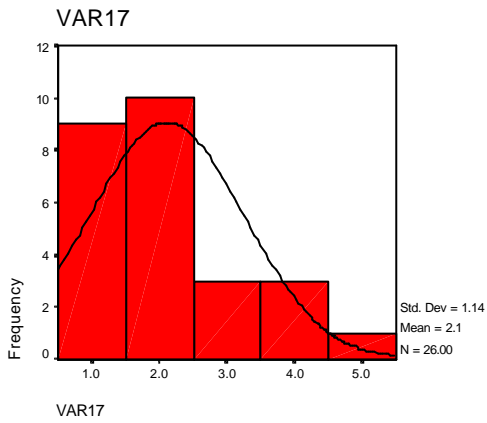
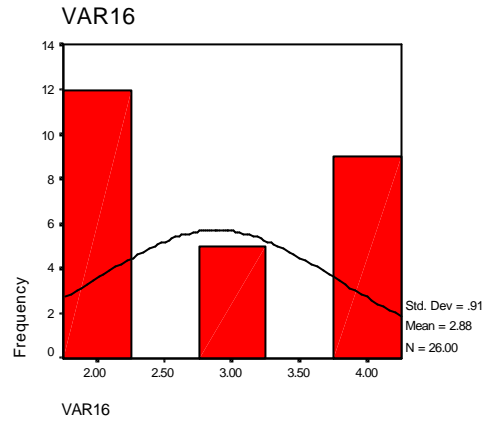
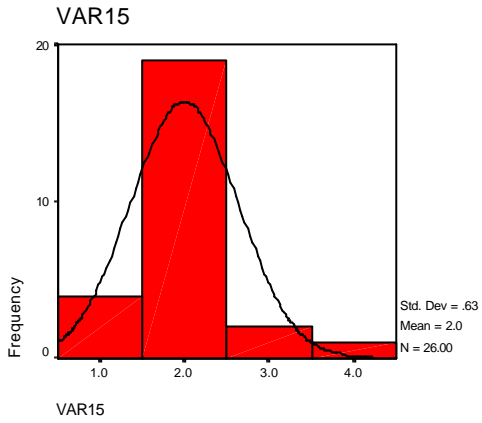


## Histograms for Canada – Air Force



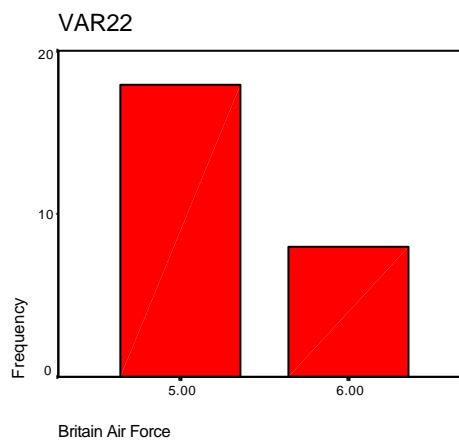
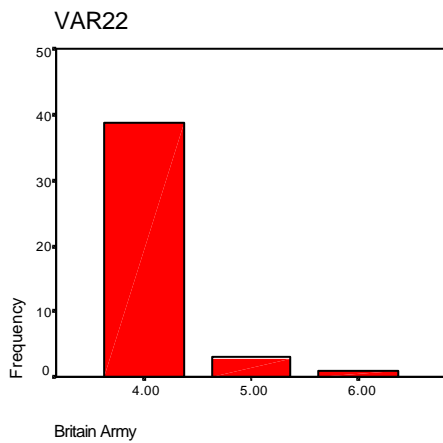
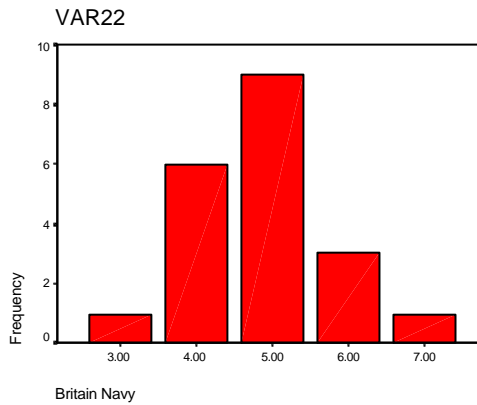
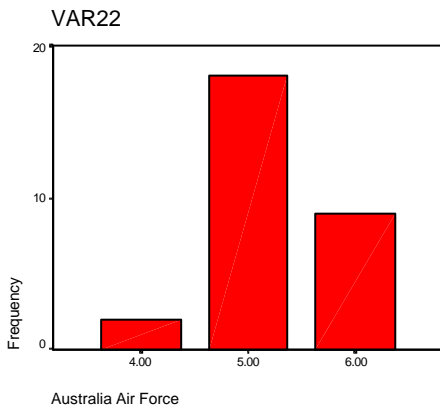
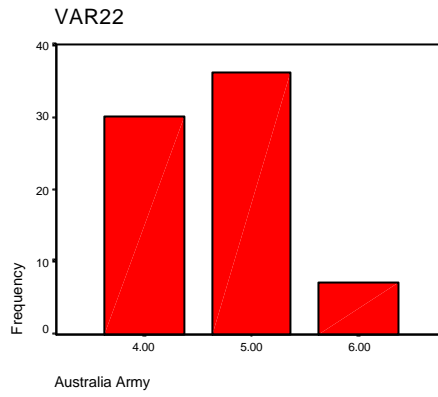
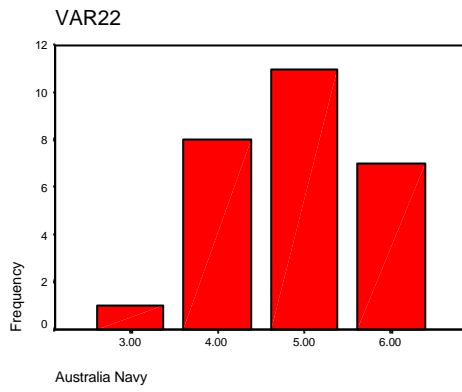


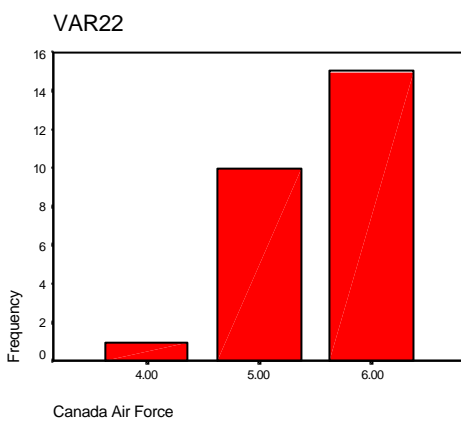
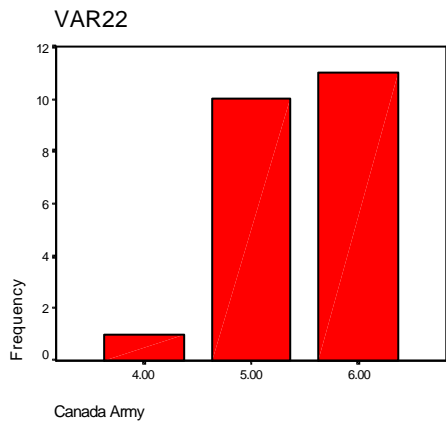
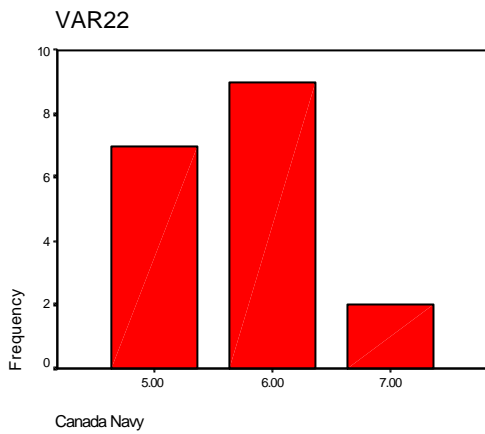
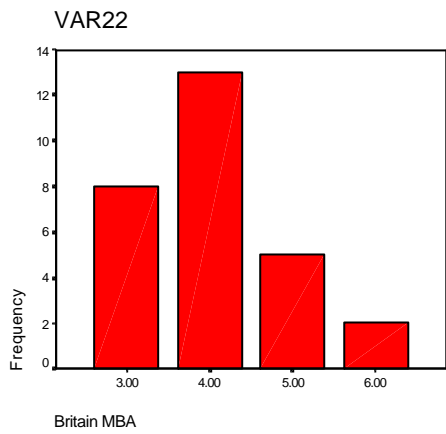




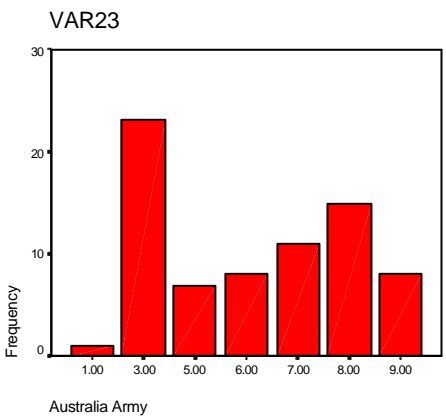
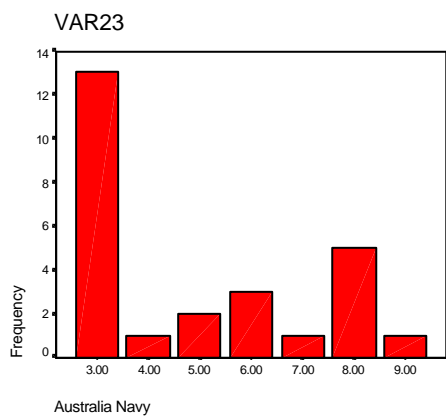
# ANNEX N – DEMOGRAPHIC HISTOGRAMS

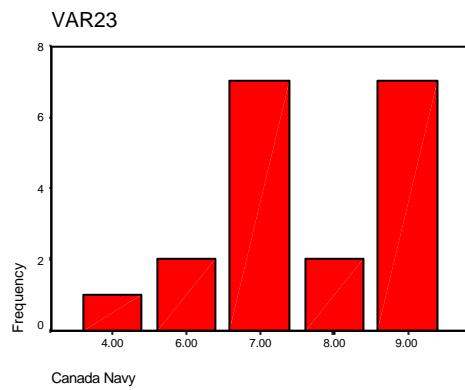
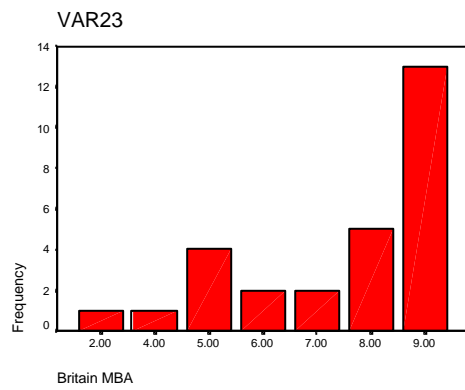
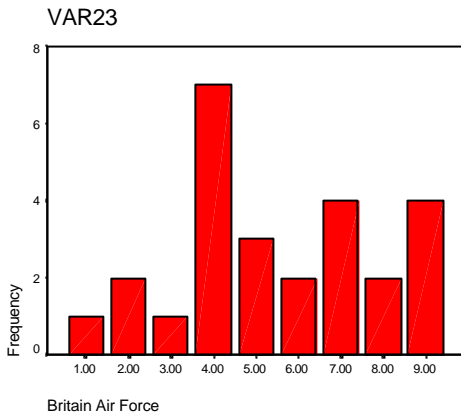
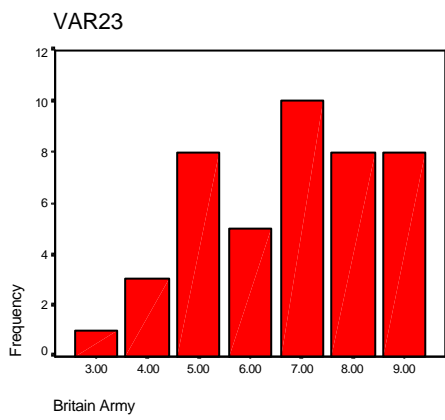
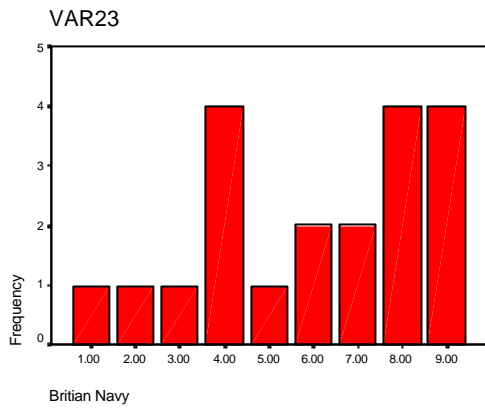
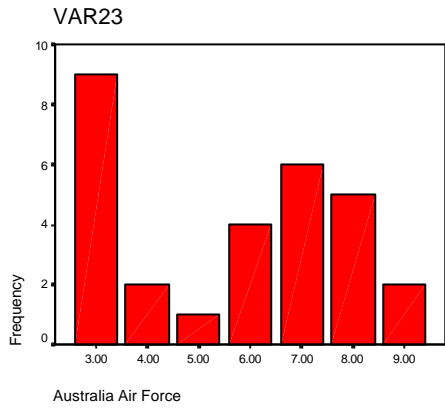
## AGE RANGES



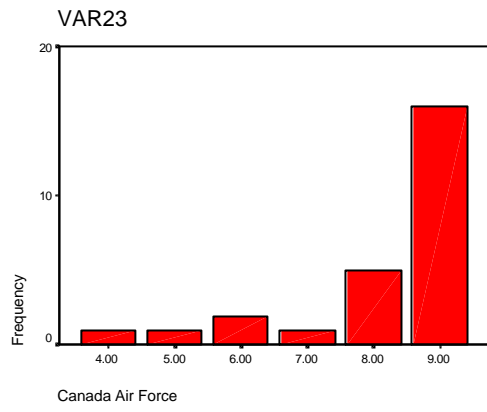
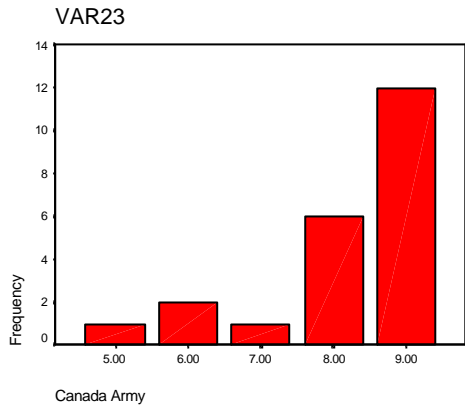


**YEARS OF FORMAL EDUCATION**









**ANNEX O**

**WORKING WITH  
INTERNATIONAL STUDENTS**

“Chieftains must develop empathy - an appreciation for and an understanding of the values of others, a sensitivity for other cultures, beliefs and traditions.....”

Attila the Hun

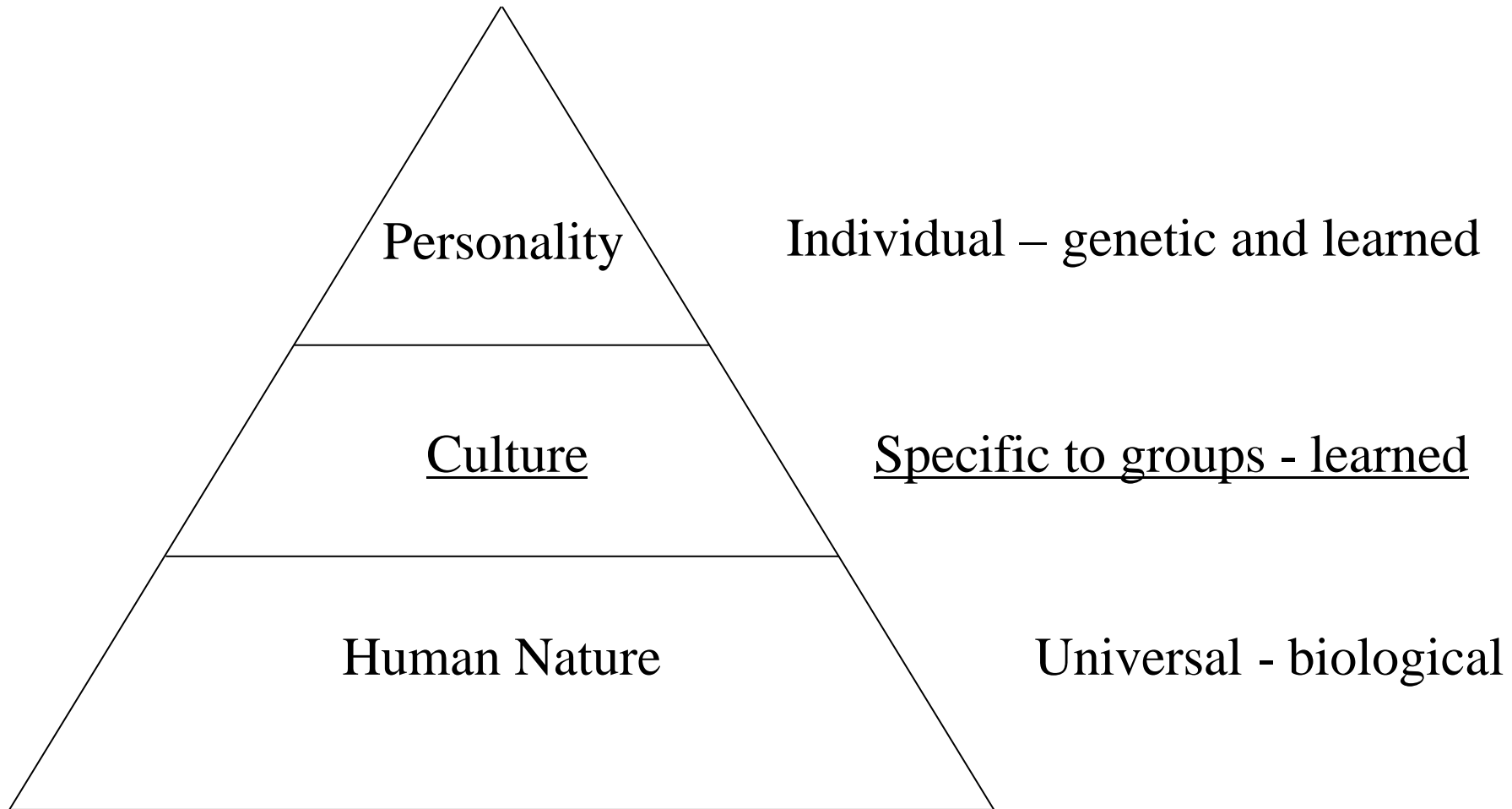
# Discussion Areas

- What is Culture?
- Three Components of Culture.
- Two Cultural Challenges.
- One Case Study.

# SECTION 1

WHAT IS CULTURE?

# What is culture?



“ [Culture] does not mean a knowledge of the arts such as music and sculpture, nor does it refer to social graces... It does mean the shared values that typify a society and lie beneath its characteristic arts and architecture, clothes, food, ways of greeting and meeting, ways of working together, ways of communicating and so on.”

# Dimensions of Culture



# Dimensions of Culture

- Nationality.
- Regional, ethnic, religious or linguistic affiliation.
- Gender.
- Generation level.
- Social class.
- Corporate or organisational level.

# Dynamics of culture

- Sub-culture
- Counter-culture
- Evolution
- Context

# Culture

## Is:

- A shared system of meanings which guides how the world is perceived.
- Relative as there is no cultural absolute.
- Learned in that it is derived from an individual's social and work environment.
- About groups as it is a collective phenomenon.

## Is not:

- Right or wrong.
- Genetic
- About individual behaviour.
- Easy to understand.

SECTION 2

COMPONENTS  
OF  
CULTURE

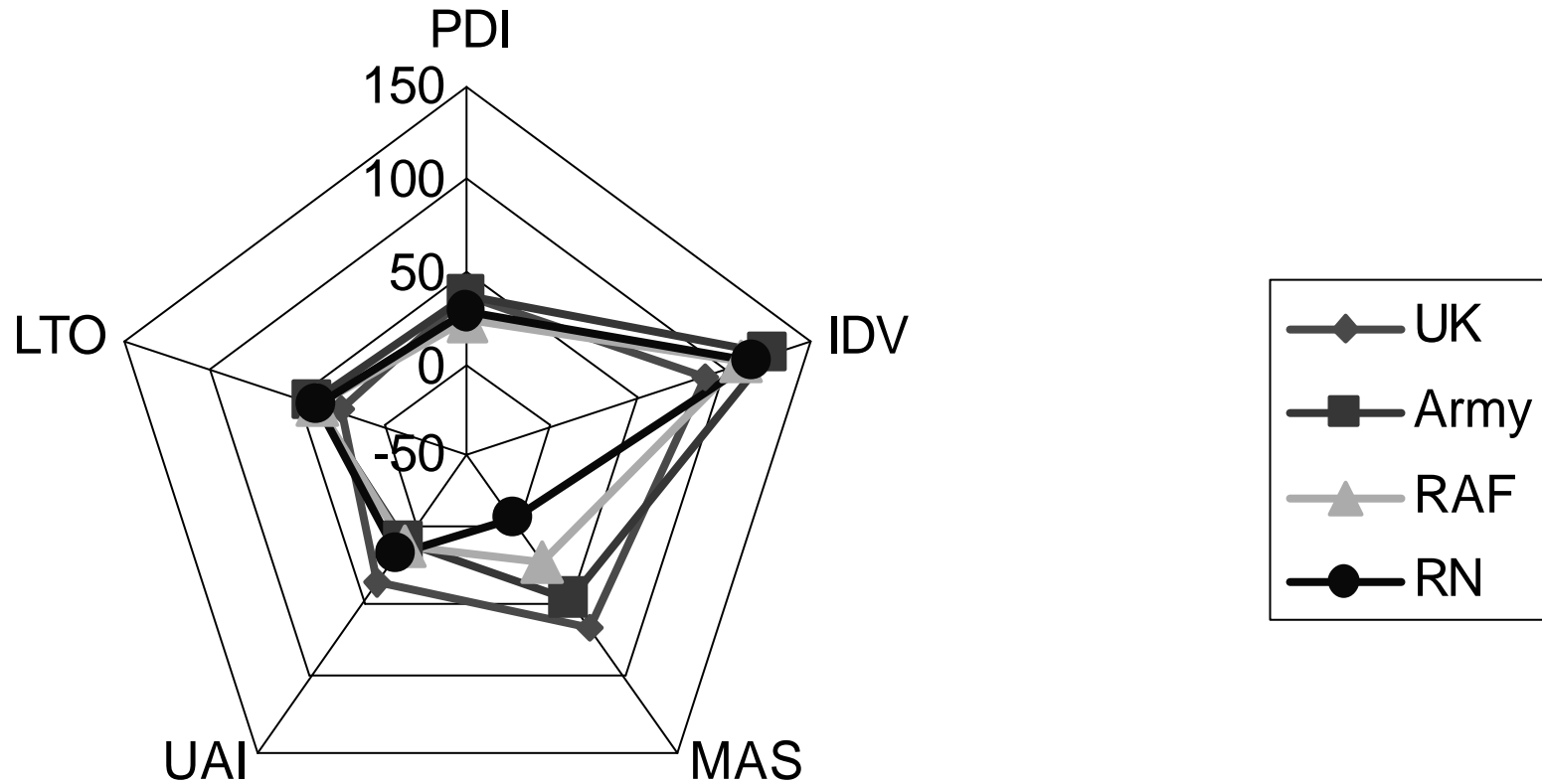
# Values



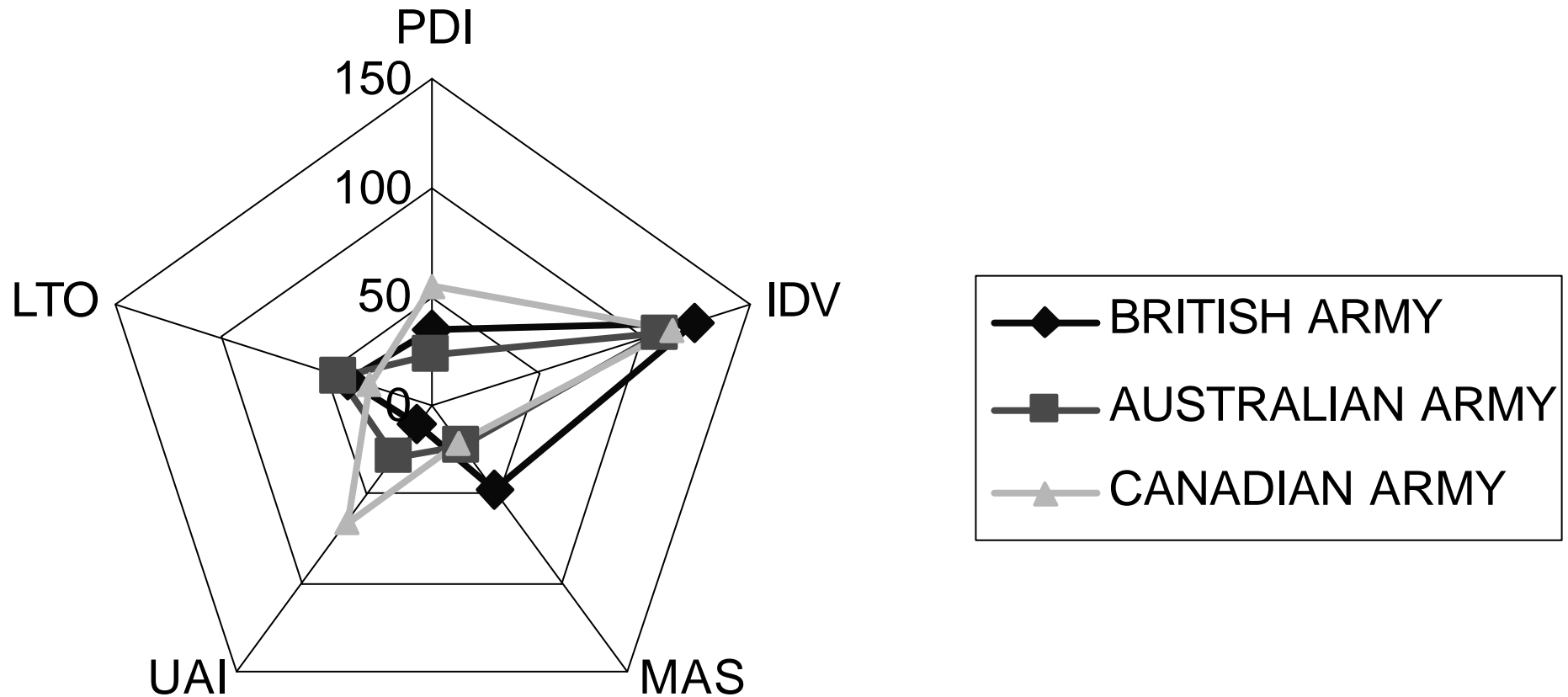
# Hofstede's Value Survey Model

- Power Distance Index (PDI)
- Individualism versus Collectivism (IDV)
- Masculinity versus Femininity (MAS)
- Uncertainty Avoidance (UAI)
- Long Term versus Short Term Orientation (LTO)

# British Military Values

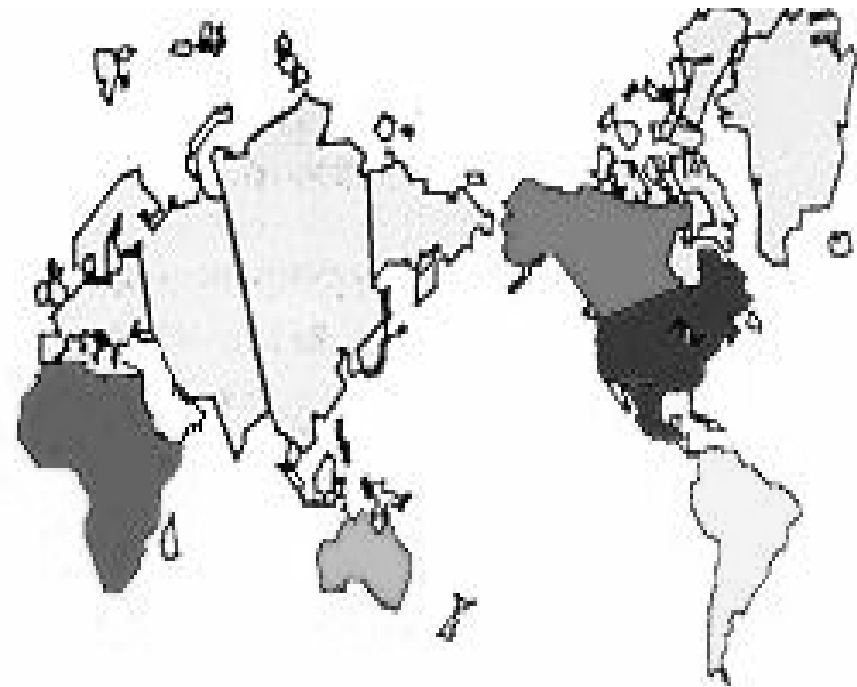
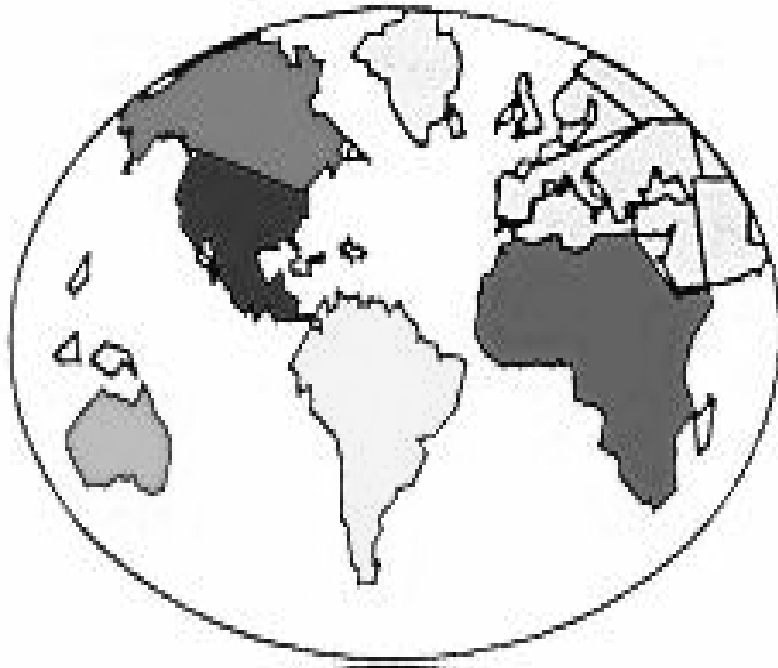


# International Army Values





# Perspective



# Perspective - objects



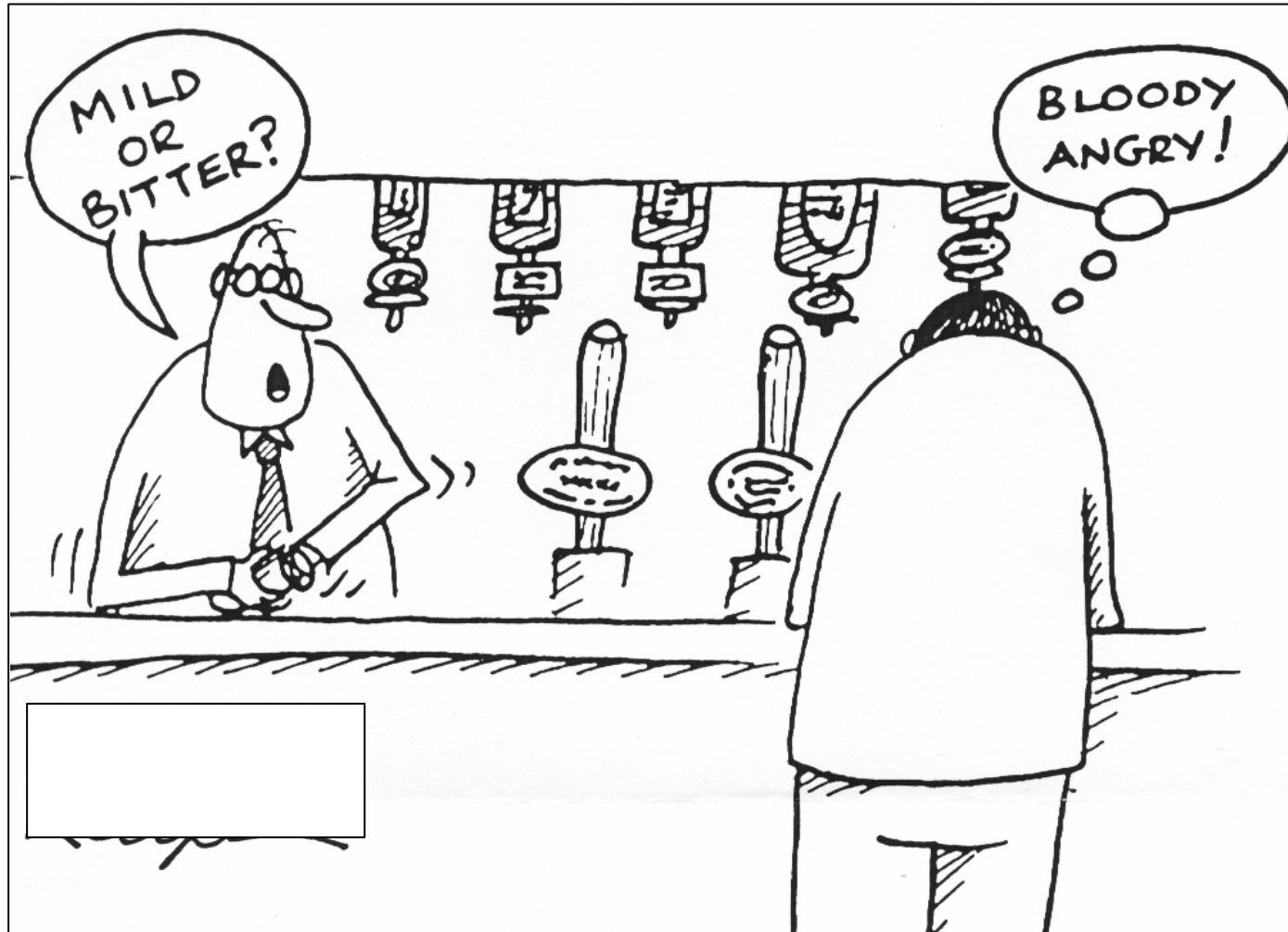
# Perspective - people



## Perspective

“It’s a funny thing; the French call it a *couteau*, the Germans call it a *messer*, but we call it a knife, which is after all what it really is.”

# Language



# The cultural role of language

- Culture determines what a group of people think.
- Language is both a determinant and an expression of how they think.
- All languages express common concepts, but the language of a culture derives richness and vocabulary beyond the common from the specific environment and experience.

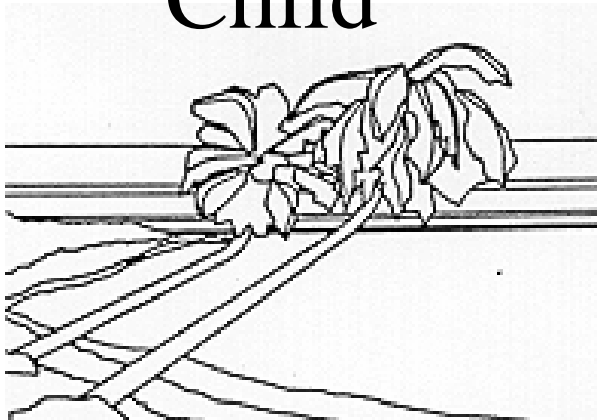
Practical use of language.

Please draw a tree.

# Trees



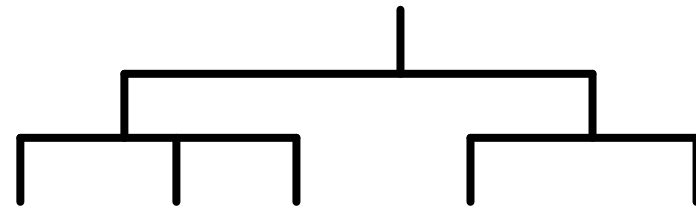
Child



Puerto Rican



English



Lateral Thinker



# SECTION 3

## CROSS-CULTURAL CHALLENGES

## Culture shock

Culture shock is a state of confusion and uncertainty that affects people exposed to an alien culture. Feelings of anxiety and inadequacy frequently accompany “culture shock”.

# Phases of culture shock

- Honeymoon
- Hostility
- Adjustment
- Adaptation

# Culture learning

# Culture learning

- Awareness

# Culture learning

- Awareness
- Intellectual appreciation

# Culture learning

- Awareness
- Intellectual appreciation
- Discover own culture

# Culture learning

- Awareness
- Intellectual appreciation
- Discover own culture
- Learn about other cultures



# Culture learning

- Awareness
- Intellectual appreciation
- Discover own culture
- Learn about other cultures
- Retrospection

SECTION 4

CASE STUDY

SECTION 4

CASE STUDY

SECTION 4

CASE STUDY

“Chieftains must develop empathy - an appreciation for and an understanding of the values of others, a sensitivity for other cultures, beliefs and traditions.....”

Attila the Hun

For further information contact  
Ashley Stocker on:

[A5hleyhere@aol.com](mailto:A5hleyhere@aol.com) or  
[a9964@hotmail.com](mailto:a9964@hotmail.com)

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## **ANNEX P - CULTURAL VALUES AT WORK IN ACSC**

### **INTRODUCTION**

There is a standing joke in the British armed forces over the meaning of ‘secure a building’, which follows something like this:

Royal Marines will assume that this means they need to storm the building with overwhelming firepower, shoot anything that moves and start to improve the defensive position immediately on entering the building.

British Army will assume they need to advance to the building from the most concealed approach, use suppressive fire from a safe distance and assault the building only when any overt resistance has ceased, before moving onto the next target.

Royal Navy will assume the building should be checked to ensure it has been locked when everyone has left at the end of the working day.

Royal Air Force will assume they should undertake a full structural survey of the building and take out a contract to rent for five years, with an option for a further five years occupancy if required.

Although this is only a story, it is based on some truth and reflects the quite different perspectives that members of the British armed forces can have of any given situation. International students on ACSC will almost certainly have markedly different perspectives on many issues than their British counterparts. This short paper aims to highlight why these differences in perspective occur, how they are shaped by cultural values and how values can vary across societies and organisations. Although ACSC is specifically considered in this paper, the issues identified here are valid for any international situation and therefore have a potentially wider application.

## **CULTURE DEFINED**

Culture can be viewed as the manner in which individuals understand their environment. “Culture is much like the air people breathe: it is taken for granted until there is an external stimulation that forces people to think about it.” (Brislin, Cushner et al. 1986, P22). It is only when assumptions about this understanding are questioned that the existence of culture starts to become apparent. The manner in which people eat, dress and talk are outward symbols of any culture of which most people will be readily aware when dealing with people from other cultures. In order to really understand how international cultural values will affect the ACSC working environment one needs to see beyond such superficial differences between societies and organisations.

Geert Hofstede defines culture as “collective programming of the mind” (Hofstede 1980, P16). This collective programming lies between the universal nature humankind and an individual’s unique personality. Hofstede states that the mind has three elements that make up the human mental programme:

Biological: All humans have a universal reaction to biological stimuli, such as fatigue and hunger.

Personality: Personality is what makes each human an individual. Although cultural socialisation will teach individuals that certain modes of behaviour are or are not generally acceptable, individual responses will vary. In any given example, it is not possible to judge precisely how an unknown individual from another culture will react to a set of circumstances. Individual experiences are unique and learned reactions therefore differ across a spectrum of responses.

Culture: Eye contact is not a universal sign of respect. Most Anglo-Saxon children in UK are taught to look their parents in the eye when they are being chastised and as a sign of respect. In many parts of Africa it is considered extremely rude to look someone in the eye and in the same circumstances children will be encouraged to cast their



eyes to the ground as a sign of respect. Cultures are, therefore, not universally applicable.

These three elements combine to provide the mental programming, which together define a human. There is discussion about whether the boundaries are as distinct as shown in Figure 1. However, Figure 1 provides an academically accepted basis upon which to consider culture.

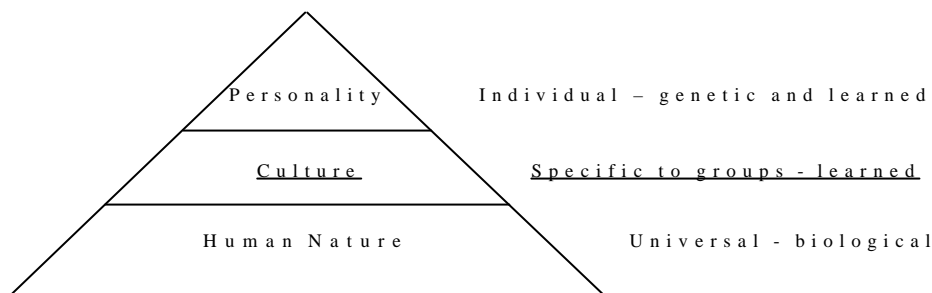


Figure 1. Three levels of mental programming  
Adapted from Hofstede 1980, P16

It is practically impossible to provide a single definition of culture that is broadly acceptable to the many branches of the social sciences, which lay claim to the subject. Paul Bohannan believes, “Defining culture has proved all but impossible. Yet we know what culture is, just as we know what life and matter are. All three are what we might call rock-bottom perceptions – they cannot be definitionally simplified.” (Bohannan 1995, P5) Given that a single universally accepted definition does not exist, the following synthesis of three approaches to analysing culture provides a sound platform upon which to base discussion on cultural values<sup>1</sup>: (Ott 1989, P181)

1. It (culture) is a holistic set of patterned physical, psychological, and social products.
2. It is anchored in a shared body of meanings (or an ideology), views about world realities, perceptions and values.
3. It is created by a society’s members in the course of their social interactions.
4. It determines specific patterns of behaviour and feelings.
5. It is transmitted to new generations through traditions.

## ORGANISATIONAL CULTURE

Having defined culture in general, it becomes necessary to define organisational culture. This is a useful approach, as most students on ACSC will reflect the values of the organisations they represent. In Schein's levels of organisational culture, shown in Figure 2, artefacts are the most visible organisational structures and processes and are the hardest to understand externally. "The most important point about this level of the culture is that it is easy to observe and very difficult to decipher." (Schein 1997, P17) The observer cannot define what the observed artefacts mean or if they reflect the intrinsic underlying assumptions of the organisation. There is also a danger that if observed in isolation the artefacts will be subjected to the observers own set of values and assumptions, which could lead to an incorrect inference.

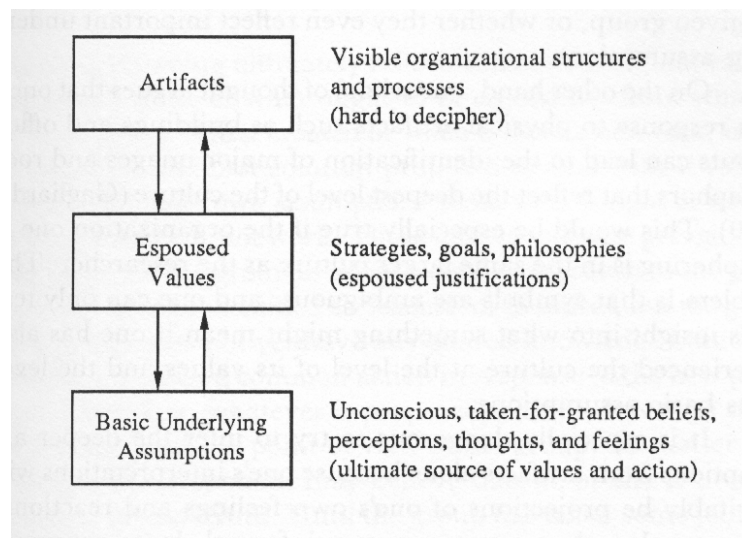


Figure 2. Schein's Levels of Culture  
(Schein 1997, P17)

Schein states "A set of values that becomes embodied in an ideology or organizational philosophy thus can serve as a guide and as a way of dealing with uncertainty of intrinsically uncontrollable or difficult events." (Schein 1997, P18) Social validation causes certain values to become confirmed through shared experiences. Such values are initially espoused by key individuals and once they are shown to work become

embodied in the organisational ideology or philosophy. These conscious values will predict many of the artefacts that might be observed. The British armed forces, for example, have published values. If these espoused values are accepted by the corporate body most of the artefact level observations should reflect these values in some form. These values will also need to be congruent with Schein's deepest level of culture, basic assumptions, for the corporate whole to be coherent. If these espoused values are only aspirations for the future, they may not reflect the artefact level accurately. This issue is particularly important for ACSC in that it is specifically aimed at attracting international students. If the underlying assumptions of the staff of ACSC do not reflect this goal it will rapidly become apparent to international students who will perceive the disconnect between the stated values of ACSC and those of the staff.

“To get at that deeper level of understanding, to decipher the pattern, and to predict future behavior correctly, we have to understand more fully the category of basic assumptions.... Basic assumptions, in the sense in which I want to define the concept, have become so taken for granted that one finds little variation within a cultural unit.” (Schein 1997, P21-22) Basic assumptions tend not to be questioned and members of a group will find behaviour based upon any other premise inexplicable. This is potentially a major cause of culture shock for international students, which is outlined at the end of this paper<sup>ii</sup>.

## **VALUES**

Hofstede states, that “Values are held by individuals as well as by collectivities” and “Nearly all our other mental programs (such as attitudes and beliefs) carry a value component.” (Hofstede 2001, P5-6) Values are instilled at an early stage of development, are non-rational and have intensity and direction. Shared values enable each individual to gain an understanding of their world, create allegiances with others from the group and communicate effectively through mutual comprehension.

Gudykunst and Kim make the following definition “*Values* are shared conceptions of the desired ends of social life and the means to reach those goals.” (Gudykunst and Kim 1997, P47) Brislin and Yoshida further highlight the importance of values,

“What is perceived as good or correct in one culture is seen as bad or incorrect in another.” (Brislin and Yoshida 1994, P54) From the organisational culture perspective, values are so essential that they can be considered fundamental to the fabric of an organisation. “...values are so important to organizational culture that many organizational culture-orientated authors define them – and the broader system of ethical or moral codes in which they are embedded – as *the* organizational culture.” (Ott 1989, 39)

Values form the focus of this paper, as they can be identified and isolated from other aspects of culture. Values have the attraction that many are universal concepts that can be clearly identified and are quantifiable. Some examples of universally understood values are: (Hofstede 2001, P6).

- Dirty versus clean
- Decent versus indecent
- Ugly versus beautiful
- Moral versus immoral

The remainder of this section identifies how values affect the way we perceive the world and how they can vary.

### **Perception**

One of the problems when dealing with other cultures is that most people automatically tend to assume that others perceive the same reality. “Although perceptions are based on interactions with others, we tend mistakenly to assume that our perceptions are ‘real’ and external to ourselves.” (Gudykunst and Kim 1997, P169)

Perception is a mental process that is deeply affected by cultural values and can be highly subjective and selective. “There is ample evidence... that we tend to see what we expect to see.” (Klineberg 1980, P45) It is therefore important to understand how cultural values shape perspective in practical situations such as ACSC. The

following observation by Terry Pratchett illustrates the influence of perception. “The truth may be out there, but lies are inside your head.” (Pratchett 1996, P242) Staff at JSCSC need to be aware that what they and British students may see and hear on ACSC may be something very different from that which the international students see and hear.

### **Ethnocentrism**

Individuals will always see the world according to their programmed perceptions and preconceptions. Stella Ting-Toomey says, “...each of us can only write and experience through our own cultural lens.” (Ting-Toomey 1997, P207). Distortion in perception is caused by values and the ‘cultural lens’ can lead to a number of different effects. A major and usually negative consequence of the ‘cultural lens’ is ethnocentrism.<sup>iii</sup> Ethnocentrism occurs when an individual perceives the group with which they identify themselves as universally virtuous and superior to other groups. In cases of high ethnocentrism, other groups’ values are rejected and are seen as contemptible and inferior (Gudykunst 1994,P77). Ethnocentrism is demonstrated by the example of the early Greeks who used the term ‘barbarikos’ (barbarian) to refer to people living around them who did not speak Greek. Persians and Egyptians were considered inferior simply because they did not speak the Greek language (Gudykunst and Kim 1997, P120).

Ethnocentrism is an important issue for all involved with ACSC to understand, as there will be a tendency for them to believe that their understanding of the ‘way things should be’ is better than that of others. It can be dangerous to dismiss ideas based upon different cultural values and is often a lost opportunity to explore different and novel approaches to a wide variety of challenges.

### **Cultural Relativism**

Cultural relativism is the opposite of ethnocentrism and involves trying to understand the behaviour of others in the context of their group or culture. This is based upon the premise that it is not possible to understand the behaviour of another person by using

one's own cultural frame of reference (Gudykunst and Kim 1997, P121). The challenge of cultural relativism for ACSC students is to find or develop a tool or model that can be used accurately to decipher or predict an individual's action in the context of their own cultural values. It should be noted that cultural relativism should not be confused with moral relativism, which is the making of a moral judgement by using another's cultural context. (Gudykunst 1994, P78 and 103)

### Xenophobia and Xenophilia

There can be confusion between ethnocentrism and xenophobia, which are related but distinct concepts. Xenophobia is different from ethnocentrism in that it is the fear of strangers. "One reason for xenophobia is that people who are strange are perceived as threats to the predictability and stability of our social worlds." (Gudykunst and Kim 1997, P120) Xenophilia can also emerge when dealing with other cultures. Xenophilia occurs when an individual believes that another culture is in everyway better than his or her own. Hofstede states "Neither ethnocentrism nor xenophilia is a healthy basis for intercultural cooperation" (Hofstede 1991, P211). This statement could usefully include xenophobia and applies equally to all individuals involved with ACSC to ensure that, as far as possible, a neutral approach to working with others is adopted.

### Focus

Culture manifests itself at different levels and the focus may need to shift in order to arrive at any meaningful understanding of people's values on ACSC. Individuals with certain functions, such as lawyers or the military, tend to have their own professional culture (Trompenaars and Hampden-Turner 1998, P7-8). This following list displays a few possible cultural dimensions, with examples, that may influence relationships on ACSC:

- Nationality. English, Welsh or British?
- Regional. Northerner or Southerner from UK or USA?
- Ethnic. Bosniac, Bosnian Serb or Bosnian Croat?

- Religious Christian or Muslim? Catholic or Protestant?
- Linguistic Canadian – Native French or English speaker?
- Gender. I would merely ask if you have read ‘Men are from Mars and Women from Venus’?
- Generation level. Eighteen-year-old officer or CO of a unit/ship/station?
- Social class. Depending upon the society an individual comes from the criteria for this might be income, occupation, education, lifestyle, or family background.
- Corporate or Organisational level. Army, Navy or Air Force?

### Context

Hofstede states that, “As almost everyone belongs to a number of different groups and categories of people at the same time, people unavoidably carry several layers of mental programming within themselves.” (Hofstede 1991, P10). Any values being examined in ACSC are likely to be contextual and there may be a number of levels of influence to take into account if accurate analysis is to be undertaken.

### Homogeneity

Up to this point, the discussion of values has assumed that any given culture is a homogenous entity. This will almost certainly not be the case, as there are few remaining homogeneous cultures in the world, and most contain subcultures and countercultures. All people within a culture do not have identical sets of values. These differences provide a spread within a culture that will cause a pattern around an average. Figure 3 demonstrates how cultures can be viewed as a normal distribution and superimposed on each other to demonstrate similarities and differences. The example in Figure 3 shows the perceived differences between French and American (USA) cultures. At one extreme, there may be a very similar set of values held by individuals from two different cultures. At the other extreme, there may be no similarity at all between individuals from the two cultures.

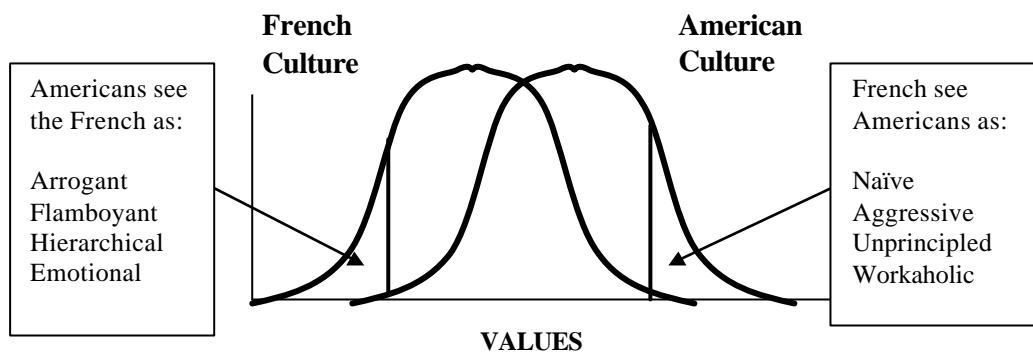


Figure 3. Culture as a normal distribution  
Amended from (Trompenaars and Hampden-Turner 1998, P25)

### Subculture and counter-culture

Subcultures are quite distinct from the different levels of culture identified previously. Gudykunst defines subcultures as “...groups within a culture whose members share many of the values of the culture, but also have some values that differ from the larger culture.” (Gudykunst 1994, P38) Working-class and middle-class are cited examples of subcultures in Western industrial society. (Haralambos and Holborn 2000, P24) When examining any given culture it is incumbent upon ACSC staff to recognise that subcultures may exist. Counter-cultures are cultures within a larger culture that may have once been a part of the mass but have basic assumptions which conflict with the dominant culture. (Ott 1989, P46) In many cases the cultures of armed forces represented on ACSC from around the world could be considered to be either subcultures or counter-cultures of the societies they stem from.

### Evolution

To ensure that values are correctly understood there is a need to recognise that cultures are rarely isolated or static. Cultures evolve through invention and diffusion and may eventually turn into something markedly different from the predecessor. (Bohannan 1995, P105). This process is represented in Figure 4. An example of how this works is the statement by Geoff Hoon to the House of Commons on 12<sup>th</sup> January 2000 concerning homosexuality in the British armed forces (Hoon 2000). By declaring that homosexuality was to become legal for military personnel, an



innovation occurred, which required an action that in due course should lead to acceptance. This acceptance will lead to a loss of some elements of British military culture and a readjustment. Because of such evolutions, the findings of one study examining a particular aspect of culture may diverge from those of another replicating the original work later. When two or more cultures, or subcultures of the same culture, are being compared against each other, it is necessary to ensure that the data being examined is comparable. Anyone who is fortunate enough to be given the task of assessing and comparing international cultural values of students on ACSC must ensure they are aware of this issue.

### *The Basics of Cultural Evolution*

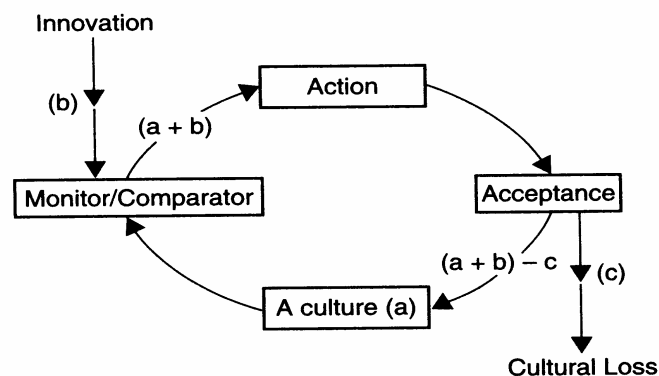


Figure 4. The Basics of Cultural Evolution  
(Bohannan 1995, P104)

### Stability

The other side of the evolution coin is that cultures do not tend to change rapidly. “Cultures, especially national cultures, are extremely stable over time.” (Hofstede 2001, P34) Hofstede cites the example where Confucian ideas from around 500 BC survive as guidelines for modern Chinese behaviour. (Hofstede 1991, P40) The changes in Western culture during the industrial revolution demonstrate how the values of a society can evolve relatively quickly. However, there is evidence that the traditional Western view (that seems to be reflected on ACSC) that all cultures will, in time, converge due to industrialisation and commerce is incorrect and naïve. Samuel P Huntington writes:

“Peter the Great and Mustafa Kemal Attaturk were determined to modernize their countries and convinced that doing so meant adopting Western culture... In the process, they created ‘torn’ countries, unsure of their cultural identity. Nor did Western cultural imports significantly help them in pursuit of modernization. More often, leaders of non-Western societies have pursued modernisation and rejected westernisation.” (Huntington 1996, P35)

The significance of cultural stability and the rejection of Western values to ACSC is twofold. First, from a practical viewpoint anyone representing the armed forces, or any other organisation, is likely to be mistaken if they think that their values hold universal appeal and understanding. Second, as cultures are generally stable over time it should be possible to use information from proven sources to try and understand the perspective of members of other organisations and societies

### **MILITARY VALUES**

It might be assumed that all armed forces are based on principles required to support stable western democracies. The international student mix on ACSC will add another dimension to the ‘value stew’ already created when representatives from different armed forces come together. Armed forces around the world have different understandings of how civil-military and military-military relations should be conducted. Samuel Huntington of Harvard University cites several examples where armed forces are facing very different challenges in their home countries from those experienced by British armed forces. (Huntington 1995, P10 and 14-15):

- Authoritarian regimes have no civilian control and the military performs functions only distantly related to normal military functions.
- Civil authorities in countries such as Turkey, South Korea, Nicaragua, Brazil and Chile are working to increase their authority over the military after it has ceded power.
- South Africa is dealing with integrating its military after apartheid.

- Russia is dealing with disintegration with the end of the Cold War.

The USA expects, usually without much success, its international military partners to exhibit three salient characteristics to which its armed forces adhere. “They are rigorously apolitical, with a total separation between political policy formulation and nonpolitical policy implementation. Chains of command are fixed, rigid and genuinely hierarchical, with well-understood, specified and firm areas of authority, responsibility and accountability. The actions of military personnel are governed and controlled by external, enforceable legal codes of conduct and behaviour.” (Cable 1996, P15) While these factors are true of the British military, it is not the case for many armed forces in the world, even within democratic countries in NATO. The BBC reported the following in November 1998, which demonstrates a political influence and interference that is not reflected by British armed forces:

“The statement said the armed forces did not favour one party over another. However, it is common knowledge that the High Command distrusts the Islamist movement and sees itself as the guardian of Turkey’s strict secular system. Pressure from the military, which traditionally prefers secular government, led to the fall of the country’s first Islamist coalition last year.” (Morris 1998, P1)

## **SHAPING VALUES**

Every culture has to deal with a limited number of universally shared problems but many will deal with these in different ways. Values define the way these problems are dealt with and are in turn shaped by outside influences and ecological factors. The aim of this section is to identify a broad set of factors that influence values so that it is possible to start to understand exactly why there can be such a disparity between the values of British and International students on ACSC.

### **Factors**

In *Cross-cultural Encounters*, (Brislin 1981, P10-15) Richard Brislin identifies six factors that influence cultural values.

### History

All cultures are influenced by their history and it is therefore an important initial factor in attempting to understand the influences on a group's specific values. Brislin defines history in the following manner, "History, then, refers to aspects of a people's world which they are 'born into' and which they are expected to learn or accept in order to become a normal, functioning member of society." (Brislin 1981, P11) A danger is that histories can be rewritten to reflect a desirable outcome rather than what actually occurred. They are also open to interpretation. However, preceding events do influence the evolution of cultures and it is generally accepted as good practise to look for the antecedents to specific values. "By studying history comparatively, as many examples of cultural process, we can detect the workings of the cultural system rather than attributing the outcomes to the machinations of persons or the muscle-flexing of political movements." (Bohannon 1995, P163)

### Individual

Individual factors include personality traits and skills, which an individual has discovered to be negative and positive when dealing with people in a cross-cultural environment. On ACSC it will be impossible to get away from the fact that at some stage individuals from other societies and organisations will have to try and understand each other if they are to communicate effectively. The aspect of the individual factor that is most useful in the context of this paper is not cross-cultural diversity but where uniformity across cultures might be identified.

### Group

When considering the group a number of issues need to be considered:

"Human beings are intensely social animals. The amount of time each of us spends with others is immense. But human beings are also highly

creative in the sociality. When the size of any group increases, for example, new culture...can be invented to keep the group from falling to pieces.” (Bohannon 1995, P27)

Almost all people want to form relationships with others. To achieve the desired relationship requires frequent communication in a mutually understood environment. The problem with groups is that they are full of individuals and, as already discussed, are not completely homogenous. This needs to be accounted for when attempting to communicate with people from other cultures. To form a sound relationship, a group's values will need to be known and understood, in order to discover how best to identify and communicate with it. For two culturally diverse groups to communicate effectively, they need to expand their own horizons of understanding in order to establish effective ties.

Many communication problems between distinct groups are due to different norms of behaviour and values. These groups may also be competing for scarce resources (such as the top grades for coursework and exams on ACSC), which will exacerbate discomfort and mistrust if effective communication is not established. There are a number of key variables which include the intensity of pre-contact attitudes, chances for intimate contact, relative status of the groups and opportunities to establish super ordinate goals valued by all groups. To maximise the chances of success, ethnocentrism needs to be eliminated as far as possible and cultural relativism successfully applied. People who can achieve this group understanding may become mediators between the groups. “With an understanding of the individual, situational, group, task and organisational factors which must be faced, the long-term adjustment of people can be considered.” (Brislin 1981, P15)

### Situation

“The situation is a very important determinant of behavior. Most of us act as expected in a particular situation *as we see it.*” (Triandis 1994, P210) When dealing with other cultures the expected behaviour may well be very different what one's own perspective of what is required. When the expected responses are not forthcoming from either party stress can accumulate caused by an unfamiliar environment and the

change in lifestyle this requires. This effect can lead to culture shock, which must be managed to ensure that effective communication is established. “It is a myth that experiencing culture shock is a weakness or a negative indication of future success. Culture shock in all its diverse forms is completely normal and is a part of a successful process of adaptation.” (Marx 1999, P5) Accepting that culture shock may occur in cross-cultural situations and understanding how this is caused by a clash of values is central to successfully overcoming the cross-cultural communication challenge.

### Task

Many organisations apply management solutions abroad that have worked at home but are destined for failure outside of their own culture. Although international students may not openly criticise any aspect of their time on ACSC, its full effectiveness may be destroyed or negated if the impact of cultural values are not taken into account. Although similar organisations in different cultural environments may appear to be alike, this may be the result of an imposed structure rather than from a shared understanding of the structural requirement.

Understanding of tasks and how they should be completed may well be different for individuals from different cultures. Their perceptions of structures, practises and policies within the company will therefore be defined by their values. The traditional Western approach to understanding organisations and a specific requirement of any task has been for staff on ACSC to decide unilaterally how they should be defined. This approach frequently does not translate across cultures and superficial acceptance may mask value related conflicts that will surface at a later and more damaging time:

“The export of ideas to other people in other countries without regard for the values context in which these ideas were developed – and the import of such ideas by gullible believers in those other countries – is not only limited to politics, but can also be observed in the domains of education and in particular, management and organization.” (Hofstede 1991, P41)

When working with other cultures the task, preparation for completing it, and success criteria become more important. If these are not understood in the target culture, there is a good chance of task failure. It is therefore incumbent upon course designers to ensure that ACSC caters appropriately for the international audience.

### Organisation

Schein argues that although individuals influence organisational culture, organisations develop from group learning when members resolve challenges together. (Schein 1997, Ch7) Most cross-cultural contact involves organisations, which can strongly affect the chances of success. Contact with other groups is explicitly a part of the organisation, which is especially true for armed forces and other organisations such as the International Organisations and Non-Governmental Organisations. The potential advantages of understanding such organisations, is that it will automatically encourage students to think across cultural boundaries.

### SUMMARY

Anyone who has read this far and is looking for an easy quick fix solution to the issues raised in this paper will be disappointed. The scope of these issues and how they relate to ACSC is too great and complex to be effectively contained within such a short paper. What this discussion has aimed to achieve is to demonstrate why a hard-nosed business understanding of cultural values is essential to the success of ACSC. It has attempted to highlight the key considerations that need to be addressed and to provide an outline framework of how to achieve this. Anyone fortunate to be given the task of unravelling the web of international cultural values on ACSC will find this paper a useful starting point. The fundamental issue is that if JSCSC is to succeed in making ACSC internationally recognised, cultural values must be taken into account throughout the whole structure and support of the course.

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## ANNEX Q NOTES

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<sup>i</sup> The three perspectives cited are:

The normative approach of archaeology defines culture as the body of meanings held by a society and transmitted by tradition.

Psychological cultural anthropology sees culture as distinctive constellations and personality determinants consisting of patterned worldviews and values ideals. These perspectives and ideals are internalised so deeply by members of a culture that they determine behaviour and feelings.

Sociocultural anthropology conceptualises culture as the totality of biological, psychological and social products of a people that are created, learned, and transmitted to new generations through social interaction. Ott, J. S. (1989). The Organizational Culture Perspective. Pacific Grove, California, Brooks/Cole Publishing Company.

<sup>ii</sup> Culture shock is a state of confusion and uncertainty that affects people exposed to an alien culture. Feelings of anxiety and inadequacy frequently accompany 'culture shock'. It is important to examine the normal reaction that can be expected from international students on their initial exposure to the UK and specifically JSCSC. Many, but not all, people experience culture shock when exposed to a new environment. Culture Shock can be broken down into four phases. These phases are not mutually exclusive and many people skip or remain in one of the phases. The purpose of the model is that it serves as a useful guide to recognising the sensations an international student may be experiencing. HONEYMOON PERIOD represents the initial euphoria or the "tourist" reaction to all of the new and interesting experiences and sensations offered by a new culture.

HOSTILITY A period of hostility and irritation is a phase in which the unpleasant and jarring aspects of a new culture become pronounced. One example is the different way cultures view time. In Latin America and the Middle East, punctuality is less important than in the UK, whereas in Germany and other middle-European countries, punctuality is even more rigidly observed than in the UK.

ADJUSTMENT A period of gradual adjustment comes with patience and application of lessons learned and increased language proficiency.

ADAPTATION Finally, successful adaptation leaves the person with the ability to smoothly function in both their native culture and the new culture.

<sup>iii</sup> The word ethnocentrism is derived from two Greek words: ethnos (nation) and kentron (centre). Gudykunst, W. B. and Y. Y. Kim (1997). Communicating with Strangers: An Approach to Intercultural Communication. Boston, McGraw-Hill..

## ANNEX Q

### HYPOTHETICAL OUTLINE BRIEF FOR COMMANDING OFFICER OF A UK INFANTRY BATTALION ASSIGNED TO SUPPORT MULTI-NATIONAL TASK FORCE

#### ISSUE

Your Battalion has been assigned to support operations in the Multi-National Task Force North West (MNTF (NW)). The Battalion will be under command of a multi-national headquarters commanded by a Canadian Brigadier General and staff from Australia, Britain, Canada, New Zealand and the Netherlands. A company of Australian Infantry will be placed under your command for the duration of your deployment to MNTF(NW). The situation in which your battalion is due to deploy will place you and your soldiers into an environment where unintended misunderstandings may have a significant impact on the relationship with personnel from the other nations supporting MNTF(NW). It is important to understand that cultural differences of the armed forces you deal with are neither right nor wrong but that they will manifest themselves in slightly different approaches to the mission. This brief provides some specific outline guidance on how to understand the cultural differences of the Canadian commander and the Australian troops under command.

#### RECOMMENDATIONS

The following recommendations are made:

- You assess the impact that Commander MNTF(NW) greater need for a formal command relationship may have on your working relationship.
- You understand that Australian, British and Canadian officers are likely to share a high self-regard, which may result in some competitiveness.
- You can expect Canadian personnel to hold a greater regard for a polite and friendly working environment than their Australian and British counterparts.
- You understand the impact that Commander MNTF(NW) expected lower tolerance for uncertainty will have on your command relationship with each other.

This will be reflected to a lesser extent with the Australian officers under your command.

- Australian, British and Canadian personnel can be expected to share a very similar concern for tradition and preservation of ‘face’. This will require a certain sensitivity on your part when dealing with national military events such as ANZAC day and Remembrance (Armistice) day.

### TIMING

In order to ensure mission success it is recommended that you address the recommendations prior to your pre-deployment recce and include them in your estimate<sup>1</sup>.

### BACKGROUND

- Power Distance (PDI). PDI is the extent to which inequality is seen as an irreducible fact of life. A low score indicates a situation where superiors and subordinates largely consider themselves equal. Subordinates accept their superior has more power and is right only when he or she knows the best way to do something or knows the correct answers. A higher score implies a larger power distance where superiors and subordinates consider each other unequal. It is likely that the commander of MNTF(NW) will appear to have a larger power distance to that which you are accustomed with British officers. You can expect the Australians under your command to have a very similar approach to your own towards command relationships.
- Individualism/Collectivism (IDV). IDV is a concern for yourself as an individual as opposed to concern for the priorities and rules of the group to which you belong. The higher the score the more concern for “I” emerges over concern for “Us”. Australian, British and Canadian officers are all likely to exhibit high concern for “I” over “Us” which may lead to friction and unproductive competitiveness if not harnessed effectively.

- Masculinity/Femininity (MAS). MAS concerns the extent of emphasis on work goals (earnings and advancement) and assertiveness as opposed to personal goals (friendly atmosphere, getting along with the boss and others) and nurturance. The higher the score the greater the masculinity of a culture. You can expect your Australian officers to exhibit a similar approach to achieving goals. The Commander MNTF(NW) is likely to be slightly more concerned for consensus and a good working environment than you are used to dealing with.
- Uncertainty avoidance (UAI). UAI is the lack of tolerance for ambiguity and the need for formal rules. This index measures the extent to which people in a given culture feel threatened by and try to avoid ambiguous situations. The higher the score the greater the need for uncertainty avoidance. Commander MNTF(NW) comes from an organisation where there is traditionally a significant need for clarity in all situations. You are likely to find that your ability to communicate effectively with each other will require you to provide and receive far more detail than you are accustomed to. To a lesser extent you may find that the Australian officers under your command will require slightly more detail from you than you are used to providing when assigning tasks.
- Long Term Orientation (LTO). LTO stands for the fostering of virtues orientated towards future rewards, in particular perseverance and thrift. Its opposite pole, Short Term Orientation, stands for the fostering of virtues related to the past and present, in particular, respect for tradition, preservation of 'face' and fulfilling social obligations. You can expect Commander MNTF (NW) and your Australian personnel to share your regard for tradition. It will be important that you ensure that any key Australian and Canadian national or regimental anniversaries are accorded the same regard you would give to your own national and regimental traditions.

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<sup>1</sup> "Estimate" is the name for a decision making process taught to British Army officers.