5. DATA ANALYSIS

5.1. Introduction

This chapter focuses on the analysis of the data gathered from both the study's questionnaires and interviews. Section 3.4.8 described the role of the qualitative data in the study. Here, before presenting the investigation of the propositions, the statistical analysis strategy adopted for exploring the quantitative data is also discussed.

In order to address the objectives set, a series of statistical analysis tests have been conducted. In the previous chapter, a number of initial treatments of the data were carried out to check sample representativeness, such as observing histograms of variable dispersion, and an investigation of group differences using ANOVA and t-test techniques. Checks were also carried out on the normality, linearity and homoscedasticity of the data as well as checking for extreme and missing data. This gave an insight into the type of data gathered, and hence the appropriateness of selected statistical tests. These further exploratory tests involved the analysis of the descriptives, scatterplots and intercorrelations of the variables. Due to the ordinal rather than truly metric nature of much of the data, many of the tests which have subsequently been applied are non-parametric. Only data meeting the requirements of truly metric data are used in parametric tests.

In statistical testing, significance is established by observing the test result and comparing this with pre-established significance levels, either .05 or .10. When the significance level is set to .05, the chance of missing a relationship which is actually there is higher than when the level is set to .10. Conversely, at the .10 significance level there is a higher chance of finding a relationship which is due to random sampling error alone. A judgement therefore has to be made as to which level is appropriate per test depending on its aims. As the .10 level is less stringent, it has only been applied here occasionally where there is a smaller sample being explored, or where the analysis is more exploratory, trying to check for possible relationships between variables. In the

majority of cases however, the .05 significance level has been applied to produce more robust test results.

The analysis in the following sections starts with the exploration of strategic contingencies theory in the HEI context. The theory proposes that a particular department's power ratings are correlated positively with its determinant of power ratings. Both multivariate followed by univariate analyses are used to test these propositions in the HEI context. Multivariate canonical correlation analysis is used to assess how strong the relationship is between the two sets of variables: the determinants of power and the level of power indicators. This is a technique that allows the combination of both metric and non-metric data for multivariate analysis. Having established a significant relationship at the multivariate level, further bivariate correlations between the individual variables belonging to the sets of determinants of power and level of power indicators are explored to understand the relationships further. Because relationships between the variables are proposed to covary in a single direction, in other words as one increases so does the other, one-tailed tests are used.

To investigate propositions *1a* and *1b* regarding the relative power of the Personnel department compared with other administrative departments, the scores for each of the level of power indicators and determinants of power are compared amongst all four department types. ANOVA techniques (or the equivalent non-parametric Kruskal-Wallis test) followed up by post-hoc multiple comparison tests are used to establish whether the ratings of the four department types differ significantly on the indicator variables. The mean or median scores per department type are then examined to see the comparative ranking of departments.

Propositions *2a* and *2b* explore the relationship between the type of institution and the power of its Personnel department. Based on three types of institution (pre-1992 universities, post-1992 universities and HE colleges), ANOVA and Kruskal-Wallis tests are used to explore whether the indicator variables differ significantly. Again, the mean and median scores of these variables are compared to see the ratings per institution type. The metric variables are then used further to see whether they are sufficient to predict

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institution type by applying Discriminant Function Analysis. This test is then followed up with comparison tests (t-tests and actual means comparisons) to identify whether there are any sub-categories of institutions identifiable within the three types identified. The equivalent non-parametric Logit test is also carried out on the non-metric data. Both Discriminant Function Analysis and Logit work on a principle of comparing observed and expected values for indicator variables to see how well these variables can predict group membership.

The third propositions, *3a* and *3b*, explore the relationship between professionalism and power. Canonical correlation is again used to explore the multivariate relationship between the set of professionalism indicator variables and the set of power indicator variables. As one of the aims of this study is to gather further information about what professionalism means in this HEI context, univariate relationships are also explored for further detail. For this, one-tailed bivariate correlations (using either Pearson or Spearman depending on whether or not the data is metric) are calculated for the professionalism and power indicators. As one of the professionalism indicators, professional body membership, is a dichotomous variable, t-tests (and the non-parametric equivalent Mann-Whitney U test) are applied to establish whether the power indicator variables vary significantly according to membership status. Mean and median scores are also observed to see how the ratings on the power variables vary. Where univariate statistics are significant, Logit analysis is then used to see whether the non-metric indicator variables combined are good at differentiating between membership status.

The final stage of the statistical analysis explores propositions *4a* and *4b* which look at the relationship between the sophistication of information system use and Personnel department power. As there is only a single non-metric variable used to measure IS sophistication, only univariate techniques are used to explore the dependence relationships. One-tailed bivariate correlation techniques are used, supported by descriptive statistics based on institution types.

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Having explained the analysis strategy, after summarising the respondent profile for the study, this chapter then explores the model proposed by strategic contingencies theory to test its relevance in the Higher Education context. The following sections then analyse each of the research propositions in turn based on the results of the postal questionnaire survey and the interviews held with members of senior management of institutions. In the following chapter, these findings are then combined to discuss the contribution of the study.

5.2. Respondent profile

Summarised, the main characteristics of the sample achieved from the questionnaire survey detailed in the previous chapter across the 144 respondents are:

- *Sex*: 57% male and 43% female. (Looking at Personnel department respondents alone, they are 43% male and 57% female).

- *Position*: 90% of respondents are the head of their department, 4% are deputies, and 6% hold other positions such as general manager. (The respective figures for the Personnel department respondents are 91%, 5% and 4%).

- *Length of service in institution*: 40% of respondents have spent over 10 years working in their institution, and 17% have been there under two years. (For Personnel, the figures are 33% and 23% respectively).

- *Career*: The respondents show high occupational and organisational loyalty, having spent a mean of six years in their current position, nine years in their current institution and nineteen years in their specialism. (From Personnel departments alone, the figures are five, eight and nineteen years respectively.)

- *Institution size*: 26% of institutions have less than 5,000 students whilst 31% have more than 15,000 students. (Broken down by institution type, 10% of pre-1992 universities, 5% of post-1992 universities and 86% of HE colleges have less than 5,000 students. 38% of pre-1992 universities, 42% of post-1992 universities and no HE colleges have more than 15,000 students.)

- *Institution funding*: 16% of institutions have less than 35% funding from state funding councils, whilst 21% have more than 55% government funding. (Broken down by institution type, 31% of pre-1992 universities, no post-1992 universities

and 7% of HE colleges are less than 35% state funded. 7% of pre-1992 universities, 16% of post-1992 universities and 57% HE colleges are more than 55% state funded.)

5.3. Testing strategic contingencies theory in HE

The first exploration to be carried out is to check that the model proposed by strategic contingencies theory, detailed in the *Literature Review* and *Methodology* chapters, holds in the context of administrative departments in Higher Education institutions. The theory proposes that the ratings of a particular department on its level of power variables are correlated positively with its ratings on the determinant of power variables. These relationships are explored here for the four departments (Estates, Finance, Personnel and Registry) in the respondent HEIs.

Both multivariate and univariate analyses are used to test the strategic contingencies theory propositions. The two level of power variables employed are:

- INVOLVEMENT: participation power of a department in decision-making on key strategic issues, based on the four stages of involvement proposed by Hinings and colleagues (1974): initiating discussion, deciding action, carrying out action and providing information. This variable is a measure of perceived department power in comparison with other subunits, based on the opinion of the head of a department. Involvement is a metric score, although it does not have a normal distribution. Where the assumption of normality must be met in statistical analysis the natural log of the involvement variable is used, which does approximate the normal distribution.

- INFLUENCE: overall perceived level of influence of departments on the strategic activities of an institution. This incorporates issues such as a department's reputation or profile and its visibility. Influence is an ordinal variable with five levels.

These are similar measures of power to those used in the study by Homburg and colleagues (1999).

Three determinant of power variables are used:

- COPING: This variable is a measure of a department's perceived ability to cope with uncertainty to the benefit of the organisation, contingent on the amount of uncertainty faced, based on the opinion of the head of department. It is about being part of information flows and acting as an intermediary or gatekeeper within an organisation. A similar item was used in the interviews carried out by Hinings and colleagues (1974). The ability to cope variable is weighted by the extent of uncertainty in the environment in which the department is operating. Coping is a non-normally distributed metric variable.

- CENTRALITY: This variable is a measure of the extent to which a subunit's role is perceived to be related to the mission of the organisation, based on the opinion of the head of department. It considers the contribution a department is seen to be making to an organisation and how effective it is in carrying out its designated role. This item was suggested for inclusion by Saunders (1990) as opposed to the definition of centrality as the extent to which a department interacts with other departments in the organisation in terms of pervasiveness and immediacy adopted by Hinings and colleagues (1974). Centrality is a five-point ordinal variable.

- NON-SUBSTITUTABILITY: This variable is a measure of the perceived substitutability a department's primary task, based on the opinion of the head of department. A similar item was used in the study by Saunders and Scamell (1986). Non-substitutability is a five-point ordinal variable.

To explore whether the strategic contingencies model is a reliable model to apply in the HEI context, multivariate canonical correlation analysis is used to see how strong the relationship is between the two sets of variables: the determinants of power and the level of power indicators. (Canonical correlation allows the combination of both metric and non-metric data for multivariate analysis). As data is available for four types of department (Estates, Finance, Personnel and Registry), the full dataset is used to explore the strategic contingencies theory propositions. Two significant variates at the 95% confidence level were found for the relationship between the sets of variables (sig. =

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.000 and sig. = .002). The results of the analysis for the first canonical variate (the most reliable variate) are displayed in Table 20.

Table 20: Canonical correlation results for determinants of power and level of power variables in HEIs

Canonical variate for independent variables (determinants of power):			Canonical variate for dependent variables (levels of power):		
Variable	*Canonical loading*	*Standardised canonical coefficient*	*Variable*	*Canonical loading*	*Standardised canonical coefficient*
CENTRALITY			INFLUENCE		
Estates	-.132	.352	Estates	-.364	-.184
Finance	-.181	.088	Finance	-.157	.180
Personnel	-.623	-.757	Personnel	-.720	-.610
Registry	-.548	-.243	Registry	-.765	-.719
COPING			INVOLVEMENT		
Estates	-.262	-.207	All departments	-.112	.240
Finance	-.042	.146			
Personnel	-.272	-.028			
Registry	-.466	-.277			
NON-SUBSTITUTABILITY					
Estates	.055	.047			
Finance	-.178	-.242			
Personnel	-.082	.280			
Registry	-.573	-.437			
Proportion of variance .122			Proportion of variance .254		
Redundancy .048			Redundancy .100		
Squared canonical correlation	.394				
Wilks Lambda	.257 (sig. = .000)				

n = 98

Source: analysis of survey data.

The independent variate is made up of the determinants of power, and the dependent variate the level of power indicators based on the theoretical justifications of causality discussed earlier (although causality is not directly proven by the canonical correlation method as it is a correlation technique). The analysis shows a significant relationship (sig. = .000) between the independent and dependent variates (39.4% variance overlap). Observation of the scatterplots of the canonical variate scores showed no obvious departures from linearity or homoscedasticity as the overall shape of the plots did not curve nor change in width throughout. But for the non-substitutability of the Estates

department, the analysis shows throughout that as the determinants of power decrease, so too do the levels of power, as suggested by strategic contingencies theory.

Moving on to focus specifically on the Personnel department and again taking a multivariate approach to explore the proposed relationships, Table 21 presents the results of canonical correlation analysis using the level of power variables and the determinant of power variables for Personnel alone.

Table 21: Canonical correlation results for determinants of power and level of power variables for the Personnel department

Canonical variate for independent variables (determinants of power):			Canonical variate for dependent variables (levels of power):		
Variable	*Canonical loading*	*Standardised canonical coefficient*	*Variable*	*Canonical loading*	*Standardised canonical coefficient*
CENTRALITY	-.980	-.962	INFLUENCE	-.986	-.908
COPING	-.287	-.166	INVOLVEMENT		
NON-SUBSTITUTABILITY				-.568	-.185
	-.076	-.121			
Proportion of variance	.349		Proportion of variance	.647	
Redundancy	.054		Redundancy	.100	
Squared canonical correlation		.154			
Wilks Lambda		.841 (sig. = .098)			

n = 66

Source: analysis of survey data.

There is a significant relationship at the α = .10 level (sig. = .098) between the determinant of power and the level of power variable sets (15.4% variance overlap between the pair of variates) for the Personnel department. Centrality loads the highest (canonical loading = -.980) for the independent variate, and influence loads the highest (canonical loading = -.986) for the dependent variate. Observation of the scatterplots of the canonical variate scores showed no obvious departures from linearity or homoscedasticity. Again, we can see that as the determinants of power decrease, so too do the level of power indicators.

Further multivariate analyses for each of the other departments were not carried out as the sample sizes for the Estates, Finance and Registry departments were insufficient for the involvement variable. This is because although the questionnaire asked each department for their opinion of themselves and the other departments for the other power variables, the question regarding involvement in decision-making was only about themselves.

Table 22: Correlation of determinants of power and level of power variables for the Personnel department

	Ability to cope with uncertainty		Centrality		Non-substitutability	
	ρ	*Sig.*	ρ	*Sig.*	ρ	*Sig.*
Overall influence	0.215	**0.008**	0.491	**0.000**	0.063	0.242
Involvement in decision-making	-0.020	0.435	0.212	**0.037**	0.137	0.130

Sig.: 1-tailed, α = .05, significant statistics are highlighted in bold.
n = 144 (missing cases are excluded pairwise)

Source: analysis of survey data.

Having found a relationship at the multivariate level, further details about individual correlations at the univariate level can now be explored to understand the relationships better. Focusing again on the Personnel department, Table 22 displays the results of the bivariate correlations between the determinant and level of power indicators (α = .05, pairwise exclusion, using Spearman's *rho* due to the ordinal nature of many of the variables). A one-tailed test has been used as strategic contingencies theory proposes covariance in a single (right-tailed) direction: as the determinants of power increase, so is the level of power expected to increase. The analysis shows positive significant correlations between centrality and involvement (sig. = .037) and between centrality and influence (sig. = .000). There is also a positive significant correlation between ability to cope with uncertainty and influence (sig. = .008). This again gives support to the strategic contingencies model for the Personnel department.

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Table 23: Intercorrelation of determinants of power and influence variables

			Influence			
			Estates	*Finance*	*Personnel*	*Registry*
Centrality	Estates	ρ	0.331	0.122	0.037	-0.015
		Sig.	**0.000**	0.078	0.335	0.431
	Finance	ρ	0.273	0.269	0.174	0.023
		Sig.	**0.001**	**0.001**	**0.023**	0.398
	Personnel	ρ	0.252	0.065	0.491	0.162
		Sig.	**0.002**	0.231	**0.000**	**0.035**
	Registry	ρ	0.041	0.172	0.152	0.455
		Sig.	0.323	**0.025**	**0.042**	**0.000**
Ability to cope with uncertainty	Estates	ρ	0.264	-0.034	0.083	0.005
		Sig.	**0.001**	0.351	0.176	0.477
	Finance	ρ	0.090	-0.029	0.061	-0.025
		Sig.	0.155	0.373	0.247	0.393
	Personnel	ρ	0.044	-0.031	0.215	-0.065
		Sig.	0.311	0.367	**0.008**	0.243
	Registry	ρ	0.064	0.153	0.200	0.151
		Sig.	0.247	**0.049**	**0.014**	0.051
Non-substitutability	Estates	ρ	0.119	0.061	-0.064	0.036
		Sig.	0.086	0.244	0.235	0.346
	Finance	ρ	0.117	0.040	0.000	0.076
		Sig.	0.097	0.328	0.499	0.204
	Personnel	ρ	0.041	0.027	0.063	0.095
		Sig.	0.326	0.381	0.242	0.150
	Registry	ρ	0.127	0.117	0.125	0.350
		Sig.	0.084	0.103	0.088	**0.000**

Sig.: 1-tailed, $\alpha = .05$, significant statistics are highlighted in bold.
n =144 (missing cases are excluded pairwise)

Source: analysis of survey data.

Looking at all four departments simultaneously, there are multiple significant correlations between each of the three determinants of power and the level of power variable, influence (see Table 23 – significant correlations at .05 are highlighted in bold; the Spearman *rho* correlation coefficient has been used due to the ordinal nature of the data). The figures in shaded cells show where the variables for a particular department intercept. At these points, we would expect to see a large degree of positive correlation according to strategic contingencies theory: the measures of the determinants of power should be high for the power level (influence) to be high.

The intercorrelations between overall influence and centrality show significant positive correlations for all departments (Estates, Personnel and Registry: sig. = .000; Finance: sig. = .001) hence supporting the propositions of strategic contingencies theory. The coping variable is significant for the Estates (sig. = .001) and Personnel departments (sig. = .008), and the non-substitutability variable is significant only for the Registry department (sig. = .000). As a result, there is evidence of support for strategic contingencies theory, however there are variations in the extent of support across the departments and in the strength of the different determinants. (The same test cannot be carried out reliably for the involvement variable due to the small sample sizes as described above.)

5.3.1.1. Summary of the quantitative evidence

Strategic contingencies theory proposes a significant positive relationship between the determinants of power (centrality, ability to cope with uncertainty and non-substitutability) and the level of power indicators (influence and involvement). Tests have been applied here to see whether the theory is supported in the Higher Education context in the UK.

Examining all four administrative department types together, multivariate canonical correlation does indeed show a significant positive relationship (sig. = .000) between the determinants of power and the level of power variables. Looking at the bivariate correlations for each department between the department's overall level of influence and the three determinant of power variables, there is a significant positive relationship ($\alpha = .05$) for all four departments with centrality, for two departments with ability to cope with uncertainty, and for one department with non-substitutability.

Focusing on the Personnel department alone, exploring the determinants of power against the level of power measures shows that strategic contingencies theory again receives support in the study. On a multivariate level, there is a significant relationship ($\alpha = .10$) between the determinants of power and the level of power variables. (The relationship is not as strong as is seen when all four departments are examined together;

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this may be a result of the smaller sample size when looking at one department on its own.) Centrality is the highest loading variable amongst the determinants of power. Significant positive correlations at the $\alpha = .05$ level are also found between centrality and the overall influence and involvement in decision-making variables; and between ability to cope with uncertainty and overall influence.

In the following section, these findings are set against the data gathered from interviews with members of senior management in fifteen HEIs.

5.3.2. Qualitative analysis in the HE context

A direct analysis of relationships between the determinants of power and the level of power indicators is not possible using the qualitative data alone, predominantly due to the small sample size. It is also not desirable as the aim of the qualitative data collection was not to explore these relationships directly, but to find out more about the HEI context in which the observed power relationships are taking place. An improved understanding of the context leads to a better explanation of why factors such as centrality, non-substitutability and ability to cope with uncertainty, as well as influence and involvement should vary between departments, and what these variations are.

5.3.2.1. Factors impacting on the HEI context

Interviewees were asked to select which two out of a list of six potential current issues concerning the operation of the Personnel department are having the most impact on how the department is perceived in their institution. These issues were: the amount (or lack) of trade union influence in the organisation, the outsourcing of Personnel activities, the HEFCE 'Rewarding and Developing Staff in Higher Education' initiative, the devolution of personnel management activities to line management, the use of computerised Personnel information systems, and the decentralisation of the Personnel department to schools/units. By far the most popular response for the issue having the most impact was the HEFCE 'Rewarding and Developing Staff in Higher Education' initiative (discussed in the *Literature Review* chapter).

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The HEFCE initiative is recognised by many institutions as being a vital source of funding which has led to operational benefits, particularly with an emphasis on improving staff development. Comments from a Pro Warden, Principal, Director of HR and Pro Vice Chancellor respectively included: "It [the initiative] has had quite a big influence with the range of initiatives it has enabled."; "The HEFCE initiative obviously has been significant because we've had monies to do various things. [...] We've used it to develop our staff capacity and our capacity to develop our HR strategies."; "Without that direction from HEFCE, I would never have been able to make the changes that I'm making. I would have come up against brick walls."; "It's an identified income stream for HR and it's enabled us to bring forward initiatives that we couldn't have afforded to do before."

As well as operational benefits, the initiative has also led to an improved Personnel department profile. According to one institution's Secretary, the initiative has "raised the profile" and "disturbed any complacency": "I'm expecting those two benefits at least from these high profile, greater demands on the HR department." The profile has changed both due to the amount of money involved – according to one Pro Vice Chancellor: "The HEFCE initiative has probably had a positive effect on how Personnel departments are perceived generally actually, not just here, because it's given them a higher profile and because of the magnitude of the funds." – and due to the way in which it has forced Personnel department members to interact more with others in their institution – according to one Assistant Principal: "The [Personnel] staff themselves have gone out far more than they would ever have done and talked to colleagues. There's a new perception, a new awareness particularly in terms of mandatory legislation in Personnel areas." The strategic activities of the department have also been enhanced. One interviewee, a Head of Organisational Development and Change, noted that: "The fact that we had to put together an HR strategy with action points meant that there were clear outcomes, very visible and funded under each of the main headings. [...] I think it has had a tremendous effect."

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However, a couple of institutions did highlight the problem that due to having to focus on strategic Personnel matters, more operational activities were suffering due to the drain on limited resources. One interviewee, an institution's Secretary, commented that *"I think here the HR department's standing has been put in some jeopardy by the concepts associated with the new initiatives from HEFCE. The impact that's had on the ability to perform some of the operational functions."* This also led the same institution to be dubious about being able to see the link between the strategic aims of the initiative and the tangible outcomes: *"The high level of monitoring and statistical analysis that is a requirement of HR strategies and legislation isn't seen as immediately related to the educational provision or research. [...] It's got to lead to a beneficial outcome some way or other, not to a tick-box and a pile of papers."*

Not all institutions shared these views of the impact of the HEFCE initiative. For some institutions it was felt that the initiative had had very little impact or it was too soon to tell the sort of impact it was having. One Pro Warden commented that: *"If you went to quite a few people across the institution and asked them about the 'Rewarding and Developing Staff in Higher Education', they wouldn't know what you were talking about."* Another institution highlighted that they were already doing many of the things the HEFCE initiative was promoting, hence in itself it was having little impact on the way the Personnel department was perceived.

The second most common issue seen as having an impact on how the Personnel department is perceived, although much less of a current priority than the HEFCE initiative, is the trade union context of institutions. Some institutions describe trade union activity as prominent, but nevertheless not a problematic area. A typical comment by one Pro Vice Chancellor was: *"I don't think we've got particularly difficult industrial relations. I think by and large they are positive. But I do think they are a significant feature of the institution."* The presence of the unions is not however ignored in these institutions. Another institution's Pro Vice Chancellor commented that: *"The unions have to be very carefully ... they aren't difficult here, but they do have to be very carefully managed."*

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In many other institutions the amount of trade union activity is described as being very low, hence requiring a minimum role of the Personnel department. The Assistant Principal in one institution noted that: "*The first one [current priority issue] without any doubt is the amount of trade union influence, which here is negligible, and inevitably it has led to an immaturity in development in the Personnel function. [...] In the past Personnel would have had to have developed to deal with that 'threat' if you like. And because it hasn't existed then Personnel has been able to get by on an operational level.*"

Despite a lack of trade union activity, institutions realise the importance and value of trade union relationships to their organisation. The Head of Organisational Development and Change at one institution noted that: "*The fact that we are influenced by the need to communicate with trade unions does affect what we can do and how we can do it.*" There was one exception to this where the interviewee, a Director of HR, described trade union issues to be very low on the Personnel agenda (interestingly there was also a strike being held by one of the unions at that institution on the day of the interview). Trade union influence is perceived as a constraint imposed on what Personnel can do according to one Pro Vice Chancellor: "*What goes on nationally in terms of contracts and pay awards, [...] the constraints that that imposes on local decision-making and therefore the sorts of changes that local Personnel teams can drive through.*"

The decentralisation of the Personnel department and the devolution of personnel management activities to line management were close behind the trade union context on the list of priorities affecting how Personnel is perceived. Decentralisation of the department is seen to have both positive and negative aspects. The positive aspects primarily concern increased visibility and involvement of Personnel in the institution's business. One Pro Vice Chancellor commented that: "*The fact of having them spending some time specifically out of the main building, I think it's almost psychologically saying to people we're here and we want to support. I think just getting to know HR. I think before they were very remote up in the main administration building – nobody ever saw them really.*" The negative aspects include detachment problems where there

is no decentralisation, according to one institution's Secretary: *"Historically we've been detached. [...] The perception is that HR is done in this building."*; the costs involved in decentralising, according to another institution's Principal: *"If you devolve budgets, cost centres hate paying lots of money to the centre for services."*; and decentralisation just not being the way the organisation operates, according to another Pro Vice Chancellor: *"We haven't gone down that line. [...] Our faculties don't want that. They would much prefer to have a small discrete dedicated outfit that they consider to be professional."*

With regard to devolving personnel management activities to line managers, one of the most common issues is the lack of skill and the need for more training of these managers. The Director of HR at one institution commented that: *"I'm not decentralising, if anything, I'm going in the opposite direction because if you decentralise your HR department that relies upon having line managers who are knowledgeable and experienced in managing staff, leading staff and employment law. And I couldn't honestly say my academic managers fulfil that requirement."* Likewise it is considered problematic getting managers to take on HRM responsibilities. A frequent problem mentioned by one Vice Principal was: *"Line managers tell them how wonderful they are, Personnel can tell them when they're not."* The same interviewee highlighted other problems including the confusion of roles and duplication of work between the Personnel department and line managers: *"There is a confusion of roles that comes partly through Personnel themselves and partly through a lack of transparency of the role of line management. [...] Personnel are not line managers. [...] Line managers manage, we [Personnel] can advise."* However, where devolution has worked, this has created a more advisory/consultancy role for Personnel according to one institution's Principal: *"We intend to continue to devolve but that will be something that we roll out over the next 1, 2, 3 years. [This will lead to the] use of the Personnel department as internal consultants."*

The outsourcing of Personnel activities was not mentioned as a priority by any institutions interviewed, and indeed the majority had no outsourcing arrangements, or only outsourced very specific activities on a piecemeal basis, such as hiring in external trainers or consultants for a specific project.

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The remaining current issue not yet discussed here is the use of <u>Personnel information</u> <u>systems</u> by the Personnel department. This issue was raised as a priority area of impact in four institutions – similar to the level of impact of devolution and decentralisation. The implications of information systems for the sector are discussed in detail in the section below when propositions *4a* and *4b* are discussed.

There were also other issues regarding the HEI context that emerged from the interviews, which were not prompted by the researcher. These include the relevance of the competitive split between those departments that are academic and those that fulfil a support role on their respective ability to develop power and influence. For example, one institution's Secretary commented that the monitoring required for the HEFCE initiative and legislation are seen as: "*a deprivation of resources from direct education or provision of research.*" Another issue raised by one institution's Vice Principal regarding the context was the dominant role of management accounting in how the organisation operates: "*The problem with business in America is it's all run by lawyers. The problem with business in this country, it's all run by accountants!*" Finally, change in the HEI external environment was also mentioned as impacting on institutions' internal power structures. For example, in one institution the Pro Vice Chancellor described the rate of change as dramatic: "*This institution has undergone huge, huge change. [...] Personnel has had to operate in that milieu. There's no sense that they've been operating in some kind of steady state with little projects and challenges here and there.*"

5.3.2.2. Weaknesses of the strategic contingencies theory model in HE

Looking beyond the confines of strategic contingencies theory in light of the interview data, one issue which was raised by interviewees which is impacting on power in HEIs is that of individuals within the Personnel department. The focus of strategic contingencies theory is on the power of a department as a whole, and not on the individual power of the members of that department. This has also been noted as a weakness of the theory by other commentators (see the *Literature Review* for a

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discussion of this point), hence this aspect of intra-organisational power is touched on here to assess its impact.

The characteristics of the head of Personnel are seen to have a significant impact on how the department as a whole operates. One Pro Vice Chancellor commented that: "*I think that Personnel departments stand or fall on the reputation/credibility of their senior staff*." Another institution's Principal saw this very positively: "*Not only I but all my colleagues have immense confidence and respect in our Head of HR. I mean not only in the specific post he has, but in the contribution he makes to the Executive as a strategic group. [...] His personal influence will go beyond the specific role that he undertakes.*" One Vice Principal suggested that: "*It [the perception of the Personnel department] has been different under each head. [...] I think it [Personnel] very much takes the lead the head gives it.*" Similar comments were also made regarding the heads of other administrative departments, for example one institution's Secretary noted that: "*The Registrar has enormous personal authority and respect in the community.*"

In some institutions, the influence of a department was seen to emanate from individuals within the team rather than the department as a whole. One Pro Vice Chancellor commented that: "*Within the professional team, there are people with a range of different strengths and weaknesses.*", and another noted that: "*Rather than being at the unit level, any criticism or low-esteem would be aimed at an individual level.*" The length of experience of individuals within a department is seen as a significant factor to gaining this credibility and power by the Secretary to one institution: "*Finance and Registry have section heads of great experience. [...] They are both held in high regard. The present Director of Personnel has been in post for just over a year so doesn't have the same standing. Nobody could.*"

5.3.2.3. Summary of the HEI context

Exploring the HE context, the HEFCE initiative, 'Rewarding and Developing Staff in Higher Education', is currently having a considerable impact on how the Personnel department is perceived. It is recognised by two-thirds of the institutions interviewed as

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being a vital source of funding that has lead to operational benefits, particularly in staff development. The initiative has also lead to an improved Personnel department profile, increasing visibility and involvement. However, a few institutions highlighted the problem that due to having to focus on strategic Personnel matters, more operational activities were suffering due to the drain on resources. Despite the obvious impact of the initiative in most institutions, others felt that it was having very little impact or that it was too soon to tell the sort of impact it was having. One institution is dubious in particular about being able to see the link between the strategic aims of the initiative and the tangible outcomes related to priorities of the institution.

Just under half the institutions interviewed describe the amount of trade union activity in their organisation as being very low, hence requiring a minimum role from the Personnel department. This situation has led to a lack of development of skill of dealing with employee relations' issues. A quarter of institutions describe trade union activity as being more prominent but not problematic, nevertheless requiring the Personnel department to manage relationships. Despite a lack of trade union activity, however, most institutions realise the importance and value of the dialogue to their organisation, although one institution saw this as low on their agenda. In general, trade union influence is perceived as a constraint imposed by the environment, which Personnel must be able to manage.

Few institutions have decentralised their Personnel department. This has only occurred where an institution is particularly large or complex; the majority prefer to maintain a dedicated, professional team at the centre. Decentralisation of the Personnel department avoids the problems of detachment, increasing the influence and involvement of Personnel in the institution's business. The negative side is particularly the cost involved in decentralising.

Devolution of personnel management activities to line managers is also limited in the HE context. One of the most common issues raised associated with devolution is the lack of skill and the need for more training of these managers. Likewise it is considered problematic getting managers to take on the HRM responsibilities and not just pass

problems to Personnel. Other problems of devolution include the confusion of roles and duplication of work between the Personnel department and line managers. Where devolution does happen, it emphasises Personnel's role as advisors and consultants.

Outsourcing of Personnel department activities is very rare in HEIs except on an occasional basis, bringing in occasional trainers or consultants for specific projects.

The final factors identified as relevant to the HE context are the amount of change it is undergoing, and its well defined split, often competitive, between those departments that are academic and those that fulfil a support role. This can limit the amount of power that any support department may have. Some institutions also emphasised the dominant role of management accounting in how the organisation operates, and the need for departments to fit into this model to be accepted in the community.

Despite the limitations set by the strategic contingencies model, the characteristics of the head of Personnel and other senior members of the department are also seen to have an impact on how the department as a whole operates and is perceived. Personal influence, credibility and respect is seen as able to go beyond a specific functional role. In some instances, the influence of the department is also seen to emanate from individuals within the team rather than the department as a whole due to the range of strengths and weaknesses within. The length of time individuals have been within a department is seen as significant in determining their credibility. The implications of this for strategic contingencies theory are discussed further in the following chapter, *Discussion*.

These and further issues of departmental power are considered in further detail in the following section as the specific propositions derived for this study are explored. The investigation starts with a look at just how much power the Personnel department is perceived to have in this HEI context.

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5.4. Investigating the propositions

In the following sections, each of the research propositions for this study is explored based on the 144 responses from the 73 Higher Education institutions. In turn, the level of power of the Personnel department and the impact of organisational history, professionalism and the use of information systems are investigated.

5.4.1. How much power does Personnel have?

The investigation starts with the first proposition for the study:

1a: The Personnel department will be perceived as having lower levels of power compared to other HEI administrative departments.

There are two variables used to explore this proposition across all respondents: involvement (the perceived participation power of a department in decision-making on key strategic issues); and influence (the overall perceived level of influence of departments on the strategic activities of an institution). The characteristics of these two variables were described in the previous section looking at the strategic contingencies theory model. The approach adopted here is to consider both involvement and influence in turn to see whether the four departments differ significantly in their opinions of each other, and to see what each department actually scores on average for both indicators.

Personnel, Estates, Finance and Registry departments were each asked about the perceived involvement of their own department in decision-making on nine key issues determined from initial exploratory interviews and research. Scores for each issue are first totalled and grouped by department and ANOVA techniques applied to see whether there is a significant difference between the different departments. The results are shown in Table 24. (The relationship between the variables was tested for homoscedasticity, resulting in a non-significant Levene statistic of .954.) The data show a statistically significant difference between the responses of the different departments (sig. = .004).

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Table 24: ANOVA of responses to involvement in decision-making by department

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.415	3	2.138	4.626	**0.004**
Within Groups	63.787	138	0.462		
Total	70.202	141			

Sig.: $\alpha = .05$
n = 144

Source: analysis of survey data.

In order to look closer at the actual difference between departments on a univariate level, multiple comparison tests for samples of varying sizes (Hochberg's GT2) and where the population variance is unknown (Games-Howell) are carried out (see Table 25). Both the Games-Howell procedure and the Hochberg's GT2 test identify two significant differences between the means on this variable: between the Finance and the Estates departments, and between the Finance and the Personnel department. This clarifies the earlier finding from the ANOVA that the means vary for any department.

Looking at the responses to involvement for each individual department and each key issue, the mean scores observed across the sample are displayed in Table 26. The results show us that Personnel departments are most involved in staff planning issues, as we might expect, but that their influence over other key decisions in the organisation is very limited. This pattern of primarily being involved in decisions that are fundamental to the function of a particular department, seems to hold true, in as much as Estates are most involved in strategic planning and Finance in budget setting, although Registry is most involved in the introduction of computer systems, with student recruitment activities coming second. This latter point may be a result of the widespread introduction of advanced student record systems in HEIs over recent years. The extent of involvement in a range of different issues is clearly greater for the Finance and Registry departments than for Personnel or Estates.

Table 25: Post hoc ANOVA tests for responses to involvement in decision-making by department

Hochberg's GT2

(I) Department	(J) Department	Mean Difference (I-J)	Std. Error	Sig.
Estates	Finance	-0.526	0.198	**0.050**
	Personnel	0.014	0.150	1.000
	Registry	-0.378	0.195	0.284
Finance	Estates	0.526	0.198	**0.050**
	Personnel	0.541	0.172	**0.012**
	Registry	0.149	0.212	0.981
Personnel	Estates	-0.014	0.150	1.000
	Finance	-0.541	0.172	**0.012**
	Registry	-0.392	0.169	0.122
Registry	Estates	0.378	0.195	0.284
	Finance	-0.149	0.212	0.981
	Personnel	0.392	0.169	0.122

Games-Howell

(I) Department	(J) Department	Mean Difference (I-J)	Std. Error	Sig.
Estates	Finance	-0.526	0.198	**0.022**
	Personnel	0.014	0.150	1.000
	Registry	-0.378	0.195	0.289
Finance	Estates	0.526	0.198	**0.022**
	Personnel	0.541	0.172	**0.002**
	Registry	0.149	0.212	0.874
Personnel	Estates	-0.014	0.150	1.000
	Finance	-0.541	0.172	**0.002**
	Registry	-0.392	0.169	0.154
Registry	Estates	0.378	0.195	0.289
	Finance	-0.149	0.212	0.874
	Personnel	0.392	0.169	0.154

Sig.: $\alpha = .05$, significant statistics are highlighted in bold.
n = 144

Source: analysis of survey data.

For the Personnel department, their limited involvement in strategic areas of decision-making often involves only the provision of information (in an average of 41% of cases) or not being involved at all (average of 38% of cases), as is shown in Table 27.

Table 26: Mean ratings of department involvement in corporate decision-making on nine key issues

	Estates (n=30)	Finance (n=20)	Personnel (n=73)	Registry (n=21)
Budget setting	4.0	7.1	2.6	3.2
Strategic planning	5.0	4.6	4.6	3.8
Quality assurance	1.1	0.4	1.3	4.4
New degrees	0.5	1.1	0.5	3.4
Student recruitment	1.1	1.3	0.6	5.4
Pricing	0.7	5.0	0.8	1.3
Purchasing	4.2	5.4	1.9	1.3
Staff planning	2.3	3.5	5.0	2.4
Computer systems	1.7	3.8	2.8	5.8
Total of involvement				
Mean	20.6	31.9	20.0	31.0
Standard Deviation	15.6	15.6	12.6	21.3

INVOLVEMENT values are the sum of scores for all applicable stages in the decision making process in which the department is involved from the following list:

0	Not involved
1	Provides information
2	Carries out action
3	Decides action
4	Initiates discussion

Source: analysis of survey data.

Table 27: Percentage of Personnel departments involved in the different stages of corporate decision-making on nine key issues

	Initiates discussion	Decides action	Carries out action	Provides information	Not involved
Budget setting	14	15	42	67	12
Strategic planning	41	32	67	64	3
Quality assurance	5	7	19	49	36
New degrees	3	7	7	7	79
Student recruitment	4	5	8	12	78
Pricing	4	7	7	30	63
Purchasing	12	21	22	34	41
Staff planning	55	34	59	62	1
Computer systems	18	33	32	47	27
Mean percentage	**17**	**18**	**29**	**41**	**38**

n = 73

Source: analysis of survey data.

Looking at another aspect of involvement in decision-making, executive board membership has been discussed as a key factor. However, it is difficult in the committee-based structures of HEIs to define exactly what the 'board' is, and hence it is a difficult variable to measure. There are often specific top-level committees established to consider specialist issues such as HRM without addressing other strategic areas. Therefore, in this study it is perhaps best to use job titles as a guide to board membership for the head of the Personnel department. Amongst the sample respondents 58% of them have 'Director' in their title, indicating a reasonable amount of top-level committee presence. Nevertheless, as has been displayed above, involvement in decision-making is actually low.

Moving on to consider the second variable used to investigate this proposition, influence, the scores based on responses from all four department types are summarised in Table 28. The mean results show that everyone agrees that Finance is most influential, although opinions vary between departments regarding the position of the others. If a department's opinion of itself is removed (which is mostly higher than the opinion that others have of it as has been shown to occur in previous studies), overall, Registry is considered the second most influential, then Personnel and finally Estates.

Table 28: Mean ratings of overall level of influence of all administrative departments

	Estates' opinion (n=30)	Finance's opinion (n=20)	Personnel's opinion (n=73)	Registry's opinion (n=21)	Mean with own opinion removed
Estates	3.2	2.8	3.0	2.8	2.9
Finance	4.5	4.0	4.3	4.1	4.3
Personnel	2.9	3.0	3.5	3.2	3.0
Registry	3.3	3.2	3.4	3.1	3.3

INFLUENCE values:
1   Almost none
2   Limited amount
3   Reasonable amount
4   Great amount
5   Very great amount

Source: analysis of survey data.

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To see the extent to which departmental opinions differ, the data can be checked to assess whether there is a significant difference between responses by department. As the influence variable is ordinal, the non-parametric Kruskal-Wallis test is applied. The results are presented in Table 29. Opinions of the Personnel department's influence are the only variable that differs significantly between departments, indicating a wide range of views in existence. (Further non-parametric multiple comparison tests, e.g. Tukey test with ranked sums, are available to be carried out to see where the differences lie for the significant variable – the influence of Personnel. Given the focus of the proposition, however, these have not been carried out as the mathematics involved in the calculation are deemed overly complex for the benefit of the calculation.)

Table 29: Kruskal-Wallis test of overall level of influence of each department by department

	χ^2	df	Sig.
Influence - Estates	3.721	3	0.293
Influence - Finance	5.413	3	0.144
Influence - Personnel	12.640	3	**0.005**
Influence - Registry	1.232	3	0.745

Sig.: $\alpha = 0.05$, significant statistics are highlighted in bold.
n = 144

Source: analysis of survey data.

The investigation now continues on to the second part of the proposition for this section:

1b: The rating of the Personnel department on its ability to cope with uncertainty, its centrality, and its non-substitutability will be lower than that of other HEI administrative departments.

The variables used to investigate this proposition are: coping (a department's perceived ability to enable other departments to cope with uncertainty, contingent on the amount of uncertainty faced); centrality (the extent to which a subunit's role is perceived to be related to the mission of the organisation); and non-substitutability (the perceived

substitutability a department's primary task). The characteristics of these variables were described in the previous section. A similar approach to that adopted for proposition *1a* is also adopted here. The three determinant of power variables are consider together to see whether the four departments differ significantly in their opinions of each other, and then each determinant is taken in turn to see each department's average score.

Firstly, the coping, centrality and non-substitutability variables are checked for significant differences between the responses from the different departments. As centrality and non-substitutability are ordinal and coping is metric though non-normal, the non-parametric Kruskal-Wallis test is applied. The results are presented in Table 30.

Table 30: Kruskal-Wallis test of determinants of power by department

	χ^2	df	Sig.
Ability to cope with uncertainty			
Estates	8.232	3	**0.041**
Finance	9.135	3	**0.028**
Personnel	31.652	3	**0.000**
Registry	8.941	3	**0.030**
Centrality			
Estates	2.839	3	0.417
Finance	1.210	3	0.751
Personnel	16.168	3	**0.001**
Registry	5.876	3	0.118
Non-substitutability			
Estates	22.414	3	**0.000**
Finance	0.254	3	0.968
Personnel	6.441	3	0.092
Registry	13.133	3	**0.004**

Sig.: $\alpha = 0.05$, significant statistics are highlighted in bold.
n = 144

Source: analysis of survey data.

The tests show that multiple variables have significant scores. In other words, on a univariate basis, there is a significant difference between the opinions of the four departments on the extent to which they and the other departments are able to cope with uncertainty, and some differences in opinion on centrality and non-substitutability. This shows the value of adopting a multiple-respondent approach to the study to obtain as

broad a perspective as possible of opinions. The results also show that with regard to centrality, the Personnel department is the only department where there is significant variation in opinions, indicating that this department may be considered to have the least clear role and hence its contribution to the organisation is obscured.

Taking each determinant of power in turn, looking first at the extent to which each department copes with uncertainty that the organisation faces, Table 31 shows that on average the Personnel department is awarded the lowest rating on ability to cope with uncertainty by the Estate's department, and the second lowest by the Finance and the Registry departments (above Estates), yet it awarded itself the highest score out of all the departments. Only the Registry department did not award itself the highest rating on this determinant of power variable. Removing a department's opinion of itself, the overall mean scores indicate that the Personnel department is rated lowest on the ability to cope with uncertainty variable.

Table 31: Mean ratings of ability to cope with uncertainty of departments

	Estates' opinion (n=30)	Finance's opinion (n=20)	Personnel's opinion (n=73)	Registry's opinion (n=21)	Mean with own opinion removed
Estates	8.40	6.89	6.36	6.06	6.41
Finance	6.52	10.11	7.90	8.44	7.68
Personnel	5.09	7.47	10.12	6.29	6.20
Registry	5.40	7.83	7.64	8.10	7.22

Coping values are the product of the amount of uncertainty faced, and the extent to which coping strategies are adopted by a department to the aid of others:

Uncertainty values:		Strategy values:	
1	Almost none	1	None at all
2	Limited amount	2	Limited extent
3	Reasonable amount	3	Reasonable extent
4	Great amount	4	Great extent
5	Very great amount	5	Very great extent

Source: analysis of survey data.

Centrality considers a department's contribution to the institution's mission. Table 32 shows less variation in opinion on centrality than on ability to cope with uncertainty. The Personnel department is again scored lowest by Estates, but scored above Registry by the Finance department, and above Estates by the Registry department. Removing a

department's opinion of itself, the overall mean scores indicate that the Personnel department is again rated lowest on the centrality variable.

Table 32: Median and mean ratings of centrality of departments

	Estates' opinion (n=30)	Finance's opinion (n=20)	Personnel's opinion (n=72)	Registry's opinion (n=21)	Mean with own opinion removed
Estates	4	4	4	3	3.72
Finance	5	4	4	5	4.10
Personnel	3	4	4	4	3.52
Registry	4	3	4	5	4.02

Centrality values:
1   No direct contribution
2   Minimal direct
3   Some direct
4   Reasonable direct
5   Substantial direct

Source: analysis of survey data.

Finally, non-substitutability is the variable used to rate the perceived substitutability of the task of the whole subunit. Table 33 shows that with a department's opinion of itself removed, the Personnel department ranked third, with the Estates department receiving the lowest score on average on the non-substitutability variable.

Table 33: Median and mean ratings of non-substitutability of departments

	Estates' opinion (n=30)	Finance's opinion (n=20)	Personnel's opinion (n=72)	Registry's opinion (n=21)	Mean with own opinion removed
Estates	3	2	2	3	2.43
Finance	3	3	3	3	3.07
Personnel	3	2	3	4	2.75
Registry	4	4	3	4	3.39

Non-substitutability values:
1   Not at all difficult
2   A little difficult
3   Difficult
4   Very difficult
5   Almost impossible

Source: analysis of survey data.

5.4.1.1. Summary for propositions 1a and 1b

In order to gauge the level of power of the Personnel department in comparison with other administrative departments, ratings on the determinants of power and level of power indicators have been explored. Firstly, departments were scored on their involvement in nine strategic decision-making issues within HE to see their extent of participation. There was a statistically significant difference between the total score for each department ($\alpha = .05$), with the Personnel department having the lowest mean score and hence the least overall involvement. The Personnel department is shown to be most involved in staff planning, having little influence over other corporate issues. However, over half of the questionnaire respondents have 'Director' in their title, at least implying board and committee membership within institutions.

When departments were asked for their opinion on the overall level of influence within their institution of themselves and their counterparts, all departments agreed that the Finance department had the greatest mean level of influence with Personnel being ranked third. The level of influence of the Personnel department was the only variable to differ significantly between departmental opinions based on mean scores.

Departments do not all share the same opinion however on the extent to which they and their counterparts are able to cope with uncertainty, are central and are non-substitutable. These questionnaire items showed great variation in responses amongst departments. On average, the Personnel department receives the lowest ranking by the other departments on its ability to cope with uncertainty, although it gives itself the highest score. This phenomenon of a higher self opinion has been observed in other studies as discussed in the *Literature Review* chapter. Personnel is also ranked lowest by the other departments on its centrality, and second lowest on non-substitutability (above the Estates department).

In summary, we can conclude that there is substantial support for proposition *1a*, indicating that the Personnel department is perceived as having lower levels of power compared to other HEI administrative departments. Support is also found for

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proposition *1b* in that the rating of the Personnel department is the lowest amongst the administrative departments on two out of three of the determinants of power.

5.4.2. Interview data on perceived power

Perceptions of involvement and influence and the determinants of power may on aggregate show the low level of power of the Personnel department, however, the quantitative data alone does not explain the reasons for this. In the following paragraphs, examples from a range of HEIs are presented of how the department is perceived and why it is perceived in that way.

5.4.2.1. The level of involvement and influence of Personnel.

From the interviews, it became clear that in some institutions the Personnel department is acknowledged as a key player in decision-making structures. For example, a Vice Principal and a Pro Vice Chancellor respectively both highlighted the importance of at least being seen to be participating: "*The Head of Personnel is clearly on the strategic management team. He's seen there and makes a contribution.*"; "*They are seen as part of the management team, not just there in a side role. They are a major player.*" It is at the highest level of decision-making that this participation really counts according to another Pro Vice Chancellor: "*All the heads of Schools and the heads of those [administrative] offices and the VCs office of five people comprise the Executive Committee. So the Executive Committee is the group that really determines the strategy for the institution. They're the prime people who have to lead its operation. [...] That's where the Personnel Director has his say, right at the highest levels.*" Equally, the Board of Governors or Council is an important decision-making arena. The Principal of one institution pointed out that: "*Given that they [the Board of Governors] are responsible for the framework in which employment takes place within an institution, the Board is incredibly important in terms of HR.*"

There are also examples of the head of Personnel having a broader involvement in decision-making in areas other than personnel management. The Principal of one

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institution noted that: "*The Head of HR is on the Executive and a person who is involved in all the strategic direction of the institution, is involved in any occasion and any grouping that looks at the strategic direction of the institution.*" Conversely, another institution highlighted that where Personnel may not be on the top senior management board, there is evidence that personnel management issues are considered at this level.

However, despite these examples of involvement in decision-making, some institutions commented that heads of other administrative departments (Finance and Registry in particular) are more often a member of senior decision-making committees than are heads of Personnel departments. The Vice Principal of one institution noted that: "*Throughout the whole Academic Board and its decision-making processes the Registrar is there. The Personnel Manager isn't. [...] In most of the decision-making processes which the academics see, the Personnel Manager is never involved.*" A number of institutions also mentioned the increasing involvement and influence of the Marketing department due to the priorities being set by institutions in a competitive marketplace.

When the head of Personnel is not a member of top decision-making bodies, he or she is more likely to get involved on an informal basis when personnel management issues are on the decision-making agenda. For example, a Vice Principal of one institution commented: "*Last year there was quite a lot of involvement because it was really that department [Personnel] that had to ensure that when it went to the Board of Governors, every 'i' had been dotted, every 't' had been crossed. [...] This year I think was probably a lot less because the issues that are of concern at the moment are not in that sense HR-related.*" In another institution, the Pro Warden suggested that an informal role in decision-making is an important substitution for a permanent position on the decision-making board: "*The Head of Personnel is quite well tied in to the senior management structure. We have a senior management team which the Head of Personnel isn't on but his line manager is. [...] But while he's not on it, he's very regularly consulted on issues and actually appears quite often in senior management*

team meetings for example, because if we're dealing with anything then he would have prepared a paper."

This therefore implies that Personnel gains a strategic role when it is critical to avoid risk of litigation, thus having a defensive role to play in risk management. This role is contingent as opposed to the more tactical operational roles that are carried out. Strategy can also have a lot to do with the informal as well as the formal decision-making structures in an institution as one Vice Principal interviewed has witnessed: *"There's a lot more going on [informally], particularly with the role of the Chief Executive, and the one-to-one meetings he will have with lots of people. [...] I would say the decision-making in the institution is actually in one-to-one meetings with him."*

Broader elements of the HEI environment, such as instances of change in an institution have led to changes in the extent of Personnel department involvement in decision-making. The Pro Vice Chancellor of one institution mentioned that: *"Now we've got an HR Project Board that came about after HEFCE, and that contains the PVC, Director of Personnel, University Secretary, representatives from Finance and Planning. So that's a small working group in essence that helps formulate policy."* Equally, the role of the head of an institution is fundamental to the extent to which departments get involved in corporate matters, as expressed by a Vice Principal and Principal respectively: *"At the moment, he [the Principal] seems to be giving it [the Planning and Resources Committee] lots of things which to me seem to be entirely marginal relevance to do."*; and *"In any institution, there is also an element of what the Chief Executive or Principal deems to be important."* Although a limitation, this can also be seen as a possibility for increasing organisational impact according to the Pro Vice Chancellor of one institution: *"I think Personnel can create a more powerful position or a more influential position in an organisation if they've got the ear of the Vice Chancellor and senior staff."*

Moving on to look at the influence of the Personnel department in the institutions interviewed, more than half of the interviewees expressed that their Personnel department has or is gaining a very high profile and is very visible. The types of

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comments made by an institution's Secretary, Pro Warden and Principal respectively include: "*I think that HR is beginning to have more, the most influence of the lot [among administrative departments].*", "*I certainly don't think people would see Human Resources as being of any less importance than the others [other administrative departments].*" and "*I think that the personnel department is seen as an essential part of the work of the institution. I think it is perceived as being helpful and supportive and approachable.*" In particular, as suggested earlier, the HEFCE 'Rewarding and Developing Staff in Higher Education' initiative is perceived to have had a substantial effect on the influence of the Personnel department. The Head of Organisational Development and Change at one institution commented that as a result of the HEFCE initiative: "*there have been some very specific outcomes that people are able to see. It's also raised the profile I think of HR activity within the institution, because people, where previously they might not have perceived it as something important, now it's got a sum of money attached to it, suddenly everybody's interested.*"

The reputation and influence of the Personnel department also extends beyond their own institution as one Pro Vice Chancellor highlighted: "*I get the impression that our HR setup is quite well regarded by other institutions. Our Director of HR and Assistant Director of HR are quite well known on the circuit. As far as I can see, they're quite well up with implementation of policies in relation to legislation and that kind of thing.*"

When transcribing the interview data at this point, the dynamic quality of the data over the quantitative data already gathered became clear. Many people spoke of how things used to be and compared the current situation with that reference point, or made reference to how they would expect things to be in a couple of years time. When talking about reputations and how a department is perceived interviewees appeared to be more comfortable being able to make a relative judgement rather than a definitive assessment of the current state of affairs, particularly if the assessment was poor. Interviewees were also more willing to talk fluently and at length about positive aspects about their departments, compared to responses being more considered when dealing with problematic areas.

Despite the Personnel department having a high profile according to over half the interviewees, just as many institutions actually perceived that other administrative departments still have a higher profile than Personnel. For example, the Finance department cropped up in a number of discussions: "*It [the Finance Department] really is seen to be very much an all pervasive influence across the institution.*"; "*It's very important information and you hear what Finance says, and if they say it's not viable to do that you listen, and if they say it is viable to do that you listen.*"; "*There's always a feeling that Finance is important because at the end of the day you don't do anything without money.*"; "*Finance yields the power and has a historical power base.*"; "*I think our Finance department is well regarded. It may not be loved but it's well regarded. We have an extremely good Finance Director who really knows what she's about. The department seems well organised and you get good data. And I think in general that would be well perceived, probably better perceived than HR in general terms.*" Finally to emphasise the point of resource control, one Pro Vice Chancellor suggested that: "*The Finance department is seen as the most influential; it controls the pound notes which is really direct.*"

This last point raises the issue of the tangibility of the Personnel department outputs compared to those of other departments. The Head of Organisational Development and Change at one institution highlighted that: "*The outputs of some of the other support functions are far more tangible. So, for example, Finance has significant power and influence because they're the people that pay people. Our academic and administrative computing support services, again, tangible – something that appears on your desk and is visible in helping you get your work done. Similarly with Estates.*" In the same interviewee's opinion: "*It's easier for individuals to question the worth or value of something that doesn't have a tangible outcome.*"

On a similar theme to the lack of tangibility affecting influence, there is also an issue around the lack of visibility of the Personnel Department. For example, one Vice Principal commented: "*In most of the decision-making processes which the academics see, the Personnel Manager is never involved. [...] So their perception is the Registrar for example is omnipresent. The Personnel Manager isn't.*" Much of the work of the

department is behind the scenes according to another Pro Vice Chancellor: "*Most customers, for want of a better phrase, don't realize the pressures of changing employment law which means that a lot of what the Personnel department has to do is unseen.*", and is only understood when problems arise: "*I think compared with those [the Director of Marketing and the Director of Facilities with high profile activities], the Head of Personnel's voice is only really heard when things go terribly wrong.*"

In institutions where the value of the visibility of the Personnel Department is clear, this leads to positive effects on influence, as highlighted by a Rector of one institution: "*I have an absolutely profound belief that HR is up with Finance in my book for the delivery of the strategic turn of the organisation. I do know that is simply not the case elsewhere. Many never even see their HR person, whereas mine will be with me there at Council and all the major strategic meetings.*" Actually getting out of the office and talking to people so that people understand the work being done appears to be an influential element. This was highlighted in particular by the Pro Warden of one institution: "*I think it [the Personnel department] probably compares quite favourably [with other administrative departments] and I think that's partly because the Personnel department get out a lot. [...] The Finance department: there's a lot of people beavering away in Finance that on-one ever sees.*" and "*They [Personnel] are front of house an awful lot more, and because they're front of house, you become very aware if they're not professional. [...] The professionalism of Personnel is fairly visible.*"

The dilemma in the Personnel department appears to sit firmly between whether it is seen as making either an operational or a strategic contribution to the organisation. Some departments appear to have a reputation built on operational activities, whereas others are judged on their strategic contribution. This reputation is then the basis from which a position of influence, or not, can be built. For example, in one institution, the Secretary commented that: "*Probably the relationship on operational issues between HR and the other administrative sections in the academic schools is at the root of all the judgements being made about HR and the service.*" Equally, the same interviewee highlighted that there can be conflict between the strategic and operational roles: "*It's difficult for the Director of HR to speak with firm authority when at the same time she is*

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aware that the last promotions panel was full of, or had some, administrative glitches. It's undermining." Another Pro Vice Chancellor supported this view: *"If all it [HR] does, or all it's seen to be doing publicly is just signing forms and arranging interviews, those kind of things, then it won't be held in high esteem."*

Whatever the primary focus of the Personnel department, it is likely to be perceived in different ways by different constituents. For example, one institution highlighted how line managers are interested in Personnel in terms of help with managing staff, whereas governors are more interested in the strategic dimension. One Pro Vice Chancellor summed up the opinions being expressed in a number of discussions regarding these differences of perception: *"I suspect it depends which staff you're talking about. I suspect that a lot of the ancillary staff, the support staff, who are probably more unionised, more oriented towards their trade union, they probably feel that they get a good deal from HR because there's a lot of negotiation, a lot of work on their behalf. I would have thought that on the whole the perception was positive. When you come to the academic staff, I'm not certain. I suspect you might get a bit more ambivalence there. [...] Sometimes you don't feel you get the level of support that you need, especially in appointments, dealing with staff matters, difficulties, etc."* As power is largely about perceptions, this indicates that the Personnel department has multiple constituents to convince of its value, further complicating its goal of being accepted as a highly valued member of the organisational community.

5.4.2.2. Level of centrality, ability to cope and non-substitutability of Personnel.

Attention is now turned to exploring the determinant of power variables for the Personnel department: its centrality, ability to cope with uncertainty and non-substitutability.

The Personnel department's centrality, in terms of the contribution it is seen to be making towards the mission of an organisation, is often vague. In a number of institutions the view was expressed that there is a lack of clarity about the HR department's role in the organisation whereas the role of other administrative

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departments is clearer. For example, one Vice Principal commented that: *"There's less sort of clarity of view of what Personnel is for [...] whereas with the more functional departments [Registry and Finance] it is a lot clearer to people what it is they do."* This applies in particular to the position the Personnel department holds between representing management and employees. One Pro Rector commented: *"In certain things I think sometimes staff think they don't get the support they would expect from their HR department. [...] I thought HR should be supporting me [the manager] rather than them [the employee]."*

There can also be conflict between perceptions of the department's role as highlighted by one Pro Vice Chancellor: *"We're reaching towards a more common understanding of what faculty and other services need from Personnel and want from Personnel, and also what they are actually in a position to deliver because those two things aren't necessarily the same."* Another interviewee from within the Personnel department commented: *"Some senior staff, our supervisors, sometimes rely on Personnel as a policing function, and that doesn't always fit with our view of how we should be operating in a strategic and forward-looking sense."*

Most institutions saw their Personnel department filling an operational rather than strategic role, with comments such as the following from a Vice Principal, Pro Rector and Rector respectively: *"It's the area of the institution that oversees the administrative process of the appointment of staff and the institution's policies, procedures for HR-related aspects."*, *"I think the vast majority of people come into contact with Personnel with just trivial administrative things, appointments, resignations, things like that. I think that in the past they haven't had a particularly good reputation for that."* and *"I think HR is so often seen, or Personnel as so many of them still call it, seen as a function, a tool to keep us out of the IR court."* Only the Rector in one institution saw their Personnel department as primarily fulfilling a strategic role: *"I would see my Director of HR as pretty crucial to the strategic planning process. So I think her main role is to work with other senior staff on strategic planning, and then to provide professional advice and finally to run her team."*

Significantly, in many institutions the HR department's role is described as in the process of undergoing change. The Secretary of one institution interviewed stated that: *"It's [HR's] a department that is going through quite a lot of change as a result of pressure from outside, both in terms of the legislation (race relations are having an impact) and also of the requirements to have a detailed HR strategy for the requirements of the funding council."* This change often focuses on moving from an operational to a strategic emphasis. According to the Principal of one institution and the Pro Vice Chancellor of another, this can lead to positive outcomes for the department and institution: *"We are in a very interesting stage because we're quite deliberately and proactively and with total massive support from the top, we're reorganising the whole thing [the HR department] and making it much more central strategically."*, and *"They're trying to be more proactive rather than policing."*

The HEFCE initiative is again seen as playing a significant part in this process of change. One Director of HR commented that: *"It [Personnel] has been fulfilling a traditional Personnel transactional administration function. [...] With the introduction of the HEFCE funding and the initiative to improve HR, we will be changing to being an HR department with all the advantages to the institution that that brings."* Another recurring theme in the way in which the perception of the Personnel department has been changing is the department's involvement in change management. The Pro Vice Chancellor of a large institution commented about the Personnel department that: *"It's a changing perception. It started a while ago as relatively low-esteem partly because its functions were seen simply as data gathering, contract writing and those kind of relatively routine activities. Over the past five years perceptions have changed as the role has changed. The role now is much more about HR, about development, about management, about management of change."*

However, the primary cause of a lack of centrality of the Personnel department expressed in numerous interviews is a lack of operational efficiency. In many institutions there remains a question mark around the effectiveness of the HR department, particularly in carrying out its operational tasks including the quality and speed of service. Two interviewees, a Pro Vice Chancellor and a Secretary, summed up

the situation very succinctly: "*It's just that it [HR] is not maybe sometimes the best at routine things.*" and "*They're generally regarded as quite helpful some of the time and a bit slow the rest of the time.*"

Numerous institutions spoke of the small detail of the work of the department, such as getting dates right on letters, often going wrong. In one institution the department was seen by the Principal as: "*Dysfunctional and incompetent! [...] We're in the process of trying to turn around that perception. [...] Letters appointing people disappear for two weeks before they get there and undoes all the good work that's been done.*" This undermined any greater impact that the department could make: "*There's a slight thing about talking about Equal Opportunities Acts, etc. when you can't even get a letter in the post. That's not quite cracked yet.*"

By and large, the role of the department is dominated by its bureaucratic functions. According to one Assistant Principal: "*They [the academics] are grateful for the assistance from the Personnel Office when it's a case of sorting out appointments, but by and large, they regard inevitably the Personnel Office as a source of bureaucracy and unwanted interference.*" Another Pro Vice Chancellor commented specifically on the department's speed of reaction: "*When they [HR] do it, it's well done, it's professionally done. The downside is they're under such pressure that even urgent things go into a queue and take a hell of a long time. [...] The quality of the process is compromised by the pressure they're under.*"

The Personnel department's ability to cope with uncertainty to the benefit of other departments is perhaps a little clearer than its centrality. There are two primary ways of coping with uncertainty; one is to control resources and the other to control processes. In the HEI environment the Finance department is predominantly doing the former, as pointed out by the Secretary of one institution: "*They [the academics] win their money and it's their money. Finance just administers that. So Finance's power comes in the, or perceived power, comes in the allocation of funds.*" On the other hand, according to one of the Pro Vice Chancellors interviewed, the Personnel department controls processes: "*Its [HR's] position in the organisation is pretty influential in the sense that the one*

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thing that all other academic and non-academic departments deal with is people really.
They are the controllers of people into the organisation and to a certain extent getting
them out as well if at least involuntarily. So they impact on every department in the
institution."

The Personnel department is also recognised as coping with uncertainty for other
departments by handling problems and managing risk. Throughout the interviews, such
comments as the following from a Vice Principal and Pro Vice Chancellor were heard:
"There is still a view that if it goes wrong, Personnel will sort it out."; and *"Where I*
think they [HR] are seen as particularly valuable is when there is case work. I think the
Personnel department has a strong reputation of dealing with things that go wrong."
This problem solving capability is seen as a way of the department building its
powerbase, as identified by one Pro Vice Chancellor: *"I think for a number of years*
Personnel was quite happy to deal with things like that [problem situations] because it
got them a strong reputation: 'get Personnel to come in and sort it out'."

The department is able to deal with uncertainty emanating from outside the institution
such as dealing with employment legislation and trade union action, however
sometimes this role is fulfilled by other departments instead. For example, in some
institutions, departments such as Planning and Research Funding were seen as the main
point of liaison with HEFCE for the 'Rewarding and Developing Staff' initiative, rather
than Personnel.

Personnel can play an important role in institutions in dealing with uncertainty to the
benefit of others by providing information for decision-making. The Pro Warden of one
institution commented that: *"The senior management team wouldn't make a decision*
about any issues to do with human resources without having had his [the head of
Personnel's] input and guidance." However, the distribution or availability of this
information is limited in many institutions. For example, one Pro Warden commented
that: *"There's an awful lot of information that we use, kind of management information,*
which comes for example to the Equal Opportunities Committee, which comes from
Personnel, which maybe doesn't go out to departments in the way that it could." The

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Finance department is again seen as more pervasive from this perspective, highlighted by one Vice Principal: "*It [Finance] has got its nose into everything. It's giving monthly reports, it's involved, etc., etc.*" The same interviewee noted that where the Personnel department is not part of the information loop, this is seen as problematic: "*The Registry and Finance are always sending people things. HR aren't because they haven't got anything. [...] They [the Personnel department] are not in that constant communication, whereas even if some people get their monthly print-out from Finance and file it straight in the bin, it is something that is happening.*"

Finally, exploring the non-substitutability of the Personnel department, in some institutions the role of the Personnel department is considered non-substitutable primarily due to the ambiguity and diversity of its role. One Pro Vice Chancellor commented that: "*One of the problems I would have thought with outsourcing is that, I think in Personnel terms, when you're dealing with an individual, you can't say I'll do this but I won't do that. I would have thought the problem with outsourcing a contract is defining the contract to be all encompassing enough to pick everything up.*" Equally, the professional expertise of the department is also being recognised, as highlighted by another Pro Vice Chancellor: "*I think increasingly people are seeing that some of the functions of Personnel or HR are highly professional, like helping the change process. [...] All sorts of things are seen as being highly professional activities that are more specialised.*" As the Pro Vice Chancellor of another institution put it, this has changed over time: "*There was a time when anybody with a bit of common sense and nous could do that [the role of HR]. I think now there's two areas where I think it's really non-substitutable: the knowledge of legislation [...] and staff discipline.*"

However, this perception of the specialist expertise of the Personnel department has not pervaded all institutions. In one institution, the Vice Principal noted that: "*We exist for the students and a lot of those [service department] roles could be contracted out. [...] But you can't contract out your academics. Why are you doing it otherwise? What are you existing for?*" Particularly compared with the role of the Finance department, the Personnel department is perceived as being more dispensable. According to one Pro Rector: "*I think there's always a feeling that I couldn't go do the accountant's job*

because I haven't got that skill, but surely I should be able to do HR's job." Again, this is seen as a consequence of the diversity of the Personnel role, as mentioned by one institution's Pro Vice Chancellor: *"Because Personnel carries out so many functions, I think there's probably somebody in the institution who thinks they can do particular bits of Personnel's job better than they can."*

5.4.2.3. Summary

In summary, with regard to involvement in corporate decision-making, a quarter of the institutions interviewed acknowledge the Personnel department as a major player in the decision-making structures. However, in just three institutions were there examples of the head of Personnel having a broader remit in decision-making bodies other than personnel management. One institution highlighted that although the head of Personnel may not be on the top senior management board, people management issues are thought still to be considered at that level. In numerous instances, the Heads of other administrative departments (Finance and Registry in particular) are more often a member of senior decision-making committees than are heads of Personnel departments due to the current priorities of the organisation.

When the head of Personnel is not a member of top decision-making bodies, he or she is more likely to get involved on an informal basis when personnel management issues are on the decision-making agenda. One institution in particular emphasised the importance of informal meetings with the Chief Executive above membership of any formal committee. Changes in the institution's environment are seen as potentially leading to changes in the extent of Personnel involvement in decision-making, such as a change of Chief Executive and the HEFCE funding initiative.

Regarding the influence of the department, in around two thirds of institutions interviewed, the Personnel department has a very visible external profile and is perceived by the members of senior management interviewed to be increasing its influence in the organisation, predominantly as a result of the HEFCE initiative. These interviewees describe the department as crucial and of equal standing to other

administrative departments. However, in the same number of institutions, other administrative departments, particularly Finance and Registry, are described as having an equal or higher profile than Personnel, largely due to the extent to which they are pervasive throughout the organisation and the current degree of attention being paid to a particular function. Finance in particular is perceived to have controlling power over what people can and cannot do on an ongoing basis.

Although the Personnel department is perceived in different ways by different constituents, there is a general issue around people not knowing what the Personnel department actually does behind the scenes. In a third of institutions interviewed the value of making this more explicit was clear. Getting out, talking to people and being approachable can result in substantial influence. There is also a related issue around the lack of tangibility of Personnel department outputs compared to those of other departments. This highlights the paradox of the potentially high external visibility of the Personnel department, yet the low tangibility of its outputs which has a limiting affect on its power.

Three institutions in particular emphasised that a department's reputation and hence influence is built around handling operational issues. However, if there are problems operationally then the chances of a strategic role are diminished significantly. Only two institutions highlighted that the Personnel department's reputation is built more around strategic effort, particularly around their involvement in change management.

Summarising the determinant of power variables for the Personnel department, in almost half the institutions interviewed, a lack of clarity was expressed about the Personnel department's role in and hence contribution to the organisation (particularly on where it stands between supporting both management and employees). In over half of the institutions interviewed, the Personnel department's role is described as primarily operational rather than strategic, with a clear tension between the two roles. A third of institutions describe the Personnel department's role as in the process of undergoing change from having an operational to having a strategic emphasis, again largely due to the HEFCE initiative but also due to increasing employment law legislation. However,

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in two-thirds of institutions interviewed, there remains a question mark around the effectiveness and efficiency of the Personnel department, particularly in carrying out its routine operational tasks and the quality and speed of service. It is frequently described as a source of frustration and unwanted interference.

One way of coping with uncertainty for other departments is by controlling resources, giving the controlling department negative power in the sense of stopping other departments from doing things. The Finance department is identified in particular with this type of power. The Personnel department is seen more as coping with uncertainty for other departments by controlling processes through the creation of professional policies and procedures which everyone in the organisation must follow. These processes are however often perceived to be overly bureaucratic and slow.

The Personnel department also copes with uncertainty for other departments particularly by handling problems when things go wrong, by interpreting legislation, dealing with trade unions, managing change, and providing information for corporate decision-making. However, the latter point is acknowledge as still being an area of weakness in terms of the information available and the way it is presented. The Finance department is perceived to have a more central role in this respect, generally having better computerised information and a more regular reporting system in place.

Finally, in a third of institutions interviewed, the role of the Personnel department is considered to be non-substitutable primarily due to its diversity and the increasing degree of professionalism required to carry out its functions. However, the same number of institutions considered the role of the Personnel department to be more substitutable, either because it is not key to the core academic purpose of the organisation, or because the level of skill and knowledge required is not perceived to be sufficiently unique to require a specialised function.

Having explored in detail the ratings of the Personnel department on the various indicators of power, and looked at reasons behind these ratings, in the following section, the analysis moves outside of the bounds of strategic contingencies theory to explore

how factors of institutionalism can also help explain the current levels of power being observed.

5.4.3. Organisational history and power: a quantitative analysis

Attention is now turned to factors beyond the strategic contingencies theory model to address the weaknesses identified in the original theory. The first step is to consider the impact of organisational history on power structures.

The first proposition explored looking at the effect of institutionalisation is:

2a: The Personnel department will be perceived to have different levels of power depending on the historical status (pre-92 university, post-92 university or HE College) of the institution in which it is based.

The historical status used to investigate this proposition is whether the institution is a pre-1992 university, post-1992 university or HE College. Status is thus a three-group categorical variable. The various known characteristics of these different types of institution were presented earlier in this thesis. They include varying structures of governance and organisational goals, as well as differences in HRM policies and practices due to historical bargaining arrangements, for example.

In addition to the two level of power variables, involvement and influence, described under proposition *1a*, two new dependent variables are introduced to the study, specific to the Personnel department. These are measures of position power:

- RESOURCE: a variable for determining resource allocation in terms of the size of the department within the institution (Boeker, 1989). Resource represents the proportion of Personnel staff to total employee headcount of an institution. It is a metric variable though not normally distributed. The normally distributed natural logarithm of resource is used where statistical analysis requires this assumption to be met.

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- and HIERARCHY: whether there is a direct reporting line between the head of the Personnel department and the head of the institution. It is suggested by Giroux and colleagues (1986) and Pfeffer (1981) that more critical functions will be housed in their own department with a direct reporting relationship with the Principal Officer. Hierarchy is a dichotomous variable, with the higher score representing a direct reporting line between the head of a department and the head of an institution.

Using these variables, statistical techniques can be used to determine the relationship between types of institutions and levels of Personnel department power. Firstly, the categorical variable, status, is used to explore differences in the level of power of the Personnel department between pre-1992 universities, post-92 universities and HE colleges. (As we are now looking specifically at the Personnel department alone, and not in comparison with other departments, tests are only run for Personnel as no argument is being presented here to say that other departments will be affected by the same contextual factors.)

By comparing the three institution type statistics for each of the power variables (see Table 34), there is a significant difference at the 95% confidence level between the Personnel resource proportion (sig. = .000) of different institution types, and a significant difference at the 90% confidence level between the extent of involvement in decision-making means (sig. = .088). The statistics show that the Personnel resource proportion is lowest in pre-1992 universities (0.009, i.e. a ratio of one Personnel staff member per 110 employees) and highest in post-1992 institutions (0.013, i.e. a ratio of one Personnel staff member per 75 employees). Overall, the proportion of Personnel staff members to headcount of employees across all institutions is 0.011 (a ratio of 1:94 employees). Involvement is highest in pre-1992 universities. Hierarchy and influence do not differ significantly between the three types of institution. (The ANOVA and Kruskal-Wallis techniques were used for the metric and non-metric variables respectively. The ANOVA relationships were tested for homoscedasticity resulting in a non-significant Levene statistic of .191 for resource, but a significant statistic of .021 for involvement. Therefore the Kruskal-Wallis test was used for the latter variable.)

Table 34: Comparative statistics of power level variables for Personnel departments in three types of institution

	Pre-1992 (n=65)		Post-1992 (n=44)		HE College (n=32)		Equality of Means	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	*F*	*Sig.*
Personnel resource proportion[a]	.009	.003	.013	.004	.012	.005	13.807	**0.000**
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	χ^2	*Sig.*
Involvement in decision-making[b]	27	19	23	14	23	16	4.863	0.088
	Median		*Median*		*Median*		χ^2	*Sig.*
Hierarchy[c]	0		0		0		0.272	0.873
Overall influence[d]	3		3		3		4.063	0.131

[a] This represents the proportion of members of the Personnel department to total employees in an institution.
[b] The score represents the total involvement in strategic decision-making across nine key issues: the higher the score the broader the extent of involvement.
[c] A score of 0 indicates an indirect reporting relationship between the head of the Personnel department and the head of the institution.
[d] On a five point scale, a score of 3 indicates a reasonable amount of influence of the department in general terms within the institution.

Sig.: $\alpha = 0.05$, significant statistics are highlighted in bold.

Source: analysis of survey data.

In order to look closer at the actual differences between institution types on a univariate level for the significant metric variable, resource, multiple comparison tests for samples of varying sizes (Hochberg's GT2) and for where the population variance is unknown (Games-Howell) are carried out (see Table 35). Both the Games-Howell procedure and the Hochberg's GT2 test identify two significant differences between the means on this variable: between the pre-92 and the post-92 universities, and between the pre-92 universities and the HE colleges. This clarifies the earlier finding from the ANOVA that the means vary for any status.

Table 35: Post hoc ANOVA tests for Personnel resource proportion by status

(I) Status	(J) Status	Mean Difference (I-J)	Std. Error	Sig.
Hochberg's GT2				
Pre-1992	Post-1992	-0.294	0.089	**0.005**
	HE College	-0.461	0.092	**0.000**
Post-1992	Pre-1992	0.294	0.089	**0.005**
	HE College	-0.167	0.102	0.281
HE College	Pre-1992	0.461	0.092	**0.000**
	Post-1992	0.167	0.102	0.281
Games-Howell				
(I) Status	(J) Status	Mean Difference (I-J)	Std. Error	Sig.
Pre-1992	Post-1992	-0.294	0.089	**0.009**
	HE College	-0.461	0.092	**0.000**
Post-1992	Pre-1992	0.294	0.089	**0.009**
	HE College	-0.167	0.102	0.231
HE College	Pre-1992	0.461	0.092	**0.000**
	Post-1992	0.167	0.102	0.231

Sig.: $\alpha = .05$, significant statistics are highlighted in bold.
n =144

Source: analysis of survey data.

The next step is to explore these relationships for the significantly different metric variables further using multiple discriminant analysis. This can tell us more about how homogenous each type of institution group is and how good certain variables are at discriminating between these groups. The dependent variable, status, has three levels. The valid sample size is 66 and there are two independent metric variables being tested – resource (Log_e) and involvement (Log_e). Therefore this gives a suitable ratio of 33:1 for sample size to predictor variables. The sample size of each of the groups is 30, 19 and 17. Ideally each group should have a minimum of 20 cases, however, given that the sample has been shown to be largely representative of the proportions of the population, and the smallest samples are only marginally below the desired number of cases, discriminant analysis is deemed a suitable approach.

Because although the groups are unequal sizes, they are representative of the population proportions, the discriminant analysis is carried out based on classification probabilities linked to the sample sizes. Due to the limited sample size a separate analysis and

validation sample has not been created, as the resulting group sizes would be too small for any meaningful results. The discriminant function derived from the whole sample is therefore applied to the same group for validation purposes, taking into account the upward bias this creates in the predictive accuracy of the function.

The assumptions of normality, linearity and an absence of collinearity of the variables involved have already been discussed in the previous chapter and are met. The remaining assumption of equality of variance is tested by looking at the significance of the Box's M test for the groups. The M statistic is 2.857, which is not significant at the $\alpha = .05$ level (sig. = 0.844). Therefore equality of variance can be assumed. Running multiple discriminant analysis on the metric power variables based on the three types of institution ($\alpha = .05$, direct entry), one significant function is found for the Personnel resource proportion (see Table 36).

Table 36: Key statistics of Discriminant Function Analysis for status variable based on metric level of power variables

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	0.416	98.985	98.985	0.542
2	0.004	1.015	100	0.065

Function	Wilks' Lambda	df	Sig.
1 through 2	0.703	4	0.000
2	0.996	1	0.606

Canonical variate correlation coefficients (SPSS Structure Matrix)		
	Function 1	Function 2
Resource	0.994	0.107
Involvement	-0.037	0.999

Classification results		Predicted Group Membership			
		Pre-1992	Post-1992	College	Total
Count	Pre-1992	27	0	3	30
	Post-1992	11	1	7	19
	College	5	1	11	17
%	Pre-1992	90	0	10	100
	Post-1992	58	5	37	100
	College	29	6	65	100

n=66
Source: analysis of survey data.

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By reapplying the function to the original sample, the classification matrix results show that 59.1% of cases were grouped correctly. Press's Q statistic can be calculated for the discriminatory power of the classification matrix to ascertain whether it is better than chance alone. The equation to calculate Press's Q is: $([N - (nK)]^2)/(N(K-1))$ where N = total sample size, n = number of observations correctly classified, and K = number of groups (Hair, *et al.*, 1998: 270). In this instance, Press's Q is 19.705. Using chi-square tables with a significance level of .05 and one degree of freedom, the critical value is 3.84. We can therefore conclude that the function provides a statistically significantly better classification than chance alone, and that institutions significantly differ on the power measure 'Personnel resource proportion' based on historical status. Although it is noted that Press's Q assumes equal group sizes and is therefore not very reliable as a finding on its own, the same significant result was also observed in the group means.

The probabilities of each case being assigned correctly by the function to one of the three groups compared to the actual assignment were also examined to see the extent of misclassification. 56% of incorrectly classified cases had a difference in probability between the correct and assigned classification of 0.25 or less. 26% (seven cases) had a difference in probability of 0.40 or more, which can be classed as serious misclassifications.

Comparing the mean values of resource and involvement between the cases that were either correctly or incorrectly classified in each type of institution, the results are shown in Table 37, Table 38 and Table 39. The means differ significantly between the correctly and incorrectly classified groups on Personnel resource proportion in pre-92 universities (sig. = .000) and HE colleges (sig. = .001). This indicates that there may be sub-groups within these two types of institution where the Personnel resource proportion is markedly different to the rest of the institutions. No further indications of patterns within the institution groups were distinguishable based on the variables explored. It is clear by looking at the classification matrix that the post-92 university group is the least homogenous group on the variables tested.

Table 37: Comparative statistics of resource and involvement variables for misclassified and correctly classified Personnel departments in pre-92 universities

	Misclassified (n=3)		Correctly classified (n=27)		Equality of Means (t-test)	
	Mean	*SD*	*Mean*	*SD*	*t*	*Sig.*
Resource	0.017	0.003	0.009	0.002	4.915	**0.000**
Involvement[a]	34	21.932	20	13.353	1.203	0.239

Table 38: Comparative statistics of resource and involvement variables for misclassified and correctly classified Personnel departments in post-92 universities

	Misclassified (n=18)		Correctly classified (n=1)		Equality of Means (t-test)	
	Mean	*SD*	*Mean*	*SD*	*t*	*Sig.*
Resource	0.013	0.004	0.012	-	-	-
Involvement[a]	20	11.420	31	-	-	-

Table 39: Comparative statistics of resource and involvement variables for misclassified and correctly classified Personnel departments in HE Colleges

	Misclassified (n=6)		Correctly classified (n=11)		Equality of Means (t-test)	
	Mean	*SD*	*Mean*	*SD*	*t*	*Sig.*
Resource	0.011	0.001	0.017	0.004	-4.256	**0.001**
Involvement[a]	19	12.449	17	9.646	0.251	0.805

[a] The score represents the total involvement in strategic decision-making across nine key issues: the higher the score the broader the scope of involvement.

Sig.: α = .05, significant statistics are highlighted in bold.

Source: analysis of survey data.

Having explored the level of power indicators, the second proposition presented in this section considers the relationship between organisational history and the determinants of power:

2b: The Personnel department will be rated differently on its ability to cope with uncertainty, its centrality, and its non-substitutability depending on the historical status (pre-92 university, post-92 university or HE College) of the institution in which it is based.

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Using coping, centrality and non-substitutability as the determinant of power variables (as described earlier), statistical tests are applied to determine the relationship between these determinants of Personnel department power and the different types of institution (based on the historical status variable). First the means of the determinants are compared between the three types of institution for each determinant of power in turn.

Looking on a univariate level at the status variable, the average values of the power determinant variables display whether scores differ significantly between institution types (see Table 40). The results of the Kruskal-Wallis tests (employed due to the non-parametric nature of the determinant variables) show very little variation in the ability to cope and centrality variables between the three types of institution. Non-substitutability does however show a significant difference between institution types (sig. = .000) with post-92 universities scoring lowest.

Table 40: Comparative statistics of determinant of power variables based on Personnel departments in the three types of institution

	Pre-1992 (n=65)		Post-1992 (n=44)		HE College (n=32)		Equality of Means	
	Mean	*SD*	*Mean*	*SD*	*Mean*	*SD*	χ^2	*Sig.*
Ability to cope[a]	8.46	4.38	7.98	4.41	8.54	4.84	0.255	0.880
	Median		*Median*		*Median*		χ^2	*Sig.*
Centrality[b]	4		4		4		2.264	0.322
Non-substitutability[c]	3		2		3		15.960	**0.000**

[a] The score represents the product of the amount of uncertainty the department faces and the strategy it adopts for coping with the uncertainty.

[b] On a five point scale, a score of 4 indicates a reasonable amount of direct contribution and a score of 5 indicates a substantial direct contribution of the department to achieving the institution's mission statement.

[c] On a five point scale, a score of 3 indicates that it is considered difficult to substitute the department, and a score of 2 indicates it is a little difficult.

Sig.: α = .05, significant statistics are highlighted in bold.

Source: analysis of survey data.

No further discriminant function analysis of the metric coping variable was carried out due to the non-significant result of the Kruskal-Wallis test. As the non-metric variable

non-substitutability is significantly different between institution types, this variable is used along with the other non-metric variable, centrality, to explore the relationship with the status variable further using multivariate logit analysis. This technique explores how well the determinant of power variables differentiate between the three types of institution by considering the Likelihood Ratio (L^2) between observed and expected frequencies. Where L^2 is low, and there is a high probability that observed and expected frequencies are the same, the model can be seen as a good fit for the data.

Table 41: Logit summary model of determinant of power variables by institution type

Model terms	L^2	df	Sig.	Entropy	Concentration
1. [status]	46.595	48	.531	.000	.000
2. [status] [status* centrality]	38.000	40	.561	.033	.034
3. [status] [status* centrality] [status*non-sub]	19.525	32	.959	.104	.099
4. [status] [status* centrality] [status* non-sub] [status*non-sub*centrality]	.000	0	-	.090	.089

n =123

Source: analysis of survey data.

The results of the logit analysis for the three types of institution are displayed in Table 41. None of the models have a level of significance suitable for further analysis (above sig. = 0.10 to avoid Type II error, and below 0.35 to avoid over-fitting). This indicates that centrality and non-substitutability are not good indicators together for differentiating between types of institution, despite the significant difference between means for non-substitutability found earlier.

5.4.3.1. Summary for propositions 2a and 2b

Based on institutional theory arguments, we might expect to find significant differences in the level of power and the determinants of power of the Personnel department based on historical organisational characteristics. The historical factor that has been explored here is the type of institution: pre-1992 university, post-1992 university or HE college.

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In support of proposition *2a*, the statistics show that the Personnel resource proportion differs significant between institution types. Pre-1992 universities have the lowest proportion (i.e. the highest number of employees per member of the Personnel department), and post-1992 universities the highest proportion. In discriminant analysis, 59.1% of cases were correctly classified based on the Personnel resource proportion and the extent to which the Personnel department is involved in corporate decision-making. Post-92 universities were shown to be the least homogenous group based on these two variables. No significant relationship was found between the position in the hierarchy and the overall level of influence variables with the type of institution. Variations amongst institution types based on the determinant of power variables are limited. The only significant differentiating factor is in the non-substitutability of the Personnel department, with post-92 universities being the most substitutable.

These results indicate that although the power variables show some instances of being related to the historical status of institutions, the picture is being blurred by other unknown factors. In the following section, these findings are explored further in the context of the interview data collected to try to uncover what these factors may be.

5.4.4. Interview data on organisational history

5.4.4.1. Differences in responses from different types of institution.

Although interviewees themselves were not asked to comment on differences between types of institution regarding perceptions of Personnel department power, as many only had experience of working in one particular type of institution, it is possible to examine the responses to general questions to see whether there are any patterns based on types of institution.

In general, because of the small sample size for the interviews, there were however few patterns discernable between types of institution. The randomness of responses appears to indicate the range of issues facing all types of institutions in HE. However, some themes that did emerge include involvement in decision-making structures being

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perceived to be higher for Personnel in mainly large universities (3 out of 4 institutions mentioning this point were large), whereas a more informal role for Personnel seemed to dominate the smaller institutions (all four respondents mentioning this were in small institutions). Change in the Personnel department's role also seems to be a common point of discussion predominantly in pre-1992 universities (3 out of 5 institutions that raised this point). Large universities also appear to consider their Personnel department less substitutable than smaller institutions (4 out of 5 institutions raising this point), and appear to place the most weight on the need for professional qualifications for members of their Personnel department (6 out of 8 institutions mentioning this). Administrative competence as a prerequisite of professionalism for the department is another area highlighted especially by pre-1992 universities (5 out of 6 institutions raising this issue).

The HEFCE initiative appears to be making the most current impact again in pre-1992 universities in terms of how the Personnel department is perceived (6 out of 8 institutions highlighting this issue), and particularly large universities commented on how the initiative was helping to improve the department's profile (3 out of the 4 institutions raising this). Those institutions reporting a minimum role for trade unions in their context were predominantly small institutions (4 out of 6 institutions mentioning this), whereas the larger universities described trade union influence as more prominent but not troublesome (3 out of the 4 institutions that said this).

One Director of HR who had previously worked in other sectors described the HE sector as a whole as bureaucratic and slow, with a lack of innovation: "*Far too much paperwork which does not comply with the watchwords of accuracy, brevity and clarity. […] Information overload in the sector as a whole from national bodies like HEFCE and internally within the institution. Very rigid decision-making structures. […] Very, very slow moving. […] This institution really goes in for consultation [with colleagues].*" Within the sector, another Pro Vice Chancellor compared the new and old universities in terms of their governance structure: "*New universities are more managed than old universities. Academic Council is limited to academic matters, and its subcommittees are limited to related academic matters. The management process*

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associated with that is run directly, as it were, down through the Executive Committee out to other functions. So it's more directly managed."

Some institutions argued that they were facing a unique set of circumstances by the nature of the work of their institutions rather than its historical status, namely related to their focus on science disciplines and being research-intensive. The independence of the academics working in this environment was described by one Pro Rector as creating difficulties for administrative departments: *"They [the line managers] are fairly independently-minded people which may be difficult for HR to control. We encourage them to be independent, go out there and get their own money and do this, and to them their whole objective in life is to do that. That's what they're good at, that's what they're succeeding at. Anything else that seems to stand in their way is wrong."* Another institution's Principal described it as a *"totally devolved culture, so we tended to like doing everything ourselves."*

One issue that recurred a number of times during interviews, and particularly with the large universities with low proportions of government funding, was that the Personnel department is subject to considerable financial constraints affecting how it is perceived to perform. One quotation from a Pro Vice Chancellor sums up a number of comments heard: *"Professionally competent but stretched!"* The Secretary of another institution explained it as a governance issue in terms of an institution deciding where its spending priorities lie: *"They [the staff] want it and they want it now. The institution simply doesn't spend that kind of money on its support structure."* Interestingly, in comparison with other administrative departments, this seems to be an issue that Personnel alone is having to deal with according to one Pro Vice Chancellor: *"The Personnel department here is perceived to be very lean. [...] Everyone perceives it to be at the minimum level of staffing that it can be to deliver what is expected. [...] There is certainly a perception that other teams, I mean you mentioned Finance, that might be one, where there's a perception that there is generous or over-staffing. I never hear anyone even consider that of Personnel."* The overall outcome was described by a newly-appointed Director of HR as: *"under-resourced, under-funded. There was a complete lack of understanding or recognition of the contribution an HR department can make to an organisation."*

It is not clear to institutions what actual size Personnel department is required, primarily due to a lack of benchmarking information. One Pro Vice Chancellor commented that: "*When you're having to cut, when the issue isn't of spending more money, then you can make judgements of 'is the personnel department the right size?' and in a large part you're relying on the judgement of your departmental heads.*" There are perceived advantages or disadvantages of being either a smaller and larger department. According to one Vice Principal, smaller departments appear to have a clearer direction: "*In the smaller department it is much easier to set a view of 'this is what we do'.*", but opportunities are restricted: "*We're too small to enter into much local bargaining.*", A Pro Vice Chancellor from a larger institution suggested that larger administrations have a more sound management approach due to the size of the operation: "*I think that we understand administration and the need for management perhaps more than other institutions might where there are fewer administrators and they are more hidden.*"

5.4.4.2. Summary of the impact of the type of institution.

Due to the small sample size, patterns of the effects of institution type are generally weak, but nevertheless some are discernable. Particularly large universities show the most in common in terms of a formal role for Personnel in decision-making, the department being perceived as less substitutable, professional qualifications being a requirement for working in Personnel, an active but not problematic trade union context, and the HEFCE initiative having helped to build Personnel's profile in these institutions. Particularly in pre-1992 universities there has been an emphasis on Personnel's role in managing change, in achieving administrative competence to display professionalism, and in seeing the impact of the HEFCE initiative in bringing about change. The small institutions are characterised by informal involvement in decision-making for the Personnel department, and by an inactive trade union environment.

The HE sector as a whole is perceived as highly bureaucratic, with differences in the extent of how managed decision-making is particularly between pre-1992 and post-1992 universities. A couple of institutions identified themselves as being quite specific

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environments within the HE sector, related to their focus on science disciplines and being research-intensive. In a predominantly research-led context, the autonomy of researchers and other staff is amplified, creating a difficult environment in which Personnel has to operate.

Half of the interviewees raised the issue that the Personnel department is subject to considerable financial constraints within the sector, affecting how it is able to perform. It is described as struggling with resources to be effective and meet the demands placed on it. The recruitment of high-calibre professional staff is also affected by an institution's ability to pay. The size of the Personnel department was described as determining how it can operate to a large extent. Smaller departments are perceived to take on a much clearer role, but being excluded from a number of activities due to restricted resources. However, how big the Personnel department should actually be is unclear: there is little benchmarking between institutions to judge appropriate sizes of departments.

Before discussing further the implications of these findings as is done in detail in the following chapter, the results for another aspect of institutionalised organisational life, professionalism, are first explored.

5.4.5. Professionalism and power: a quantitative analysis

Attention is now shifted to the second aspect of institutionalisation proposed in this study: the impact of the professions. The proposition investigated here is:

3a: The Personnel department will be perceived to have more power where it has a larger professional element than Personnel departments in other institutions with a smaller professional element.

In order to measure the extent of the professional element of the Personnel department, two items are introduced to the study:

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- PROPORTION: the proportion of professional staff (as opposed to other grades of staff) in the Personnel department. Professional grade staff in HEIs are on the whole also professionally qualified or with substantial previous work experience;

- CIPD: whether or not the head of the Personnel department is a member of the professional body for Personnel practitioners, the Chartered Institute of Personnel and Development.

Proportion is a continuous metric variable, although it does not have a normal distribution. Where the assumption of normality must be met in statistical analysis the natural logarithm of the proportion variable is used. CIPD is a dichotomous categorical variable.

The same level of power variables are used as those described in investigating propositions *1a* and *2a*: resource, hierarchy, involvement and influence.

In order to support this proposition, we are looking for the indicators of professionalism to be positively related to the level of power measures for the Personnel department. Firstly, taking a multivariate approach to explore these relationships using canonical correlation, no significant relationship between the set of professionalism measures and the level of power variables was found (α = .10). However, as the definition of professionalism adopted here is relatively narrow, and one of the aims of the study is to understand as much as possible about the factors relating to professionalism, each of the professionalism indicators is also explored on a univariate basis. The multivariate analysis is very sensitive to the exact variables included, whereas univariate analysis allows a clearer focus on what individual relationships are. On a univariate level, the metric variable, proportion, is correlated with each level of power indicator, and the categorical variable CIPD is used to compare mean scores on the level of power indicators between members and non-members.

First, the correlation between the proportion (Log_e) of professional staff in the Personnel department and the level of power variables (resource Log_e, hierarchy, involvement Log_e and influence) is explored. Table 42 summarises the correlations between these

variables (one-tailed, $\alpha = .05$, pairwise exclusion; Spearman's *rho* is used for the non-metric variables and Pearson's correlation coefficient for the metric variables).

Table 42: Correlation of level of power variables and professional staff proportion for the Personnel department

	Professional staff proportion		
	r	*Sig.*	*n*
Personnel resource proportion	0.138	0.127	70
Involvement in decision-making	-0.140	0.122	71
	ρ	*Sig.*	*n*
Hierarchy position	-0.170	0.077	72
Overall influence	-0.104	0.191	72

Sig.: $\alpha = 0.05$ (1-tailed).

Source: analysis of survey data.

This shows that all of the correlation coefficients are non-significant at the $\alpha = .05$ level. This contradicts the research proposition. Hierarchy position does however show a significant relationship with the professional staff proportion at the $\alpha = .10$ level (sig. = .077). This indicates that there is a link, although a weak one, between the extent of professional grade staff and whether the head of department reports directly to the head of the institution. However, the negative correlation indicates that there are fewer professional grade staff in departments that have a direct reporting line between the head of department and the head of the institution.

In addition to exploring the proportion of professional staff in the Personnel department, another indicator of professionalism is whether or not the head of the department is a member of the CIPD, and hence recognizes the role of a professional body. In order to support the proposition, we are again looking for the CIPD membership status to significantly differentiate between the level of power variables (resource, hierarchy, involvement and influence). Table 43 summarises the results of independent t-tests for the metric variables, and the Mann-Whitney U test for the non-metric variables.

Table 43: Comparative statistics of power level variables for Personnel departments dependent on CIPD membership of head of department

	Not a member (n=15)		Member (n=58)		Equality of Means	
	Mean	*SD*	*Mean*	*SD*	*t*	*Sig.*
Resource[a]	0.014	0.006	0.012	0.004	1.084	0.282
Involvement[b]	15	9	21	13	-1.326	0.189
	Median		*Median*		*U*	*Sig.*
Hierarchy[c]	1		0		272.5	**0.008**
Overall influence[d]	4		3		414	0.762

[a] This represents the proportion of members of the Personnel department to total employees in an institution.

[b] The score represents the total involvement in strategic decision-making across nine key issues: the higher the score the broader the extent of involvement.

[c] A score of 1 indicates a direct reporting relationship between the head of the Personnel department and the head of the institution, and a score of 0 indicates an indirect reporting line.

[d] On a five point scale, a score of 3 indicates a reasonable amount of influence of the department in general terms within the institution, and a score of 4 indicates a great amount of influence.

Sig.: $\alpha = 0.05$ (2-tailed), significant statistics are highlighted in bold.

Source: analysis of survey data.

This shows that the position in the hierarchy is significantly different depending on whether the head of the Personnel department is a member of the CIPD or not (sig. = .008). Looking at the median score for hierarchy related to the CIPD variable, we see that where the head of the Personnel department is not a member of the CIPD, there is more likely to be a direct reporting line to the Principal Officer of the institution. This contradicts proposition *3a*.

Due to the large difference in the size of the two groups (n = 15 and 58) and the non-significant result of the t-tests, no further tests are carried out for relationships between CIPD membership and the metric power variables. However, given the significant result of the Mann-Whitney test for hierarchy, in order to explore further the relationship between the non-metric independent variables (hierarchy and influence) and the dependent variable (CIPD), logit analysis is used. This technique explores how well the power variables differentiate between membership statuses. The results of the logit analysis for the two membership statuses are displayed in Table 44.

Table 44: Logit summary model of non-metric level of power variables by CIPD membership

Model terms	L^2	df	Sig.	Entropy	Concentration
1. [cipd]	11.348	7	.124	.000	.000
2. [cipd] [cipd * hierarchy]	4.416	6	.621	.094	.098
3. [cipd] [cipd * hierarchy] [cipd * influence]	1.869	3	.600	.128	.132
4. [cipd] [cipd *hierarchy] [cipd *influence] [cipd *influence* hierarchy]	.000	0	-	.113	.114

n =73

Source: analysis of survey data.

None of the models subsequent to the basic CIPD model have a level of significance suitable for further analysis (sig. = 0.10 to 0.35). This indicates that hierarchy and influence together are not good indicators for differentiating between CIPD membership statuses.

The second proposition being considered here relates to the determinants of power:

3b: The Personnel department will be rated higher on its ability to cope with uncertainty, its centrality, and its non-substitutability where it has a larger professional element than Personnel departments in other institutions with a smaller professional element.

As with proposition *3a*, in order to accept this proposition, we are looking for the proportion of professional staff in the Personnel department and membership of the CIPD to be correlated positively with the determinant of power variables (coping, centrality and non-substitutability). At the multivariate level, again no significant variates were found between the two sets of variables in canonical correlation analysis (α = .10). Univariate analyses are however also undertaken as described under proposition *3a* in order to explore relationships more fully to understand more about Personnel professionalism in the HEI context. Univariate tests are run to explore the

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correlations between the proportion variable and the determinant of power variables, and the mean scores per determinant are also compared between those respondents who are a member of the CIPD and those who are not.

Firstly, Table 45 summarises the correlations between the proportion of professional staff in the Personnel department and the determinant of power variables ($\alpha = 0.05$, one-tailed, pairwise exclusion, Spearman's *rho* is used for the non-metric and non-normal variables).

Table 45: Correlation of determinant of power variables and professional staff proportion for the Personnel department

	Professional staff proportion		
	ρ	*Sig.*	*n*
Ability to cope with uncertainty	0.139	0.130	68
Centrality	-0.118	0.162	72
Non-substitutability	-0.068	0.289	70

Source: analysis of survey data.

No significant correlations are found between the professional staff proportion and any of the determinant of power variables, therefore no further tests for relationships were carried out.

As with proposition *3a*, the CIPD variable can also be analysed to explore the level of professionalism in the Personnel department. In order to accept the proposition, we are looking for the determinant of power variables (coping, centrality and non-substitutability) to significantly differentiate between the CIPD membership statuses of the respondent from the Personnel department. Table 46 summarises the results of the Mann-Whitney *U* tests and the average scores related to CIPD membership. The results show that there are no significant differences in the determinant of power variables based on whether or not the head of the Personnel department is a member of the CIPD. As none of the relationships are significant, no further analysis is undertaken.

Table 46: Comparative statistics of determinants of power for Personnel departments dependent on CIPD membership of head of department

	Not a member (n=15)		Member (n=58)		Equality of Means	
	Mean	*SD*	*Mean*	*SD*	*U*	*Sig.*
Ability to cope[a]	10.60	5.84	9.98	4.37	390.5	0.831
	Median		*Median*		*U*	*Sig.*
Centrality[b]	4		5		393	0.534
Non-substitutability[c]	3		3		333.5	0.316

[a] The score represents the product of the amount of uncertainty the department faces and the strategy it adopts for coping with the uncertainty.

[b] On a five point scale, a score of 4 indicates a reasonable amount of direct contribution and a score of 5 indicates a substantial direct contribution of the department to achieving the institution's mission.

[c] On a five point scale, a score of 3 indicates that it is considered difficult to substitute the department.

Sig.: $\alpha = 0.05$ (2-tailed)

Source: analysis of survey data.

5.4.5.1. Summary for propositions 3a and 3b

The investigation of propositions *3a* and *3b* lead to very little relationship between the extent of the professional element in the Personnel department as it is defined here, and the levels and determinants of power variables.

There were no significant relationships found in multivariate statistical analysis. At the univariate level, there is a significant relationship at the 95% confidence level which contradicts proposition *3a*, in that where the head of the Personnel department is not a member of the CIPD, there is more likely to be a direct reporting line to the Principal Officer of the institution. There is also a significant negative correlation (90% confidence level) between the proportion of professional staff in the department and the head of Personnel's hierarchy position, again contradicting proposition *3a*. No statistically significant relationships were found at all between the determinants of power and the professionalism indicators at the univariate level.

These results may be surprising in terms of the discussions in the literature presented earlier regarding the impact that the professionalisation of an occupation is said to have

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on power structures. More needs to be understood however about exactly what professionalism means for the Personnel department in HEIs. This question is explored in the following section as a result of the qualitative data collected.

5.4.6. Interview data on professionalism

The interviews held in fifteen HEIs highlighted that in the broadest sense of the term professional, there are numerous dimensions to a department being perceived as professional beyond the number of people in a department being employed on a professional grade and membership of a professional body. The interviews attempted to gather information on just what these dimensions are in the HE context for Personnel in particular. Two broad categories of dimensions emerged from the interviews: the characteristics of individuals, and the way in which the department delivers its service. These two dimensions are described in further detail in the paragraphs below.

5.4.6.1. Professionalism and power – what this means for Personnel in HEIs.

Starting with individual characteristics, the most common aspect of professionalism mentioned particularly in large universities, was being professionally qualified. Qualification is seen a means of gaining credibility amongst colleagues, as suggested by one Pro Vice Chancellor: "*I think at the level of the managers there'd be an assumption that they were professionally qualified. I don't think they'd have any kind of street credibility really if they weren't.*" The reason for this is described by a Vice Principal at one institution as: "*By obtaining their professional qualification, we assume they know something about it. There's a basic knowledge there.*" However, having a qualification is not everything; it is also a question of perception as highlighted by one institution's Head of Organisational Development and Change: "*Whilst an academic might not be looking at the qualifications of the people advising them, I think that the breadth of knowledge an advisor has [...] is helpful in looking broadly at the ways of meeting the needs of an individual or unit.*" Indeed the Pro Vice Chancellor from the same institution did not see the professional qualification as of any importance in terms of people looking at the Personnel department from the outside: "*I would be surprised if*

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people in the rest of the institution knew or even cared what qualifications people will have. [...] People will judge much more on whether people in Personnel can get things done and how they do it than the formal qualification."

The professional qualification is not always seen as providing an individual with the necessary skills and knowledge to perform effectively. This point was made strongly by one institution's Assistant Principal: *"I have a view that institutions should have professional personnel departments, and that they've been let down badly by what they've got. [...] I think it's to do with the calibre of staff that have gone into Personnel historically and the qualifications they've got. [...] The professional skills are not transferable. [...] They might have a IIi in English from a good university, but that's got to be transferred into skills and I'm not so sure that happens. [...] My reservations are to do with the skills that they are then capable of demonstrating."* The same interviewee continued to express how the history of the Personnel department, its previous focus on employee welfare, is still having an effect on how people are operating today: *"I think when people went into Personnel back in the early days it was to do with welfare. [...] I think some of that still rubs off, that people don't focus on the resource aspect, the management aspect and have the tools to do that."*

In general terms, it is perceived as being considerably easier to become professionally qualified in Personnel than in some other administrative areas, particularly Finance. The Pro Rector of one institution highlighted this: *"Registry, I think again I would perhaps class the same way as HR actually as it is a job that often requires intelligence, but doesn't need vocational training. [...] You need some vocational training for accounting and for the higher echelons of Estates, so you clearly couldn't do those jobs."* The professional qualification for Personnel is again brought into question by another institution's Assistant Principal in terms of the capabilities it develops in its graduates: *"I don't think it [the CIPD qualification] gives them the necessary professional base for them to carry it forward to be accepted in an institution in the same way Finance people are."*

Following on from qualification, continuous professional development is seen as a key indicator of an individual's professionalism. It is a means of getting external input into a profession and staying up-to-date with developments in the specialist area of expertise. However, the Personnel profession is not perceived as doing as well with this external input as perhaps other professions are, as expressed by the Principal of one institution: "*In Estates you've got quite a lot of professionally trained architects. People who are constantly interfacing externally with professional peers: other architects or builders, big construction companies or planning authorities. So there's a sort of reinforcement of professionalism. The HR thing's sort of introverted. It's not challenged by external professional colleagues. [...] You don't have the same checks and balances.*"

For Personnel professionals, a sound knowledge of employment legislation is a fundamental requirement. An institution relies on Personnel to keep it out of trouble and to facilitate effective staff management through "*well-grounded professional advice*", according to one Deputy Vice Chancellor interviewed. Key attributes mentioned by another Pro Vice Chancellor are thus: "*Being able to give a good summary of the legal position, to be able to think on your feet really.*" Previous work experience within the profession is also a valued attribute. This was highlighted by one institution's Secretary: "*My definition of professional would have to incorporate substantial experience although once you've got your qualification you're classed as professional.*"

In terms of the service being provided by a department being perceived as professional, the primary requirement is for administrative competence, in one Pro Vice Chancellor's words "*i.e. not making mistakes all the time.*" According to a number of respondents, and summarised by one Pro Vice Chancellor, "*It's something to do with speed of delivery. It's something to do with accuracy of delivery.*" At the end of the day, professionalism is about delivering what the customer wants despite the dilemmas this may cause the department. The Head of Organisational Development and Change at one institution highlighted this reality: "*I think what academics are looking for is a satisfactory outcome however they might define that. Sometimes that's around speed of response, sometimes it's around helping them meet a requirement that they have, and*

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that requirement may or may not be consistent with institution policy or employment law."

Other specific aspects of professional service delivery include: providing judgement and risk assessment particularly in working around problems; facilitating staff management, *"where actually the trick is to convince people to confront their problems"* according to the Secretary of one institution; and providing information, as also acknowledge by the same interviewee: *"The level of professionalism there [at HR Advisor level] is extremely high. I get information; I get informed so I know what's going on."* Having broad business understanding beyond the limits of Personnel is also valued in the opinion of the Head of Organisational Development and Change in one institution: *"I measure that [professionalism] through service delivery in terms of how the unit sees its role in supporting business objectives, so being closer to what the institution wants to provide, the direction in which the institution is going."*

A couple of institutions describe their Personnel departments as already being professional. One Pro Vice Chancellor commented: *"I think that the perception of the professionalism of the service departments is quite good actually, whomever they are, be it Personnel or Finance or whatever. I think some of the more operational areas, maybe Estates and so on, that might get a different opinion."* Others describe them as in the process of becoming more professional, such as this Assistant Principal: *"We've been trying to raise the profile of Personnel and to improve its professionalism [through CIPD qualifications]."*

However, there are variations in the perceived need for professionalism at different levels of the organisation. One institution's Secretary was concerned that: *"There's a point in HR speak at which you can become too professional because it's a people issue. Actually you can't treat people like counters."* Coming back to the issue of administrative competence across the whole of the department, the Rector of one institution highlighted a sentiment raised in a number of others: *"I would suggest that the level of professionalism is extremely high particularly from the Director of HR but also from her Deputy Director and the other Personnel Officers. I think where the*

system sometimes falls apart (and this isn't only true of an HR department) but is where you then have secretaries and technicians or whatever. You can get a mismatch sometimes between the level of professionalism being shown by the professionally-qualified workers and ... every so often things go wrong like one of the secretaries sends out a letter with the wrong interview date."

5.4.6.2. Summary of professionalism and power.

There are numerous ways in which a department can be perceived to be professional including the characteristics of individuals and the way in which the service is delivered. Being professionally qualified is one of the primary factors, although attitudes, ability, skills and knowledge are often perceived to be of greater importance than letters after a person's name. It is also perceived as being considerably easier to become professionally qualified in Personnel than in some other administrative areas, particularly Finance.

The two dimensions of professionalism identified also include: undergoing continuous professional development and networking with other professionals; having previous work experience, sometimes from outside the HE sector to bring in new perspectives; having a sound knowledge in particular of employment legislation to keep an institution out of trouble; being administratively competent and efficient and meeting client needs; providing judgement and risk assessment; facilitating staff management and getting people to confront problems; providing relevant and accurate information; and having a broad business understanding and commitment to the institution.

A couple of institutions described their Personnel department as being in the process of becoming more professional, whereas a couple of other institutions already described the level of professionalism as quite high. There are variations in the perceived need for professionalism at different levels in the department. Professionalism is said to be more essential at the top of the department, however having too little professionalism at the lower levels often results in small but significant operational errors.

In the following section, attention is turned to the final aspect of organisational institutionalisation explored here – the use of information systems.

5.4.7. Information systems and power: a quantitative analysis

The final area of the institutionalisation of power structures in HEIs considered in this study is the impact of the use of information systems by the Personnel department. The proposition suggested and being explored here is:

4a: The level of power of the Personnel department will be perceived to be higher where there is more sophisticated use of Information Systems (IS) to support service delivery, compared to Personnel departments in other institutions using IS in a less sophisticated manner.

The independent variables used to investigate this proposition are:

- HRIS: the functionality of the Human Resources/Personnel Information System application, including database and intranet facilities;

- IT SKILL: perceived level of computer literacy in the department. This is a perceived measure based on the opinion of the Head of Personnel on a 5-point ranking scale resulting in ordinal data. A similar measure was used in the study by Martinsons and Chong (1999) to explore whether Personnel people were active IS users.

The IT skill variable is used as a weight for the HRIS functionality variable. HRIS is a composite score, whereby a high score indicates more sophisticated capabilities of the technology. Similar measures designed for the college library context were included in the study by Crawford and Rice (1997). The HRIS score indicates the total functional capability available within a department. Weighted by the level of computer literacy, IT skill, this gives a single variable, IS sophistication, which indicates the sophistication of use of Personnel information systems within a department.

The same level of power variables are used as those described in investigating propositions *1a*, *2a* and *3a*: resource, hierarchy, involvement and influence.

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The approach adopted here follows that taken for propositions *2a* and *3a* in as much as dependence relationships are being explored. Univariate techniques are applied to establish the strength of relationship between the IS sophistication variable and the level of power indicators. Firstly, non-parametric correlation analysis was used to explore the relationship between the IS sophistication variable and each of the level of power variables separately. The results are displayed in Table 47 (one-tailed correlation, where $\alpha = .05$, using pairwise exclusion). Non-parametric techniques were used due to the non-normally distributed nature of the IS sophistication variable.

Table 47: Correlation of IS sophistication and level of power variables for the Personnel department

	IS sophistication		
	ρ	*Sig.*	*n*
Personnel resource proportion (Log$_e$)	0.031	0.401	70
Hierarchy position	0.187	0.057	73
Involvement in decision-making (Log$_e$)	0.013	0.458	72
Overall influence	0.281	**0.008**	73

Sig.: $\alpha = 0.05$ (1-tailed), significant statistics are highlighted in bold.

Source: analysis of survey data.

Here we can see a significant correlation between IS sophistication and the department's overall level of influence (sig. $= .008$). There is also a significant correlation at the 90% confidence level between the IS sophistication and position in hierarchy variables (sig. $= .057$). These correlations are positive, indicating that as IS sophistication increases, hierarchy and influence scores increase. Alone, this provides some support for proposition *4a* albeit weak.

If we look further at the detail of the extent of functionality of Personnel information systems and the level of IT skill of department members, this will help enlighten us as to why only a weak relationship with power variables is being observed. Table 48 shows the percentage of Personnel departments with the different levels of sophistication of information system, and of computing skill. We can see that the vast majority of institutions (around 90%) have basic provisions for running reports,

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however only between a quarter and a third have any provision for line managers to access and manipulate data for themselves. No institutions surveyed have an employee self-service system in place. Personnel webpages are common: 86% of institutions have them with around two-thirds of these having on-line facilities such as training course booking or applying for job vacancies. Again, the majority of institutions (84%) believe Personnel department members are competent when it comes to computing skills, but only 6% see their department as being expert in the area. There is thus little variation to be seen amongst institutions, particularly when looking at the breakdown of percentages for the different types of institution. In general, it could be said that HE colleges have the lower levels of sophistication of use, yet the higher level of computing skill, although variation by institution type is small. This lack of variation may have implications for being able to see the effect of information systems on power structures.

Table 48: Percentage of Personnel departments with different levels of sophistication of IS use and computing skill by type of institution

	Pre-1992 universities (n=31)	Post-1992 universities (n=20)	HE colleges (n=19)	All institutions (n=73)
Personnel database:				
- run standard reports	87	90	90	88
- run ad hoc reports	87	90	100	92
- manager access to run reports	26	35	16	25
- manager access to see data	36	45	16	33
- manager access to update data	13	30	11	16
- employee self-service	0	0	0	0
Personnel web page:				
- on institution's website	94	90	68	86
- on-line interactive facilities	58	65	58	60
Computing skill:				
- mainly novices	0	0	0	0
- mainly limited skill	16	10	0	10
- mainly competent	84	90	79	84
- mainly expert	0	0	21	6
- all expert	0	0	0	0

Source: analysis of survey data.

The analysis is now taken further to include the determinants of power, exploring the following proposition:

4b: The more sophisticated the use of Information Systems (IS) to support service delivery, the higher the Personnel department will be rated on its ability to cope with uncertainty, its centrality, and its non-substitutability compared to Personnel departments in other institutions where IS is used in a less sophisticated manner.

This time taking the determinants of power (coping, centrality and non-substitutability) alongside the IS sophistication variable, Table 49 shows the correlations between these variables on a univariate basis. As it is proposed that determinant of power scores will increase as IS sophistication increases, a one-tailed bivariate correlation test is carried out (α = .05, pairwise exclusion). Spearman's *rho* is used due to the ordinal nature of the data.

Table 49: Correlation of determinants of power variables and IS-sophistication for the Personnel department

	IS sophistication		
	ρ	*Sig.*	*n*
Ability to cope with uncertainty	-0.120	0.163	69
Centrality	0.219	**0.031**	73
Non-substitutability	0.007	0.477	71

Sig.: α = 0.05 (1-tailed), significant statistics are highlighted in bold.

Source: analysis of survey data.

There is one significant correlation at the 95% confidence level reported between the IS sophistication variable and the determinant of power variable, centrality (sig. = .031). This is a positive correlation, which supports the proposition, indicating that as IS sophistication increases, so does the centrality of the department. However, the remaining correlation coefficients are non-significant. This indicates a weak link between power determinants and the sophistication of use of IS by the Personnel department based on the opinions of the heads of Personnel.

5.4.7.1. Summary for propositions 4a and 4b

Looking at the results of propositions *4a* and *4b* together, there is some evidence although not conclusive of a relationship between the sophistication of use of IS by the Personnel department and its power in the organisation. On a univariate basis, IS sophistication has a statistically significant positive relationship with the department's hierarchy position and its centrality at the 95% confidence level, and with general level of influence at the 90 % confidence level. However, analysing the amount of variation in information system use and skill across institutions, variations are small, which may be obscuring any effect on power structures, as the same impact might actually be taking place across all institutions with the same level of IS sophistication.

To understand this situation further, qualitative data in the following section from the interviews held in HEIs clarifies what the use of information systems by Personnel entails in this context.

5.4.8. Interview data on information systems

5.4.8.1. Relevance of IS to Personnel's power position.

The majority of the institutions interviewed described current Personnel information systems as ineffective with varying consequences and are looking for new solutions. This is summed up by the comments of the Secretary of one institution: "*One issue we have had is the fact that we haven't had a decent database. [...] That has been of influence in a negative way in that the Registry and Finance are always sending people things. HR aren't because they haven't got anything.*" Poor systems undermine the position of the department according to the Secretary of another: "*The Director of HR finds the system at least in its present configuration, and the way it is serviced here, inflexible and inadequate in its ability to provide management information. [...] Certainly it's a cause of HR not being perceived in the community as being very professional.*" There is a general cry being heard from all types of institution, voiced by the Principal of another institution: "*We need a better computerised Personnel system.*"

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Where an effective HR database is in place this can have positive consequences for how the department operates in terms of raising its profile and the quality of data it provides. This was clearly seen by a Pro Vice Chancellor in one institution in particular: *"We've got all transaction records relating to people, projects and finance all in a strongly integrated suite of databases which gives us entirely consistent information. [...] What this means in terms of dealing with individuals now is that it's a much more straightforward connection between the individual, their financial consequences on the system, which department or school they're located in, all that kind of information about the individual – how they fit in the organisation – is now much more consistently held. That has a number of considerable benefits."* However, others see this as a future goal for improving how Personnel is perceived, including one Pro Vice Chancellor: *"We're just changing [our Personnel information system] so I can't say about that at the moment. If you asked somebody in six months' time, that one may well be very high on the list."*

Despite the nature of Personnel data being highly sensitive, some institutions see the benefits of its use in the devolution of personnel management activities to line managers where advanced systems are available to facilitate this. One Pro Vice Chancellor explained: *"What we're trying to do is get much better and more immediate information available to line managers to help them manage."* However, it is often necessary to bring new skills into the Personnel department when upgrading computing facilities, such as making a specialist appointment as the Rector of one institution found they had to do: *"What the Director of HR has done is to bring in a member of staff using HEFCE money in order to launch the system."*

5.4.8.2. Summary of IS and power.

Two-thirds of institutions interviewed describe their current Personnel databases as ineffective and many are looking for new solutions. This means Personnel is unable to provide adequate up-to-date information to departments, undermining its

professionalism. There is evidence that this is a common phenomenon across the HE sector.

Where an effective Personnel database is in place this is having positive consequences for how the department operates in terms of raising its profile and the quality of data it provides. Personnel data is of course highly sensitive. However, a few institutions see the benefits of its use in devolution of personnel management activities to line managers.

5.5. Summary

This chapter has explored the applicability of strategic contingencies theory in the HE context, and has found it to be a useful model for exploring departmental power. Subsequent sections have presented the detailed quantitative analysis and results of the interviews for each research proposition in turn.

The first proposition that Personnel department power will be low compared to other departments is largely substantiated both for the level of power indicators and the determinants of power. The following propositions are more ambiguous in their outcome. In some respects organisational history shows some clear patterns in power structures, but in others it is only weakly related to patterns we might expect to see. Professionalism by the definition adopted for the quantitative element of the study proves to have a very weak relationship with power, however, by the wider definition introduced by interviewees, it appears to be a more relevant variable to power. Information systems have likewise shown a weak relationship with power, but both the quantitative and qualitative data show that the sophistication of information system use is generally quite low, hence any effect it may be having can only be marginal and similar across institutions.

These themes are explored now in detail in the following chapter. The extant literature, quantitative and qualitative data analysis results are all combined to discuss the research outcomes of the study.