

“COPING WITH CONFLICT
IN THE CURRENT UNIVERSITY ENVIRONMENT:
THE CASE OF ACADEMIC DEPARTMENT HEADS”

By

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Abstract

Higher education in the UK, and in the most European countries, has undergone major changes in the last two decades. These changes were in part external - economic, social, technological and political - and in part internal. Most of the external changes, due essentially to global trends, were not exclusive to the UK. Different countries have used different approaches to adapt their higher education systems to the economic and financial uncertainty present in their environment. Value-for-money and efficiency and performance indicators have all become concerns in higher education. Mass higher education, the emergence of the knowledge society, the marketisation of higher education and the turbulence of globalisation have brought revolutionary changes to the university's mission and purposes. New conceptions of what counts as a university are developed.

The external pressures on universities have been reflected in an increased concern with their management and governance systems. Strong pressures for academic autonomy, managerial efficiency and market competition underlie the changing patterns of control in the context of higher education. What characterises the changing external and internal environment is the issue of power among the different interest groups: the academy, the state, the market. Under recent pressures for stronger institutional management and the resulting loss of departmental power in favour of the institution, the post of university department head represents one of the most complex positions and is characterised by high levels of role conflict.

Two distinct dimensions of role conflict were identified in the contemporary university environment, according to the results of the present research survey. "Janusian" and "value" conflict were the forms of role conflict experienced by heads of departments in the post-binary sector. On the one hand, heads' efforts to provide the critical link between the managerial requirements of the modern university and academic staffs' values of their departments, in addition to the performance of their academic core activities led to the development of "janusian" role conflict. On the other hand, the emphasis on market mechanisms in higher education and the departure from the traditional academic work values, in an era of post-modernity, characterised by change, uncertainty and complexity contributed to the appearance of the "value" conflict among heads of departments. However, both of these conflict dimensions were relative to the type of institution (new/old university category). In order to assist heads of departments to cope with the conflicts, challenges and threats, specific strategies are suggested.

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Introduction

I. Research background

Higher education in the UK, like that in most European countries, has undergone major changes in the last few decades. These changes were in part external – economic, social, technological and political- and in part internal. External changes include:

- reduction in public funding, viz. a squeeze on government resources with subsequent pressure on universities to seek alternative sources of finance;
- political emphasis on greater market responsiveness and public accountability;
- a tighter coupling between higher education and the wealth creating needs of society;
- the external assurance of quality of higher education services and products;
- a considerable expansion of both the number and diversity of students in higher education

Most of these changes, due essentially to global trends (Taylor, 1987; Handy, 1987) were not exclusive to the UK (Green, 1988; Wasser, 1990; Lewis et al, 1996). Different countries used different approaches to adapt their higher education systems to the economic and financial uncertainty, present in their environment, since the early 1980s. However, it has been largely acknowledged that there is a shift towards market principles in higher education policy and management in many countries. In the UK, between 1980 and 1992 universities moved from an academic dominated system and polytechnics from a bureaucratic system, towards a unitary system in which market criteria are dominant (Williams, 1992; Kogan & Becher, 1994; Scott, 1995; Ramsden, 1998).

A similar shift has been occurring in many public services of the UK, as a result of the political stance towards the public sector, by the conservative government, which was in power for 18 years. This policy orientation led to a “growing managerialism”

(Kogan, 1988) or a “managerialist ideology” (Pollitt, 1990) in higher education, which puts a premium on the efficient and disciplined use of resources, the achievement of value- for- money and increased productivity.

More specifically, government intervention and demands for accountability have increased so that the relationship between higher education and the state has significantly changed. As Gellert (1992: pp19) summarised it:

“While in earlier times universities and similar institutions have been fairly stable providers of clearly circumscribed social goods, they are now definitely bound into the constantly changing flow of societal and political processes” .

The state is increasingly expressing its interest in the benefits and value it gets from the universities it supports. Changes in funding mechanisms have often been introduced in order to affect greater government control in higher education. As Williams (1994: pp10) pointed out:

“a marked shift is occurring from input based budgeting whereby the state supplies educational services, either directly or indirectly, and the main criterion determining what is provided is knowledge and expertise, towards output and performance based budgeting in which suppliers receive resources to the extent that they provide services that satisfy consumers. This represents a massive cultural shift which many academics are having difficulty in coming to terms with” .

Value- for- money, efficiency, performance indicators have all become concerns in higher education. The pressures have particularly been reflected on an increased concern with the management of universities. Universities now employ a wide array of managerial tools such as: strategic management and planning, executive management structures, marketing, initiation of fund raising campaigns, performance indicators, quality assurance systems etc, as a way of responding to all these pressures.

Apart from the above mentioned external changes, universities face dynamic changes in their internal environment. In particular, such external changes have increased the

challenges for leaders at all levels within higher education institutions, and especially for academic leaders in departmental level. The increasing complexities in the operation of universities, along with budgetary constraints have altered the way in which departments are organised, the range of activities that are undertaken within them, and their relationship with the institutional level, and with the outside world.

As a result, in many institutions, more and more responsibilities are delegated to heads of departments, who have witnessed significant changes in their role, in recent years. In the current university environment, for example, heads of departments have to be concerned with the following administrative leadership functions:

- ◆ requirement to formulate annual, departmental, strategic plans;
- ◆ responsibility for demonstrable quality control procedures;
- ◆ responsibility for the management of staff appraisal schemes;
- ◆ “cost-centre” management of financial resources;
- ◆ increased fund raising activity;
- ◆ increased general administrative activity, etc.

Heads of departments have to enact these new activities in parallel with their main academic leadership responsibilities (e.g. formulation of academic policy; concern about the nature of courses offered; concern about the quality of provision; establishment of research priorities etc.).

It is apparent that the post of university department head represents one of the most complex positions. It is unique, without common management parallels and equally important in providing the critical link between the administrative requirements of the university and the academic staff values of the academic departments. It is the head who must provide leadership to the academic staff and at the same time supervise the translation of institutional goals and policies into academic practice.

The complexity of the department head role results from attempting to bridge the managerial and academic cores of the university, which are organised and operated differently (Bare, 1964). The academic core of teaching and research operates freely and independently in a loosely coupled system, whereas the managerial core maintains the mechanistic qualities of a tightly coupled organisation. The department

head is at the heart of the tension between the two systems and suffers from conflict inherent to the position (Booth, 1982).

Department heads appear to be caught between the common managerial themes of stress: time, conflict and organisational constraints, along with the regular academic staff pressures of “keeping current in their discipline” and “preparing manuscripts and presentations” (Gmelch et al, 1993). This is a unique situation to managerial positions further weakened by the fact that the assignment is often temporary, with the head returning to the academic position, when the period in head’s office is ended.

The pressures and the developing demands on heads of departments point to the problems and conflicts of headship. One of the main problems of headship is the potential for role conflict experienced by heads in performing their duties. The role conflict may arise from the nature of the position, which carries a dual identity as professional academic and as a leader and manager. The fundamental differences between roles of professional academic and department head, as well as the associated differences in job demands, make the transition from one role to the other difficult and may increase the level of role conflict experienced by them.

Research evidence from the private sector, conducted over the last two decades, has demonstrated that the experience of role conflict is related to unfavourable personal and organisational outcomes, such as tension, job dissatisfaction, lack of confidence in the organisation and withdrawal behaviour (e.g. absenteeism, turnover intention and actual turnover).

Negative relationship of role conflict and job satisfaction has also been confirmed in the academic sector. The challenge that heads of departments are facing in today’s turbulent external environment - characterised by: competition, less public funding, changes in the role of state, claim for more accountability, efficiency and value-for-money- is how to maintain flexibility, viability and preserve the quality, academic freedom and autonomy of their department, while responding effectively to the changing needs of society, within the context of inflation and declining resources from the state. Success in that objective implies continuous efforts to better

understand the conflicts and stresses associated with the headship position. A position generally regarded as the most crucial in the institution's survival and the expansion of higher education institutions.

II. Research problem and its significance

Despite the fact that the unfavourable individual and organisational outcomes of role conflict are well known, the multivariate nature of role conflict and the antecedents associated with the various role conflict types are not yet fully understood. This is especially true in the academic context, where very few studies concerning role conflict among academic professionals have been conducted. Most of the studies in academe investigated the construct of role stress and through its analysis they referred to the role conflict variable and characterised it as one of the main dimensions of stress. It is also evident that because of the drastic changes that contemporary universities are facing, the study of role conflict in academic populations is more than ever necessary, since it may constitute the most important impediment to attracting professors to become heads of departments.

To help bridge the gap in literature regarding role conflict and academic department heads, this study aims at a multidimensional investigation of role conflict at departmental level. The majority of studies on role conflict so far have either examined a generalised concept of role conflict or have focused on the sum total of different types of role conflict, assuming that role conflict is one dimensional. This study, however, argues that role conflict is a multidimensional phenomenon and therefore the first purpose of the research is to explore the multivariate nature of role conflict by examining the level and various types of role conflict of academic staff who find themselves in managerial positions as department heads, in UK universities.

A careful examination of the relevant literature reveals that the bulk of the research on role conflict was concerned with the role conflict- outcomes relationship and with the hypothetical moderators of that relationship. While very few studies focused on role conflict as a key dependent variable. It becomes necessary to move beyond the

role conflict–outcome relationship and try to discover the specific and multiple sources of role conflict, since it is the knowledge of the various antecedents of role conflict, that dictates the choice of the appropriate strategies, in order to effectively cope with this unpleasant phenomenon.

A critical evaluation of the literature also suggests that the sources/ antecedents of role conflict might not only be multiple but interactive as well. It appeared that role conflict might be a function of the interaction of three classes of predictor variables: institutional, interpersonal, and personal. Although there are some studies which have used multivariate analyses in approaching role conflict antecedents, very few of them reported investigations that specifically include and compare at the same time, the three classes of predictor variables. The second purpose of the present research is to examine the relationship of a number of organisational, interpersonal and personal variables and their simultaneous combination, with the degree of certain role conflict types, experienced by heads of departments in the UK universities.

The institutional variables included in this study are the following:

- ◆ Type of university;
- ◆ Reward system of the university;
- ◆ Job structuring of the university;
- ◆ Area of discipline;
- ◆ Department orientation and size of department;
- ◆ Role requirements.

We shall also examine the “power of academic staff members” (as an interpersonal variable) on the role conflict level reported by heads of departments in our sample. The heads of departments’ professional and/ or organisational commitment, as well as, their educational level and years of experience will constitute the set of personal variables, that this research will try to test as possible antecedents of role conflict. Each of the above clusters of factors were selected on the basis of its empirical or theoretical relevance to the concept of role conflict and work roles, as studied in the relevant literature.

III. Research questions

For each set of antecedents, namely institutional, interpersonal, personal there is specific propositions that this study aims to test. An extensive development of the research propositions will be made in chapter (4). It is considered necessary, here, to present the research questions that guided this study. These are:

- ◆ What are the types of role conflict experienced by heads of departments;
- ◆ Are there differences in the degree of role conflict experienced by heads in different universities (old/pre1992 versus new/post1992);
- ◆ How well would a common set of structural properties (e.g. formalisation, autonomy, and participation) predict levels of heads' role conflict;
- ◆ To what extent would such predictions be sensitive to discipline differences;
- ◆ What influence does academic discipline have on heads' role conflict;
- ◆ How much influence has the department's goal orientation on the role conflict reported;
- ◆ How wide are the differences in the way heads distribute their time across the primary activities of their role? And how the various activities influence the degree of role conflict experienced by them;
- ◆ How much the extent of staff's contribution to departmental decision making can influence the level the heads' role conflict;
- ◆ How is professional and organisational commitment of heads related; and how do they affect the degree of role conflict experienced by them? Are there differences in the role orientations of heads among the different academic disciplines [e.g. are the members of certain disciplines/ professions more inclined to adopt a more "local" (organisational) orientation than are members of other disciplines /professions];
- ◆ What influence do other personal attributes (educational level, years of experience) have on heads' role conflict?

In summary in the section developed above, we have introduced the research problem and its significance, as well as we have put forward the research questions that this study aims to answer. The thesis is structured in the following way: The first

three chapters discuss the background theory, which refers to the theoretical arguments developed in the Introduction. In particular chapter (1) presents the changes in the roles of heads of departments by examining the specific context of higher education institutions- shaped by change and culture. Chapter (2) analyses in detail the role conflict phenomenon, in both private and public sector, by examining its sources and possible antecedents, as well as its various outcomes. Chapter (3) refers extensively to the conceptualisation of role conflict variable in the academic environment.

The following two chapters deal with the process of the research as a whole. Namely, the conceptualisation and the operationalisation of the study are discussed and analysed in detail. In particular, the conceptual framework underpinning this research and a number of testable propositions derive from it will be presented in chapter (4). While the research design, along with the measurements of each the hypothesised relationships between the possible antecedents and the role conflict variable are explored and evaluated, in chapter (5).

Finally, the remaining three chapters focus on the findings of the research survey. More specifically, chapter (6) presents in detail the statistical analyses performed on the data collected and the results obtained. Chapter (7) summarises the results of the research in relation to the propositions developed in the Introduction, and in relation to the past literature. The primary research questions to be answered are discussed in the light of the findings of the present inquiry. Chapter (8) recognizes the most important underlying dimensions of conflict extracted by the present research and formulates a coping strategy in confronting these conflicts. It is suggested that the development of such a strategy will assist universities to adapt effectively to the complex and sometimes threatening globalized contemporary higher education environment

Background theory

Chapter 1: Higher education context

Higher education in the UK has changed dramatically in the 1980s and 1990s, and in some respects these changes reflect a world wide shift in how higher education institutions are governed, managed and controlled. Many of these changes are part of a wider change in the conduct of public services, which has been extensively analysed and interpreted by people who work in higher education. However, the new academic understandings of the context in public services have not yet been systematically applied to the changes in higher education.

This chapter aims to interpret higher education change by looking at forces of change, the clash of ideologies and values, and the pressures that have been exercised in order to adapt into a more market oriented philosophy of education. In doing so, the chapter explores the appropriateness of market mechanisms and the utility of managerialism in highly professionalized organisations, key higher education issues which are mirrored in other public services. In addition the implications on the headship position from the shift of higher education system towards a market ideology are analysed.

In order to illustrate the complex external and internal environment of higher education institutions it is necessary to distinguish between the different levels already identified in the structure of any higher education system. The number of levels which can be discerned within the system is a matter of choice of the individual researcher and the purposes of his/her research.

Our categorisation is based on the criterion used by Becher & Kogan (1994) - in their study of the basic structures and the underlying processes in higher education. According to their view the condition for a particular organisational category to form a level, is that it has a distinctive value set of norms and operations. In particular, they have argued that:

"...all forms of governance above the institutional level have a reasonably coherent set of values and functions, and that the faculty level functions either as a molecular basic unit or as a subsidiary to the institutional level, according to context. To us the condition for a particular organisational category of groups to form a level is that has a distinctive value set and sufficient authority to promote it" (Becher & Kogan 1994: pp 8).

Based on Becher & Kogan's (1994) model we identify four elements as essential components of different structural levels within the system. First, the central level involving the various authorities responsible for the overall planning, resource allocation and the monitoring of standards (e.g. central government and agencies). Second, the institutional level representing the various higher education institutions within the system, as defined by law. Third, the basic unit level which corresponds either to the discipline-based departments or to a more broad sense with the school of study. Finally, the individual level consisting of the human resources of the system: academic leaders, academic staff members, research staff, administrators, administrative personnel, and students.

Within the framework of this structural categorisation we shall concentrate first on the changes that have taken place, during the period from the 1970s to the mid 1990s, between central authority and institutional level, especially in the UK higher education. We shall refer to these as external, denoting that these changes are in some way impinge on the system from outside. And secondly we shall turn our focus on the internal changes, denoting those which stem from the nature and purpose of higher education and are integral to the system of higher education itself.

1.1 External changes

During the last few decades higher education institutions in most countries face dynamic changes in their external environment. In Europe this has been caused both by an increased demand for education that leads to mass education and by a decreased supply of necessary resources leading to financial constraints -as a result of political attitudes towards public expenditures (Sporn, 1996). Socio-technological,

economic, political and legislative were the main external changes that had influenced higher education system. It is worth noting that although our analysis of the changes concerns the academic scene in the UK much of it is relevant to higher education in other countries.

Socio-technological changes

There is extensive evidence of the growth of mass higher education across the world. In many countries student numbers have quadrupled within the last 30 years (Pratt, 1994). In the UK there has been a great expansion of student numbers amounting to what can surely be described as a radical transformation from a highly selective elite system into a mass education one. Between 1979 and 1993 the number of university students nearly doubled reaching 1.5 million, and the proportion of young people entering full-time higher education rose from 12% to over 30% over the same period (Cuthbert et al, 1996). Trow (1974) generally regarded systems with a participation rate below 15% as elite. Beyond 15% they move towards mass higher education and beyond 50% towards universal higher education. However, it is clear that

“expanding student numbers changes the organisation, functions and nature of the student body and the academic staff” (Kogan et al, 1994: pp23).

Along with mass higher education an explosive growth of science and the entrance into the “knowledge society” has occurred internationally. It is now generally acknowledged that knowledge is the real source of wealth and progress of nations and the main production factor, more than labour or capital were in the past. In a knowledge society the universities inevitably have a decisive role to play, not only as independent centres of learning, education and culture, but also as future sources of innovations in educational process and technology.

Mass higher education, knowledge growth, together with the ever growing internationalisation of the university environment, brought revolutionary changes to the university’s mission and purposes. Notably an emphasis on “instrumentalism” and a “vocational drift” of universities (Pratt, 1994) cause reform of curriculum, change the duration of studies and relate higher education to students, to society, and the economy. The locus for research has shifted to some extent outside the university, through increased contract research. Indeed the move from elite to mass

higher education increased the numbers and the diversity of the clients of higher education system (namely the students- enrolled and potential- the employers, the professions and the government) as well as their expectations and demands.

All these clients expect that the curriculum will become directly relevant to the economic needs of the nation and of the society. They also believe that it is legitimate to have input into types and content of courses offered (Kogan et al, 1994). On the other hand, they expect the universities to share their expertise with society, to work with professional bodies, to act as consultants and to collaborate with employers for the realisation of research projects.

Since the 1980s employers have demanded that graduates not only have technical, professional or discipline- specific know how but that they have generic and transferable skills. In the UK the British Department of Employment offered funding in 1988 for projects submitted by universities aiming at developing students' generic skills, with an emphasis on experiential learning and entrepreneurship (McNair, 1990). During the same period the Royal Society for the encouragement of Arts, Manufacture and Commerce had sponsored a project which encouraged:

“the ability to learn independently and collaborate with others, to set achievable and relevant goals, to acquire and apply knowledge and skills, to communicate ideas and information, to show respect and concern for others and to reflect on their values” (Kogan et al , 1994: pp18).

Similar skills were encouraged by the employers of other countries. In Australia, for example, the graduates must possess communication as well as interpersonal skills, management and leadership skills, analytical and research skills, skills in teamwork, supervision, organising and negotiation, culture analysis skills etc. (Australian Higher Education Council, 1992).

More recently, using the data from an international study initiated in 1992 by the Carnegie Foundation for the Advancement of Teaching, Dillemas (1996) has suggested that the initial education must change thoroughly :

“..we don't have to teach students what to think but how to think...universities have to offer their own quality product of permanent

education with their own specificity, only they can bring education which is directly based on a open, non-commercial not product- driven research effort, truly international, multidisciplinary and often embedded in ethical tradition of humanity and solitary. In ten years more, half of our education effort will probably go to permanent education...universities have to engage in new types of contact with industry for the new projects of permanent education and applied research, they have to promote spin offs and sit in joint ventures, to manage science parks with local authorities and industrial multinationals. They have to introduce the new tasks universities are required to perform by way of services to the community” (Dillemas, 1996: pp5&6).

Barnett (1997) in his book “Realising the university” has argued that the modern world is radically unknowable, namely

“instead of knowledge let us turn to ignorance. Let the modern university be built upon this realisation that everything is changeable in the modern world. Let it revel in the uncertainty that surrounds us and to which the university itself contributes in substantial measure” (Barnett, 1997b: pp9).

A similar perspective about the nature of the university in the modern age has been developed by Clark (1998) arguing that

“With complexity and uncertainty now endemic, no one knows with any degree of confidence what the twenty-first century holds in store for universities. How then to proceed? One answer stands out: step by step, learn by experimenting. We need widespread experimentation that tests ways to move into the future. We need particularly to learn from efforts to innovate in the overall character of universities” (pp xiv:Introduction).

In order to understand the current environment and also ourselves Barnett (1997) invoked four concepts: uncertainty, unpredictability, challengeability and contestability. According to his view these must be the main elements of our frameworks for the conceptualisation of today’s turbulent world. What are then the challenges that higher education is facing in terms of its educational objectives?

“Transferable skills and core skills are simply the code words for the kinds of capability now being sought; adaptability and flexibility are indications of the kinds of disposition now required. These are meta skills, skills which not only enable persons to deploy effectively a repertoire of generic and more specific skills but which also make it possible for the self-reflexive individual ultimately to jettison particular skills and take on new ones...Reflexivity at the level of individuals- the capacity critically to go on interrogating one’s taken-for-granted universe- is needed in order to assimilate and to accommodate to the new order.” (Barnett, 1997a, pp3 &23)

Complementary to Barnett’s challenging ideas about the new conceptualisation of the university, is the emergence of a widespread sense of the “post-modern” (Smith & Webster, 1997; Filmer, 1997), which tends to question many of the traditional justifications of the university. Post modern thinking suggests that the academic community is a kind of fiction, and difference is the hallmark within and between institutions. The growth of specialisation has become so complete that colleagues even within a faculty often cannot discuss their areas of expertise without misunderstanding. Standards vary within departments, still more across universities and between eras, and so it has become difficult to defend any particular hierarchy of subjects in the modern university today (Smith & Webster, 1997).

It can be argued that the growth of mass higher education is an important and valuable phenomenon, but there is an evident fracture between those who interpret these changes as “post-modern”- as an overturning of what went on before- and those who acknowledge the changes but insist that the continuities remain, together with their established lines of legitimacy. Scott (1995) tended towards the former view, though he exempted the Oxford, Cambridge and London Universities from many of these changes. He documented an association between a post-Fordist economy and a wider post-modern world which had profoundly shaken university life. According to Scott’s view all is change: flexibility, new forms of vocationalism, new forms of pedagogy, new kinds of students, new kinds of learning, different motives for study, etc. In contrast, Filmer (1997) queries the conceptual logic of postmodernism and offers a defence of the university as the locus of disinterested research, scholarship

and teaching, sensitive to the realities of change.

In summary, the implications of knowledge growth together with the development of mass higher education are far reaching. New forms of higher education have emerged. Alternatives to universities have been established. Academic monopoly of curriculum generation have been challenged. An extension of skills, as well as new teaching methods and re-orientation of teaching focus have been required. The sharing of power in decision making process with the various client groups has been demanded. The functions and the nature of the academic work have been changed (Kogan et al, 1994; Dillemas, 1996).

Economic changes

During the last few decades, in addition to the above mentioned socio-technological changes, higher education institutions were affected by another group of external pressures. These pressures were economic in nature. The oil crisis of the 1970s and the subsequent cycles of inflation, recession and unemployment have put increasing pressure on public expenditure. Reductions in public funding along with the need to generate income from alternative sources and to become more cost conscious and efficient in the use of resources, have been the one outcome of these economic changes; increased competition for scarce resources has been another (Middlehurst et al, 1992).

Throughout the 1970s the ideology of the Welfare State -of which higher education formed one element- remained firm, although economic pressures and growing lack of confidence in the capacity of public systems to deliver services with sufficient responsiveness and effectiveness, have some what questioned the value of this ideology (Kogan et al, 1994). In contrast, one of the main arguments developed in the 1980s was that public organisations can operate like other economic enterprises and therefore must change the way of their funding by limiting their dependence on state money.

This is based partly on the macro-economic view that the monetary policies necessary to sustain high levels of public expenditure have a damaging effect on national income, and partly on the micro-economic belief that direct public subsidy

of public organisations is a disincentive for improvements in efficiency (Williams, 1992). Higher education institutions were influenced by the same assumption that academic work can be administered in the same way as any work in any service providing agency (Henkel et al, 1997). This is evident in the following OECD (1990) statement:

“whatever the pros and cons, the fact remains that institutions of higher education and especially universities have the potential capacity to operate as service enterprises; and under some conditions cover a big part of their expenditures from the sale of their services” (OECD, 1990: pp 999).

During the 1980s and 1990s there has been a major concern, especially in the UK, with:

- the amount of public expenditure on higher education;
- changing priorities within higher education;
- sources of funds;
- mechanisms of resource allocation (Williams, 1992).

During the same period, markets became global in considerable part because of increased economic competition from Pacific countries. Multinational corporations began to dominate the world economy. Established industrialised countries, such as the UK and the USA, lost shares of world markets to the Pacific countries. Multinational corporations in established industrialised countries responded to the loss of market share by investing in new technologies so they remain competitive in global markets. These corporations turned increasingly to universities for science-based products and processes to market in a global economy. As the economy globalised, the business sector pushed the state to devote more resources to the enhancement and management of innovation so that corporations and the nations compete more successfully in world markets. As a response, Governments developed national policies that link higher education to business innovation (Slaughter, 1997).

Political changes

The political response to the above mentioned groups of changes (social and economic) has been to place higher education institutions' operations under

increased scrutiny. With the massification of higher education over the last decade and with diminishing resources available to the sector, efficiency questions were high on the political agenda in many countries, and in the UK in particular.

Such agenda included a concern for efficiency and accountability in the use of public funds; a focus on value-for-money in terms of the universities' share of public resources and their role in providing a service to the economy and to society; a pressure to increase entrepreneurial activities so as to decrease dependence on the public purse; and attention towards effectiveness defined in terms of the quality of individual and institutional performance (Middlehurst et al, 1992; Geurts & Maassen, 1996).

In many countries the governance of universities and colleges as well as the effectiveness of internal institutional decision-making processes and procedures are under discussion. This recent interest in the governance and management of higher education institutions can be seen as a result of a trend started in the mid 1980s which emphasises a more market-oriented approach to the "steering" of higher education systems (Geurts & Maassen, 1996). With respect to institutional management the most important carrier for change is the changed role of the government. Many governments in the world have attempted to introduce market-related elements into their higher education systems, and to emphasise business-like structures for their internal governance (Goedegebuure et al, 1996).

Most of the social, economic and political changes described above, due essentially to global trends (Taylor, 1987; Handy, 1987) were not exclusive to the UK (Green, 1988; Lindsay, 1990; Wasser, 1990), but they had acquired a particular character in the UK context, in view of the political stance towards the public sector by a government which has retained power for 18 years. This policy orientation has led to a "managerialist ideology" (Pollitt, 1990), which puts a premium on the efficient and disciplined use of resources, the achievement of value-for-money and increased productivity.

As Fulton (1996) has also stated, it is certainly possible to explain most if not all of the changes that occurred during the last decade in the higher education environment

as

“symptoms of British higher education’s transformation from an elite to a mass system, at a speed that has been largely dictated by a rapid rise in the demand for higher education. But many of them can also be, and often are, viewed as examples of the exceptionality of the UK under “Thatcherism.”

Government intervention and demands for accountability have increased so that the relationship between higher education and the state has significantly changed. As Gellert (1992: pp9) summarised it:

“while in earlier times universities and similar institutions have been fairly stable providers of clearly circumscribed goals, they are now definitely bound into the constantly changing flow of societal and political processes”.

The state is increasingly expressing its interest in the benefits and value it gets from the universities it supports. Changes in funding mechanisms have often been introduced in order to affect greater government control in higher education. Value for money, efficiency, performance indicators have all become concerns in higher education. The pressures have been reflected, in particular, in an increased concern with the management of universities (Pratt, 1994; Williams, 1994; Boer, 1996). These changes may be viewed as aspects of what Kogan (1988) called a growing “managerialism”.

Legislative changes and their effects on patterns of finance

In the light of the abovementioned considerations, it is useful next to analyse the changing financial conditions in the UK higher education system during the last decades and the process by which universities, polytechnics and colleges moved from reliance on two dominant funding mechanisms in the early 1980s -one for universities, one for polytechnics and colleges- towards a unitary but market-oriented system by the early 1990s (Williams, 1992; 1994)

Up to the 1960s virtually all higher education was provided by the universities. Polytechnics were created during the late 1960s as an alternative non-university sector. The polytechnics along with the colleges of higher education (established as

specialist teacher- training institutions) comprised the public sector of higher education. At that time a binary system of higher education was set up.

Public sector institutions, like the university sector ones, were concerned with higher education but they offered a wider range of courses, particularly in vocationally relevant subjects such as business studies or health care, a more flexible pattern of attendance modes and a larger percentage of sub-degree work than the universities. Most of the public sector institutions were under the control of local authorities, although some, larger colleges were funded directly by the Department of Education and Science. The size of these institutions varied considerably from over 10.000 full-time equivalent students to less than 2.000. The degree of autonomy which they enjoyed from their Local Education Authorities also varied widely (McVicar, 1992; Fulton, 1996).

During the expansion of higher education that followed the end of the Second World War and continued up to the early 1970s, it was widely accepted that only public funds could provide the resources needed. The main characteristic of this earlier period and especially from 1963 onwards was a university dominated expansion in which governments accepted the principle that “courses of higher education should be available to all who were qualified by ability and attainment to pursue them and who wanted to do so” (Robbins, 1963), and they funded the expected demand on an average cost basis. There was a general shift away from private funding and more and more institutions and students came under state funding. By the mid-1970s the idea of higher education as a publicly provided service was the dominant model, and the state was providing roughly 90% of the higher education institutions income (Williams, 1992).

In that period the central institution for funding was the University Grants Committee, which acted as a buffer between the universities, and the state, which provided a substantial part of their support (Trow, 1994). And the University Grants Committee continued to serve this function during a period of substantial growth in British higher education. While the overall size and shape of the system was determined by central government (Trow, 1994). In the public sector the National Advisory Body was a central government agency acting as the main provider of the

income of polytechnics and colleges. Local Authorities were responsible for the financial support of public sector institutions and the funds were allocated on the advice of the National Advisory Body (Williams, 1992)

Up to the beginning of the 1980s in the UK there was a clear distinction between what the central government decided through its own structures, and what decisions were delegated to the intermediate central authorities (the two principal funding bodies University Grants Committee and National Advisory Body, as well as the various research councils), which occupied a position between government and the individual institution (Becher & Kogan , 1994). Particularly in the traditional sector, the University Grants Committee was regarded as a buffer between the state- which provided most of the funds- and the universities which decided how they should be used. As Trow (1994) has pointed out the role of the University Grants Committee was:

“...to protect the autonomy and independence of the universities from the government and political pressure” (pp12).

Universities were funded through University Grants Committee by block grant system, where two-thirds of universities income came in the form of a single block grant and no attempt was made to indicate to universities how much of this was deemed to be for research and for teaching. Although there was always some degree of selectivity universities received their previous allocation plus an increment which was positive (Williams,1992). On the other hand the non-university sector was funded by local authority, through the National Advisory Body, which set target student numbers for institutions and subject areas, and funded them according to complex student number formulae weighted by subject and type of course (Williams, 1992).

Incremental block grants led to highly developed collegial forms of management in universities, where funds were distributed largely on the basis of consensus amongst providers of academic services, and academic criteria dominated internal resource allocation decisions. Line-by-line budgets stimulated a bureaucratic form of management in polytechnics and colleges. Tight management structure and bureaucratic administration were involved for the efficient use of resources and their

monitoring. Institutions were subject to detailed administrative regulation over the spending of their funds (Williams, 1992).

Under such conditions the universities were institutions in which the interests of academic staff were paramount. Research usually took precedence over teaching-in the traditional university sector, while teaching and service to the community were the dominant orientations in public sector institutions. Tenure until retirement age became the almost universal form of employment contract, and academic staff controlled university management. The academic staff were members of a decision making policy, and administrators and administrative personnel were there to implement the decisions of the academics.

“Students in this system were neophytes learning academic skills largely through close personal interaction with their mentors” (Williams, 1994: pp7).

In March 1981, with the publication of the 1981 Public Expenditure White Paper the government announced a big reduction in public expenditure for the following three years. Taken together with the overseas student fees policies in 1980, (overseas students, whose fees accounted for 13% of university income, would have to pay the full economic cost of their courses), these cuts produced a total cut in resources for universities of between 11 and 15% in real terms between 1980-81 and 1983-84 (Kogan, 1983).

The University Grants Committee decided to allocate the cuts on a selective basis, taking account the popularity of each university with school leavers, as reflected in the A-level scores of its entrants, and its research performance, as reflected in the amount of research council income it was earning. Higher education institutions were experienced sustained cuts in their budgets and were forced to seek new funds from sources outside government. The view of the government was that by this cutting funds policy, universities and polytechnics will become more efficient in the use of resources, will achieve value for money and increase their productivity (Pollitt, 1990)

These views were captured in two reports: the Jarratt Report (Committee of vice-chancellors and Principals) 1985, for universities and the “Management for a

Purpose” report (National Advisory Body) 1987, for polytechnics. Keith Joseph, the Secretary of State for Education had called for a study of the efficiency of universities. Conducted under the auspices of the CVCP, the Jarratt Report (1985) recommended the transformation of vice-chancellors into chief executives and the use of performance indicators to measure, assess and reward achievement. The historical significance of this recommendation was that it directly contradicted the established, “equity” basis of resource allocation that had already been violated by the 1981 cuts (Willmott, 1995).

As Cutler (1992) has argued, prior to the 1980s, the principle of equity was widely adopted for individuals as well as departments. Each member of staff was assumed to be engaging in scholarship and research in its widest sense, whether or not there was any measurable evidence of this activity, in the form of research grants or publications. Substantive evidence of individual research productivity was rewarded through promotion. Jarratt’s idea of performance indicators was enthusiastically endorsed by the government. The selectivity exercise of 1986 allocated 14% of UGC funds on the basis of an assessment of the research performance of university departments (now designated “cost centres”) through the use of performance indicators. Criticism of the 1986 exercise was largely about the process and the technical limitations of the evaluation method employed rather than the abandonment of the equity principle and consequences that would follow (Willmott, 1995).

The Jarratt Committee recommended that university councils produce “strategic plans to underpin academic decisions and structures which bring planning, resource allocation and accountability together into one corporate process” (pp 36). Universities were also recommended to develop their own “rolling academic and institutional plan, which will be reviewed regularly and against which resources will be allocated” (pp 36). The recommendations of the Jarratt Committee made clear that universities need to adopt modern business practices, namely to develop strategic plans, carefully define and monitor their organisational development, as well as to address fundamental questions about their purpose.

The corresponding document of the polytechnics and colleges issued two years after Jarratt (NAB, 1987), adopted a slightly different perspective. The National Advisory

Body's Good Management Practice Group (1987) asserted that people work best if they are not only committed to what they are doing but also have control over the resources and activities involved.

In 1989, following the Education Reform Act 1988, the University Grants Committee was replaced by the University Funding Council, and the National Advisory Body by the Polytechnics and Colleges Funding Council. These new bodies received their funding from the Department of Education and Sciences. But the Education Reform Act 1988 and the ministerial statements that followed gave a different mission to these bodies declaring that their function is to provide funds in exchange for the provision of specific academic services rather than to subsidise institutions (Williams, 1992).

According to this, all public funds received by higher education institutions were dependent on continuing satisfactory provision of specific services for which there was economic demand. The main interest of the funding bodies was that the institutions to which they offered contracts had the capability to undertake the teaching or research for which they were being paid and there was a demand for them (Turner, 1990; Howarth, 1991; Williams, 1992).

The 1988 Education Reform Act removed the polytechnics and some of the larger colleges from local authority control. The 1988 Act transferred staff and assets from the polytechnics and colleges into the new higher education corporations (Cuthbert, 1988). As McVicar (1992) has observed before 1989 most polytechnics and colleges had only limited financial responsibilities, varying according to the degree of devolution permitted from the Local Education Authorities. While from 1st April 1989 the 30 polytechnics and 50 other colleges of higher education became independent of their Local Educational Authorities and completely free-standing organisations, responsible for all the financial functions of any other independent institution- or business- and capable of going bankrupt (McVicar, 1992; Fulton, 1996).

Since April 1989 local authorities have had no responsibility for higher education institutions but they were able to buy places for non-advanced students in

Polytechnics and Colleges Funding Council institutions and to purchase other academic services, such as research or short courses on a contract basis. By the 1990s local authorities were at most supplementary purchasers of academic services (Pratt & Hillier, 1991; Williams, 1992).

It is evident that the 1980s was a period of sustained cuts for higher education. The central government made the decisions about the level of resources which would meet social and economic needs; it had also formulated policies concerning how many places should be financed in the different sectors of higher education, and what resources to provide for each.

“Increasingly, too, it expressed views on the deeper purposes and modes of functioning of the system in a way not known before the 1980s” (Becher & Kogan, 1994: pp53).

Having made the framework decisions, however, the government delegated the specific negotiations with and allocations to institutions to its two principal funding bodies and other research councils, which in turn made the money available to the higher education institutions on a contractual basis and monitored their performance according to those contracts.

The change of the titles of the principal bodies signified

“the advent of funding for specific purposes laid down by the centre and in return for evaluated performance” (Becher & Kogan, 1994, pp64).

Changes in the style and the content of the relationship between funding bodies and institutions were also evident. Higher education institutions were to submit strategic plans for scrutiny to the funding agencies. The vice-chancellors were to be chief-executives and senior academics were to take the place of middle-managers in an academic hierarchy. Performance was to be measured by quantitative indicators and tenure was not to be offered to new academic staff.

To some extent, therefore, the radical changes induced by government in the 1980s were a deviation from the classic position of the central authorities (Becher & Kogan, 1994). Observed changes in the membership of the funding bodies were indicative of this deviation. For example, of the eighteen University Grants Committee members, thirteen were academics, three were industrialists and two

represented local authorities. It was led by a distinguished academic of vice-chancellorial level. The Universities Funding Council was intended instead to be under the chairmanship of an industrialist. The new body had fifteen members comprising nine academics, five industrialists and one polytechnic director. The local authority was not represented.

Output oriented programme budgets, direct payments by students and sales of other academic services were the main elements of the newly created funding bodies' policy in 1988 and onwards. Funding formulae were developed between 1988-1993 which explicitly linked finance to student numbers and research output (Williams, 1994). In both universities and polytechnics income was derived from many sources as payment for services rendered. These sources included: endowments and donations; sale of research, consultancy and teaching services; and student fees. The classification of student fees as a private source of income was questionable since nearly 90% of home student and 12% of overseas student fees paid to British universities by students were in practice subsidised out of public funds. From the point of view of government subsidy of student fees was part of the public sector contribution to higher education, but as far as higher education institutions were concerned, fee income was generated in the same way as other private income and could be increased if more students were recruited (Williams, 1994).

In the late summer 1992 some of the largest colleges of education joined the polytechnics in acquiring university status. Indeed under the directions of 1992 Education Act the binary line between "old" and "new" universities was abolished and the polytechnics and the largest higher education colleges were granted university status (Fulton, 1996). As a result, they acquired both full degree-awarding powers in their own right and also formal parity in relation to a new, single funding council- the Higher Education Funding Council, responsible for managing the whole higher education system in the UK. One major consequence of the abolition of the binary line was that these new universities were for the first time permitted to compete for core funding to support basic/strategic research (Fulton, 1996).

It can be argued that since 1988 the role of the funding agencies has changed dramatically.

“...whereas the central authorities were earlier prepared to concede to the basic units and individuals, at least in universities, powerful degrees of self-determination within an order negotiated largely on the basic units’ behalf by the institutions with the central authorities, they now sought to determine the norms pursued by the academics. And towards the end of the 1980s, it was they who began to insist that academic decision-making be guided by market and enterprise considerations as well as by those of academic excellence” (Becher & Kogan , 1994: pp48 &49).

Trow (1994) in his criticism of the Thatcher era in higher education has stressed that the new Higher Education Funding Council was not intended to serve as a buffer between government and universities to protect their autonomy from government’s control and political pressures. But on the contrary,

“...they are an arm of the government, an instrument for the implementation of government policy on the universities which, in the government’s view, are by their nature and traditions recalcitrant, and tend to defend their own parochial interests against the national interest, as defined by the government of the day” (Trow, 1994: pp13).

Objective setting was a major responsibility at the powerful hands of central authorities, while academic norms and modes of self-governance have lost ground (Becher & Kogan, 1994). At the same time institutions were being invited to respond to the needs and demands of the various markets and the key task for government as described by the Secretary of State, was:

“... to develop a more market-oriented higher education system. This is because properly ordered markets promote efficiency by providing better matches between demand and supply, and they achieve better value for money” (Alan Howarth, 1991: pp15).

It is evident from the above analytical review of the changes that occurred in the external environment of higher education system in various countries, that there has been a radical change since the mid1980s which especially in the context of British higher education can be described as a cultural transformation, characterised by an emphasis on market mechanisms in higher education and a departure from the

traditional university values. The ideology behind these reforms in the UK higher education which have been implemented mainly by deliberate acts of government, will be analysed next.

The Market ideology in Higher Education

Clark (1983) formulated a model, sometimes referred to as the “triangle of tension” in order to compare higher education systems world wide. The position of a system is shown as the resultant of three opposing forces forming the vertices of a triangle, the state, the academic oligarchy and the market. We shall try to illuminate the shift in government’s ideology in relation to higher education institutions by using an extension of Clark’s model originated by Williams in 1994. Williams (1994) in his effort to analyse the reforms in higher education finance during the last decade regarded higher education systems as being subjected to three forces: the state, the academic and the market and used the following diagrams in order to capture the changing roles of the three components of the system.

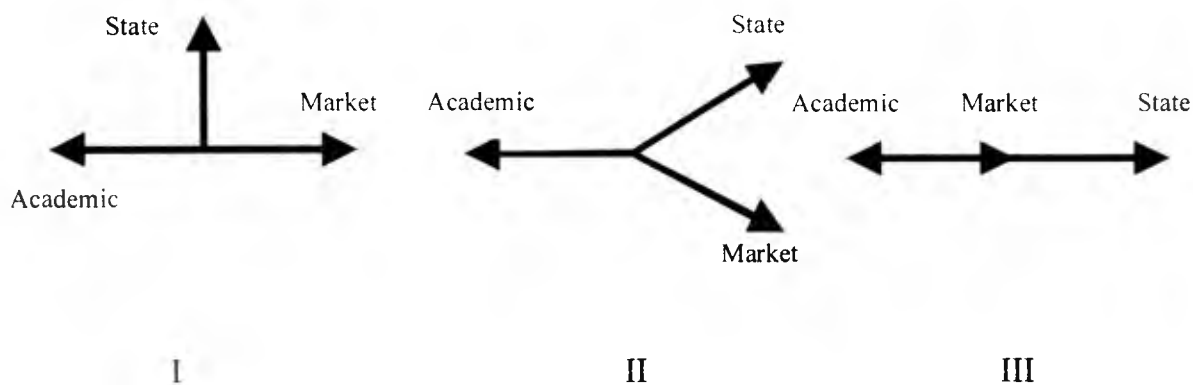


Figure 1 Three forces in higher education system (Williams, 1994)

Diagram (I) broadly describes the traditional role of the state in the UK higher education. Until the 1980s government’s role was broadly neutral. It was there to hold the balance, to set the boundary conditions within which the higher education system is to operate.

“The universities and colleges had a great deal of autonomy over student and staff recruitment, research, courses and assessment. Governments provided funding to underpin this autonomy” (Williams, 1994: pp4).

At that stage the establishment of polytechnics as an alternative system to the traditional sector of higher education can be viewed as the intention of the government not to instruct the universities to change their ways. As we have already stressed non-university institutions were attempting to achieve equal educational opportunity for all, and to provide such developments that universities were not, at least at first willing to e.g. more open access; part-time degrees; modular curriculum; a wider range of subjects and a larger proportion of adult and part-time students etc.

The prevailing ideal at that period was that of the self-governing institution. It was also assumed that the interests of society, interpreted by the central government, and of the academy coincided. The academy was trusted to educate and train the students of the nation and to deliver knowledge that would satisfy the needs of employers and would sustain the economy and society at large (Kogan et al, 1994).

However, as depicted in diagram (II) and (III), a new pattern began to emerge from the mid 1980s onwards,

“in which the state has begun to underpin student consumers rather than academic suppliers. Even in less extreme examples the state has certainly been narrowing the angle between it and consumers and widening that between the state and producers” (Williams, 1994: pp4).

Diagram (II) describes the changing role of the state during the 1980s which has become not only less neutral but an active and a powerful player in the higher education system. In the early 1980s higher education institutions were increasingly seen by government policy makers as large enterprises which should be managed by the same criteria applied to other sectors of economy (Lewis et al, 1996).

What has been happening is a particular shift of governmental ideology which tries to promote managerial values above those of the academic community which management is meant to serve (Kogan et al, 1994). Neave & Vught (1991) in their analysis of the changing relationship between government and higher education in

Western Europe, speak of a managerial revolution that has swept through higher education. According to their view the new approach to institutional management in higher education -“corporate rationality”, “entrepreneurial management” or “managerialism”- is in essence characterised mostly by a bigger influence of external stake-holders (mainly at the central level).

Trow (1994: pp12) has argued that, during the last decade, British higher education has undergone profound changes and has been affected more than any other system in industrial societies. He described the changes in the systems as a revolution involving

“the emergence of managerialism in the governance and direction of British universities”.

Trow (1994) defined managerialism, as opposed to management, as not just a concern for the effectiveness of an organisation, but an ideology, and went on to differentiate between “soft” and “hard” forms of managerialism:

“the soft concept sees managerial effectiveness as an important element in the provision of higher education of quality at its lowest cost; it is focused around the idea of improving the efficiency of the existing institutions. The hard conception elevates institutional and system management to a dominant position in higher education; its advocates argue that higher education must be reshaped and reformed by the introduction of management systems which then become a continuing force ensuring the steady improvement in the provision of higher education. In this conception management would provide this continuing improvement in quality and efficiency through the establishment of criteria and mechanisms for the continual assessment of the outcomes of educational activities, and the consequent reward and punishment of institutions and primary units of education through the formulas linking these assessments to funding” (Trow, 1994: pp11).

Following Trow’s conception the “soft” and “hard” forms of managerialism correspond roughly to two phases of the changing context in the UK higher education. The first, which developed in the early 1980s within the universities under

the pressures of coping with cuts in funding. And the second, which developed in the late 1980s after the abolition of the University Grants Committee and the National Advisory Body to the creation of a new unitary funding body, the Higher Education Funding Council, aiming at introducing business-like attitudes in higher education governance, as already stressed in the previous subsection. Indeed the creation of the Cabinet Office Efficiency Unit under Sir Derek Rayner, a businessman from Marks & Spencer, signalled government intentions to introduce more business-like approaches in public services (Thorne & Cuthbert, 1996).

In higher education the ideological intent of the government was captured in the Green Paper (DES, 1985). "The development of higher education into the 1990s", which viewed higher education as a servant of the national economy and its needs. Moreover, managerial approaches in higher education were encouraged by the Jarratt Report (CVCP, 1985), which argued that it was necessary for institutional leaders to see themselves as chief executives of major enterprises and adopt new approaches to strategic institutional management.

The Jarratt Report (1985) attempted to promote

"...management into a self-justifying activity and allowed that it might take on imperatives of its own- with the implication that they could be endorsed separately from higher education's primary objectives, and could be distributed hierarchically" (Becher & Kogan, 1994: pp181).

The report "Management for Purpose" (NAB, 1987) for the polytechnics, was seen as indicative of a similar managerial ideology.

Equally, it is contended that as higher education was provided largely through public money and affected the interests of multiple stakeholders in society, higher education institutions should be called to account rigorously and their performance should be evaluated as well as they should be accessible to those stakeholders. Academics and their institutions thus became vulnerable like other institutions valued for utilitarian end. (Henkel, 1997).

According to Trow (1994: pp12) government's view during the "soft managerialism" phase was that the universities

“...are incapable of reform from within and must be forced to reshape their roles missions and functions...the transformation was to be accomplished by radically cutting their budgets, forcing them to seek new funds from sources outside government. That in turn would require them to become more efficient administratively...more responsible to the requirements of business and industry which employ their graduates” .

We shall now turn our attention to the “hard” conception of managerialism, as described by Trow (1994), which developed from 1988 onwards. Diagram (III) pictures this phase showing that the state has begun to underpin the market (e.g. student consumers) rather than academic suppliers (Williams, 1994). As already stressed in the preceding subsection there is a shift from input based budgeting where the state supplies educational services, towards output and performance based budgeting in which institutions receive resources by selling their services into various customers (Williams, 1994)

Government had increasingly sought to put higher education institutions into a market environment. The pressure to adopt market approaches to higher education was based on the following propositions. The first was the belief that the private sector and the individuals could be a source of supplementary funding and thus relieved governments of some of the cost burden. The second was that many of the benefits of higher education accrue to private individuals and they should be prepared to pay for them. The third was that competition for private funds would increase institutional efficiency and responsiveness to economic and social needs. The fourth was that both external and internal efficiency would improve if government agencies were buying services from universities rather than made grants to them. And finally the expectation that the markets put the power in the hands of purchasers of services so the system had to be responsive to their demands (Williams, 1992).

The abolition of the University Grants Committee and the National Advisory Body and their replacement by Funding Councils which were seeing themselves as “buying services” from higher education institutions on a contractual basis rather than subsidising them was a major shift of the government’s policy towards a market-

oriented strategy of higher education. Institutions were invited to bid for allocations at what the funding bodies estimate to be competitive prices.

In 1992, as earlier mentioned, government announced the abolition of binary line and the formulation of a unitary funding body the Higher Education Funding Council. The separation of funding for teaching and research and the institution of separate assessments by committees of academics appointed by the Higher Education Funding Council for England of each set of activities at the departmental level, was another sign of what Trow had called “hard managerialism”.

As Henkel (1997) has observed in her research of the implications of policy reforms in the UK for the institutional contexts

“the tradition of self regulation of academic standards in research and educational provision was transformed in Britain by the systems of audit and assessment” (pp136).

All the assessment systems, she continued, were important for government’s aims to reduce the universities’ dependence on state funding and to instil market mechanisms into higher education. Institutions’ performance in the various forms of quality assessment is now crucial to them in the new world of markets, even if at present the most influential market is state-regulated (Henkel , 1997).

In particular, as Thorne & Cuthbert (1996) have argued, the most significant change in control over research has been the Research Assessment Exercise initiated in 1986 and subsequently extended to cover the whole of the expanded higher education sector. They viewed Research Assessment Exercises, namely the means by which research outcomes and quality were related to funding, as an intention behind the Thatcherite reforms of the public service to increase accountability and reduce professional control (Thorne & Cuthbert, 1996).

There is extensive evidence that higher education institutions during the last decade and especially since mid 1980s onwards- as a result of the government pressures and altered political ideologies- have become market-led and they have been concerned with income generation, as well, as they have tried to adapt their structures and policies to the new business-like environment (McVicar, 1992; Miller, 1994;

Williams, 1994; Lewis et al, 1996; Thorne & Cuthbert, 1996; Henkel, 1997).

Government reforms have aimed at extending the scope of market forces to promote “a more efficient and responsive system and fairer sharing of its costs” (Howarth, 1991: pp5). An explicit aim of the government’s reforms was to reduce public funding and by forcing the higher education institutions to be exposed to the competition of various markets- government being one of them- in searching for alternative sources of funds, government claimed that institutions’ autonomy will be increased.

Research evidence, however, casts doubts on whether these aims have been realised. More specifically Miller (1994) in his research into the management of change in the UK, Canadian and Australian universities found that although the Conservative party in the 1980s celebrated a free market, economic policy which involved privatisation and advocated a reduction in the role of the state, in practice its higher education policy has involved considerable state intervention in regulating and controlling the policy and practice of universities.

Williams (1994) pointed to the paradox that universities had been subjected to more state regulation at the same time as they had been exposed to market forces and given more financial autonomy. He explained this paradox as an outcome of the shift from an input based budgeting towards an output based budgeting, imposed by the government’s reforms. He argued that output budgets tended to lead to tighter and tighter specification of the outputs in order to ensure that the “agent” had produced what the “principal” wanted.

“...governments and external funding agencies become as involved in at least as much detailed regulation as they are in line item by line item input based budgets” (Williams, 1994: pp19).

Becher & Kogan (1994) in their analysis of the structures and the underlying processes of British higher education, drawing on detailed interview data with leading figures in higher education, have argued that during the last decade the system had changed from being a small group of universities and of public institutions, loosely held together to a largely centralised system.

They proposed a two-dimensional model as a conceptual interpretation of how the education system works. The one dimension was called “modes” and constituted by two components: the “normative mode”, related to collective and individual values, aspirations and loyalties- what people in the system count as important; and the “operational mode” reflecting the job requirements at different levels within the system- what people actually do. Each mode was seen as having an internal and external aspect. Internal aspect embodies features which are integral to the enterprise of higher education, while external denotes those which derive from outside sources. The second dimension of Becher and Kogan model represents the “levels” designed to indicate the discrete clusters of norms and operations which differentiate one stratum of the organisation from another. These include: the individual, the basic unit, the institution and the central authority levels.

The following figure 2 presents the elements of the Becher and Kogan (1994) model:

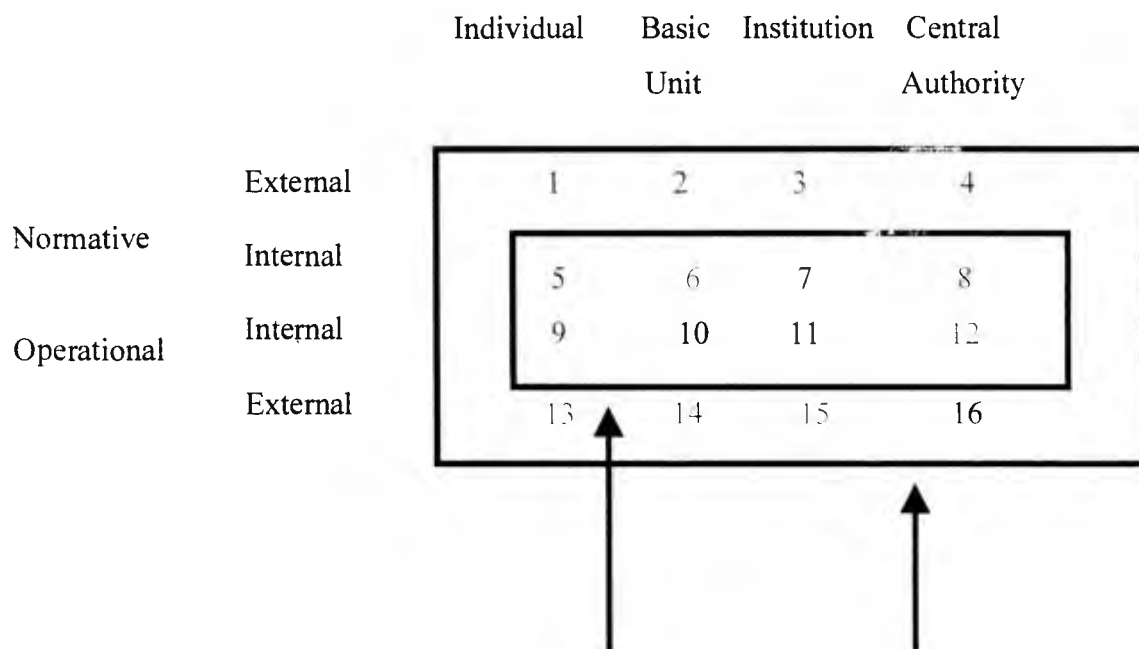


Figure 2 A model for higher education (Becher and Kogan, 1994)

In terms of the above model, Becher and Kogan have argued that during the last decades the balance of control has shifted from the inner core to the outer framework.

“In the 1980s, external expectations and requirements had largely been mediated by the central authorities, which then passed directives through the system...(pp188);...academic norms and modes of self-governance had given way to powerful objective-setting by the central authorities. At the same time, institutions were being invited to respond to the needs and demands of markets constituted by students and research sponsors...(pp48);...the advent of the “market” stage of evolution largely substituted external values for the internal values which characterised the heyday of autonomy...(pp188)” (Becher & Kogan, 1994).

Trow (1994) interpreted government’s reforms towards market approaches to higher education as an attempt of the state to reshape and redirect the activities of academic community through funding formulas and other bureaucratic mechanisms of accountability imposed from outside the system. There was, he continued, a development of a “quasi-market” that gave central government (and not the student/consumers) the power to decide about the quality of university activities and the assessment criteria of quality.

“What we have is the rhetoric of the market coupled with a substantial increase in the power of the external assessing and funding agencies, making a real shift in power in the world of British higher education” (Trow, 1994: pp13).

Johnes and Cave (1994) argued that

“discussions about quasi-markets in the field of higher education usually focus on new methods designed to introduce competition specifically for financial resources, taking competition for prestige for granted” (pp95).

The use of market forces aims to change producer behaviour by empowering the consumer or customer. There are obvious conceptual difficulties in defining the customer in an higher education context, since there are multiple stakeholders- government, society, funding councils, students, parents, employers- all of whom

may in some sense be customers. However, two sets of stakeholders- students and funding agencies- can be regarded as the main customers. We will focus on them in order to illustrate the effects of increased competition and market forces on control of higher education work.

The fashion of consumerism in the public sector reflects the growing need for organisations to

“pay more attention to consumers wishes, offer wider choice and develop techniques for marketing their services” (Pollitt, 1987: pp43).

Higher education, like other public services in the UK, has a government- imposed charter setting out the rights of the student as customer. Operation within a market implies a transaction between a provider and a consumer, where both can readily evaluate what they receive and whether the exchange represents value for money. However, exchanges in higher education are more ambiguous. The recognition of this problem of performance ambiguity in many public services has led to the development of the concept of quasi-market, a system “set up in such a way that the provision of services remains free at the point of delivery” (Propper et al., 1994) and in which Le Grand (1991) suggests that often professionals may act as purchasers on behalf of the otherwise insufficiently informed lay consumer.

The higher education quasi-market is regulated by government and its agents, the funding councils, which act as purchasers. Within this constrained quasi-market, students as consumers have imperfect information, which limits their ability to make effective choices, and their rights of redress and representation have been developed in ways which stress individual rather than collective action. This might imply weak consumerist forces in the face of institutional providers’ superior knowledge of products and services (Thorne & Cuthbert, 1996).

In the higher education quasi-market the funding councils act as purchasers. However, Sizer’s (1992) analysis concluded that funding councils could not serve as an effective proxy for price competition in a competitive market. Johnes and Cave (1994) note that existing methods of funding teaching in the UK tend to distort the quasi-market by overemphasising uniform prices and thus promoting cost equalisation and quality regulation. They argue for the possibility of a true market

driven by student buying power, which would eliminate the funding councils' role as purchasers.

A study of the implications of quality assessment and quality assurance undertaken by Henkel (1997) also found that there was significant movement towards the university as corporate enterprise, but in the context of a largely state-regulated market. The evidence of the Dearing Report (1997) has shown that there have been important changes, since Robbins in the nature of the relationships between government and the higher education institutions. In particular, there have been moves towards a stronger interplay of market forces, in order to increase competition between providers and thus encourage efficiency and an emphasis on standards and accountability.

According to the Report, these general trends have been reflected in higher education through the introduction of the new funding methodologies, new approaches to quality assurance and an emerging focus on the consumer rather than the provider. Finally the Report has anticipated that although the emphasis and the mechanisms may change over time, it is expected to be a continuing concern to promote efficiency, informed choice, quality and accountability over the next twenty years (Dearing Report, 1997).

In summary, in the preceding section we have tried to analyse the legislative and structural changes in higher education, during the last decade, in the UK and to interpret their implications on the relations between higher education institutions and their external environment. It is generally acknowledged that there has been a massification of higher education, an unprecedented knowledge growth and differentiation, as well as a shift towards market approaches in higher education and management.

However, most of higher education reforms were driven by government policies aiming to increase efficiency in service delivery and limit professional autonomy, by strengthening market forces and promoting managerial control. Strong pressures for academic autonomy, managerial efficiency and market competition underlie the changing patterns of control in the context of higher education. What really

characterises the changing context of higher education is the issue of power among the different interest groups: the academy, the state, the market.

“Who is the principal and who are the agents” (Williams, 1994: pp24).

Based on the above analytical review of the external changes in the UK higher education we can argue that higher education institutions are forced to operate in a market-oriented environment and to be transformed into organisations rather similar to corporate enterprises. Within this framework the state is acting as the “principal” increasing involvement and control in the shaping of the system. Within such a quasi-market conditions there is a radical cultural transformation, where higher education institutions sell their services to various markets and where students purchase higher education as a commodity rather than seek apprenticeship in the community of scholars.

Shumar (1995) has argued that it is unhelpful to see the rise of market forces simply in terms of a dialectic between collegiality and corporate bureaucracy. For Shumar the changes in the idea of the university are better explained as a process of “commoditization”. He has also argued that when higher education institutions respond to market forces by reframing their services as commodities, there is a steady change in their structure and ideology involving the erosion of the democratic and participatory ideal.

We shall next explore how higher education institutions respond to such external forces. Do the traditional values of university governance reinforce or hinder such external changes? The answer to such important issues will help us to conceptualise the internal changes in higher education system and more specifically the changes that have occurred in the role of heads of departments.

1.2 Internal changes

We have already examined the factors that have changed radically in recent years and shaped the external environment of higher education. We shall now go on to consider the impacts of the abovementioned changes on the internal functioning of

the higher education system. The focus on this section will be on changes of institutional governance structures in higher education. In many countries the traditional forms of higher education institutions' governance have been under pressure. The effectiveness of internal institutional decision making processes and procedures are under discussion, and in several countries governance structures have been altered quite substantially over the last few years (Boer, 1996).

This interest in the governance and management of higher education institutions has several causes. First, it can be seen as a result of a trend set in motion in the mid 1980s that emphasises a more market- oriented approach to the steering of higher education systems. Governments world-wide have attempted to introduce market-related elements into their higher education systems. Adapting institutional governance is one of the major policy issues in higher education, in the 1990s.

Second, it can also be regarded as a logical consequence of changes in the relationship between higher education and central government. For a long time, both the governance and the management of higher education were settled matters, subject only to incremental change (Maassen & VanVught, 1996), but since the end of the 1980s more far-reaching changes were introduced, as a result of the changed role of central government.

As Becher & Kogan (1994) have observed higher education in the UK has developed from an emphasis on largely autonomous institutions operating in the internal academic market (before 1980s), through a phase of strong central management (mid 1980s onwards) and only subsequently onto the external market (1988 onwards). Each one of the above phases is characterised by the dominance of a specific set of values influencing institutional governance, which higher education institutions must accommodate in their structural and operational system. For example, one such group of values is the professional, and derives from academic norms and aspirations. Another is the governmental and is concerned with the demands of the state and that of the economy. A third is that of the market as it seeks particular skills in its work force and particular forms of knowledge for conversion into wealth production. Finally, there is that of public and social utility at large whose interests may lie in increased educational opportunities as well as in the maintenance and

enhancement of a civilised society.

The recent history of higher education in the UK shows that there are cycles of such forces, where the one gains ground for a time over the other. Higher education institutions are experiencing changes in their governance due to the profound changes that have taken place in their external environment. These include, changes towards managerial in place of collegial forms, towards market alongside academic criteria, and towards output -based performance criteria in place of peer forms of evaluation (Becher & Kogan, 1994).

In a rapidly changing -and frequently threatening- social and political environment, where all aspects of higher education are being questioned -from sources of financial support to the character, quality and efficiency of institutional activities- it is timely to examine the managerial framework within which the purposes of higher education are realised. It will also be useful to explore some of the contradictions and dilemmas which the changing context of higher education has produced for this framework.

Several authors, e.g. Maugham & Silver (1987), Hirsh & Bevan (1988), have pointed to a confusion of understanding in relation to the terms used to describe various aspects of the managerial framework. Apart from the term “management” there are other terms commonly associated with it, such as “leadership”, “administration”(McKonkey, 1989) and -in the context of higher education, but not business- “governance” (Birnbaum, 1988; Adair, 1988). It is interesting to note that “management” is the term used mostly to describe senior posts in business, industry and some public sector organisations. Higher education has consistently preferred to use the term “leadership” and/or “headship” of its academic management, and the term “administration” for the management of its support systems and services (Middlehurst, 1993).

Following Adair (1988) and Kotter(1990), we define management as coping with complexity, and leadership coping with change. The functions of management are, therefore, to order and control, mainly so as to make an organisation efficient and effective within agreed objectives. Management may also exercise both these functions in the support of change in the organisation, but successful change cannot



be imposed by controlling; it is the task of leadership to clarify the direction of change and to make the members of the organisation willing, even enthusiastic partners in the change process. Lastly, administration is the function by which organisations can implement policy within a framework of established systems, rules and procedures. In this way, it can serve the purposes of either management or leadership (Middlehurst & Elton, 1992).

“Put epigrammatically: management controls, leadership guides and enthuses, administration serves” (Middlehurst & Elton, 1992: pp252).

Deciding whether or not “management” and “leadership” are appropriate terms in relation to academe is an extremely complex matter. The pluralistic nature of the university, its different functional forms, the various levels at which power and authority are exercised within it, all contribute to this complexity (Davies & Lockwood, 1985). The choice of an appropriate model of governance and within that model of governance the practice of management and leadership depend on the specific context in which higher education institutions operate. During the last decades this context has been shaped by the influence of external forces to change (see previous section), which in turn have altered the nature of institutional governance structures.

In the following paragraphs we shall try to analyse chronologically the changes that have occurred in the internal functioning of higher education and more specifically the changes in the relationships of the various levels of the system, namely the institutional, the departmental and the individual/role level.

1.2.1 Organisation of the UK higher education institutions - models of governance

Before 1992 most of the universities in the UK were established by royal charters as autonomous bodies and each has its own system of internal government. There are in fact many similarities between them. In the vast majority there are five principal officers, usually termed chancellor, vice-chancellor, chairman of council, treasurer and registrar, respectively, and two main bodies usually designated as senate and

council or court.

The first, chaired by the vice-chancellor is essentially an academic body drawing its representation from the professoriate and lecturing staff. The function of the senate is to deal primarily with academic issues admissions policy, curricula, examinations, research conduct and facilities for research, especially libraries, student progress and staff promotions. Their deliberations may well include consideration of the resources necessary for the effective academic conduct of the university and involve representations on such matters to the council but they do not usually determine, save at the level of faculties or departments, resource allocations. Over the centuries it has always seemed natural in Britain that, since a university's objectives are academic, academic policy should be determined by the academic staff, hence the senate is the supreme academic body (Association of Commonwealth Universities 1961 et seq).

The council is the supreme body in university governance and takes legal responsibility for the university's actions. Half of its members, so-called "lay" members, are selected from the public outside the university. They may be selected by virtue of the links between the university and the local authority, industry or commerce, from former graduates, or other members of the community. The rest are largely academics. The council is formally responsible for all appointments and promotions although relying almost entirely on the advice of academic or administrative committees. It is responsible for the material resources of the university, for the allocation to buildings, maintenance, academic and other activities, and for bidding for resources from government and other external sources (Association of Commonwealth Universities 1961 et seq).

The council represents the public face of the university. The chairman is almost without any exception drawn from the lay members and it is also usual for a treasurer to be appointed from amongst members with financial expertise and experience. The treasurer assumes responsibility for the university's financial affairs, although a bursar or finance officer and staff are responsible for the daily conduct of university finances (Association of Commonwealth Universities 1961 et seq).

In all universities below the level of the governing bodies there is a clear dichotomy

into academic and administrative activities. So far as the former are concerned the two commonest units have been traditionally, the faculties and the departments. There is an increasing tendency for intermediate units - schools - to be established, where a closely allied subjects formerly separate departments, have come together to form a larger unit and more effective structure (Association of Commonwealth Universities 1961 et seq).

Academic departments or their equivalent, are regarded as key arenas for the performance of a university's core functions, such as pure or applied research, graduate or undergraduate teaching, professional training or service to society. The concept of department has its deepest roots in the United States. The growth of knowledge in the last half of the 19th century led to a specialisation in scholarship. But specialisation and the emergence of disciplinary boundaries reflected also the emergence of the research spirit, as the central method for extending knowledge (Trow, 1976).

Specialisation along with the growth in size of American universities changed the role of the university president and led to the creation of departments. In particular the president could no longer define the curriculum and hire the staff but had to cooperate with other academic staff members. The department then was

“...as much as an organisational as an intellectual necessity, an efficient unit for making decisions about the curriculum, student careers, and the appointments and promotion of staff, that could no longer be made effectively or credibly by university presidents” (Trow, 1976).

Although this development was to a significant degree German- inspired, and thus partly oriented toward bringing the mission of research within the American university, the departmental structure, as it gradually evolved, had little to do with the German structure of chaired professors at the head of institutes. Where in Germany the discipline was represented by the chair- holding professor and his/her Institute, in the United States a more democratic ethos, a wider variety of functions and growing size led to the appointment of more than one professor in the same field, in the same university (Trow, 1976; Moodie, 1986).

The chair-based institutes evolved in most European countries at a time when universities catered to a small elite. Research activity was less complex than today and was easily undertaken by instructing a small number of students. The chairholder in the classical “European mode” of academic government (Clark, 1987) possessed absolute formal authority over his domain (Moodie, 1986).

During most of the first half of the 20th century, a chair or professorship indicated a package of distinctive characteristics. This is to say that, the title of professor signified the holder of the chair in a particular subject whose superior rank was accompanied by superior status, pay, authority, power and responsibility within his university as well as in the department of which he was the head and uniquely qualified representative (Halsey et al, 1971; Moodie, 1986).

The British universities constituted an intermediate case using the word department to denote what on the continent would have been termed a chair system. However, while the Germans generally established parallel institutes in a given field to accommodate two or more professors, the British increased the number of professors in existing departments. In Britain professors carried out the main burden of running the university since all of them were members of the senate.

The first major departure from the chair-based system had been to multiply the number of professorships. In the early 1960s the growth in the number of the students has led to a further increase of the proportion of professors. Within departments a democratisation process had taken place, through the establishment of staff-student committees or the forming of departmental boards including senior staff and representatives of junior staff and students (Moodie, 1986). The involvement of non-professorial staff in the decision making procedures through their membership in various policy committees, as well as the reduction of the head's power who was elected rather than appointed to this position, contributed to the establishment of a collegial system of institutional governance characterised by high departmental autonomy (Halsey & Trow, 1971; Moodie, 1986).

As Trow (1976) has pointed out the department is the central building block- the molecule of the university-as well as the central link between the university and the

discipline. Trow viewed the department as the link between an organised body of learning and the institution in which such learning takes place. The institution is regarded as a loosely co-ordinated aggregate of autonomous departments, which are supported by the university's resources in order to perform the variety of their functions (Trow, 1976).

In the classical models of higher education governance the prevailing ideal was that of the self-governing institution. The norms and values that characterised the whole functioning of the institution were those of academic freedom and autonomy. These values were determined either by single members of the academic staff or by academics collectively within their basic units (Becher & Kogan, 1994). This model of academic governance is often referred to as a collegium.

Collegial Model

The university as a collegium or community remains the most acceptable image among the academics (Davies & Lockwood, 1985). Indeed Harman(1990) also suggests that despite the heterogeneity of modern academic organisation, the “community of scholars concept remains a myth of considerable strength and value in the academic world”.

Surveys of academic staff show that they are driven mainly by the values of academic freedom and autonomy in what they do. One recent investigation found that eight out of ten of them were motivated almost solely by the intrinsic interests of their work (McInnis, 1996). Affiliation with an academic discipline remains very important to 93% of UK academics and 94% of Australian ones (Boyer et al., 1994); autonomy and self-determination of priorities continue to be vitally important to all academic staff. They continue to be an essentially “cosmopolitan” occupational group whose loyalties lie outside the organisation as well as within it (Ramsden, 1998).

In the collegial model, differences in status are based on seniority and expertise, rather than position, people interact as equals in terms of consultive rights in a system that stresses consensus, shared power and participative government.

Behaviour is controlled primarily through the groups' norms and through the acceptance of professional and intellectual rather than legal authority (Bensimon et al, 1989). Leaders in a collegial organisation are seen as "first among equals" as servants of the group. So the leader's task is to define the priorities, problems and goals towards which institutional effort and resources will be focused, to facilitate and encourage talent in the interests of the common good and to promote consensus within the community. A collegial model assumes a common or negotiated responsibility for institutional direction between the leader and his/her constituents. Leadership is thus a process of facilitation, relying on communication, consultation and persuasion (Cohen & March 1986; Wasser, 1990; Middlehurst et al, 1992).

A similar model defines the university as a professional organisation. (Handy, 1984). Its norms and values centre on the norms of its professional members who exercise considerable autonomy. Authority in the professional organisation is based on the knowledge and expertise and an ideal of shared governance. The leadership role has been defined in "action-centred" terms, as contributing to task achievement, to group maintenance and to individual development, as well as to the external domain through representation and interpretation of the institution, public relations and political manoeuvring (Adair, 1983).

However, such a traditional image of the university as a collegium has never been realised in its pure form in terms either of relationships between government and institutions or the internal governance of institutions (Kogan et al 1994). The collegial model assumes that resources can be secured from endowments or from the state which regards that the interests of society and of the academy coincide (Kogan et al, 1994).

In the early 1970s, before the ending of the quinquennial grant system, universities were independent of financial constraints. Acting as autonomous institutions they were free to set their own objectives and formulate their own programmes of research, scholarship, teaching and service to the society. Under the collegial model of governance the unit which makes the academic and policy decisions is not the state even if it gives the money, nor the institution even if it supports and houses the academics, but the academic department (Trow, 1976; Moodie, 1986).

Consequently, in such an autonomous system of academic governance the central government and the central authorities "...exercise their guidance with a light touch, and the strength of the system lay in the basic units" (Becher & Kogan, 1994: pp188). Up to the 1980s apart from the collegial model of university governance a rich set of images, each focusing on different aspects of the institution's functioning and suggesting different models of management and leadership has been produced. These are analysed briefly in the following paragraphs.

Bureaucratic Model

Descriptions of the university as a bureaucracy have concentrated on the administrative structures, systems of control, co-ordination and decision making. As Bensimon et al (1989) have suggested bureaucratic systems are hierarchical in structure and tend to be centralised; the leader at the top having final authority and holding most power. Bureaucratic perspectives tend to emphasise the rational aspects of the leader's administrative and managerial role and the skills necessary to perform the role. Leadership and management are seen as a process of establishing goals, acquiring and assigning resources to effect them, designing organisational structures and staffing them appropriately, analysing information to decide courses of action and then evaluating activities to assess goal achievement (Atkins & Brown 1986; Bensimon et al, 1989; Middlehurst, 1993).

In practice some universities resemble bureaucracies more closely than others and the image is better suited to parts of the organisation (e.g. finance, personnel, maintenance etc.), since the educational and academic aspects do not fit easily into a bureaucratic frame. In particular, hierarchy is a strong element in the governance of polytechnics which have developed a more business-like structure in their operations. Old universities on the other hand as mainly research oriented institutions have operated under a collegial structure, which seemed consistent with the knowledge generation and the nature of academic tasks in general (Middlehurst & Elton, 1992; Becher & Kogan, 1994).

Political Model

Baldrige (1978) pointed out that universities differ from other organisations since they are characterised by:

(1) Goal ambiguity

Universities have different constituencies- staff, students, the administration, the community, government, employers. As Baldrige (1978) has argued there is a lack of agreement on the importance of a variety of goals among these different constituencies. The goals of a university used to be phrased in vague terms. Goal ambiguity is typical of universities, and in times of scarce resources some groups within and external to, the university may promote achievement of specific goals at the cost of others (Baldrige, 1978).

(2) Professional staff

Academics like other professionals are characterised by considerable autonomy in their work, divided loyalty between the discipline and the institution, tensions between professional values and bureaucratic expectations, as well as peer evaluation of work.

(3) High level of autonomy of sub-units

Universities are characterised by the strength of their basic unit: the department. There are disciplinary cultures into which academics have been socialised. Academics find it often easier to talk to colleagues in the discipline elsewhere than to colleagues from other departments in their own university. Thus, communication across departments can be poor and individual and departmental goals may be pursued which are not necessarily in harmony with the institution's (Baldrige, 1978; Cohen & March, 1974; Clark, 1977).

(4) Part-time decision makers

Universities are also characterised by having part-time decision makers, in their councils, as well in its academic administrators and committees. This makes universities very different from business organisations (Baldrige, 1978).

(5) Environmental vulnerability

The environmental vulnerability of universities stems from the fact that most of the funds coming from the government and universities are very dependent on the autonomy governments grant and aware of the power of interference they have (Baldrige, 1978).

(6) Undifferentiated functions

In the basic units of the universities there is no differentiation in function between the various ranks in the academic hierarchy. Lectures like professors are expected to perform teaching and to do research, to engage in professional activities and to take administrative tasks.

Baldrige (1978) viewed academic institutions not as bureaucracies but as political organisations. He concentrated on a political perspective in decision making, assuming that power and conflict are essential features of organisational life because resources are scarce and must be allocated selectively and because individuals and groups differ in their values, beliefs, interests and perceptions of reality. Political organisations are characterised by fragmentation into different interest groups; organisational goals and decisions emerge out of a continual process of negotiation and bargaining with different coalitions (Baldrige, 1978). Leadership in the political organisation involves mediation or negotiation between shifting power blocks, building support from constituents and on fostering respect between interest groups. Political leadership is thus a process of problem solving, negotiation, interpretation and mediation (Middlehurst, 1992).

Organised Anarchy Model

Cohen & March (1974; 1986) present an image which for some has come to be seen as a stereotype of university functioning. Their organisational analysis acknowledges the complexity of institutional operations, the ambiguous goals, part-time decision makers and the constraints on rational choice in decision making. The connections between different parts of the organisation are loose and decisions are often the outcomes of unintended and unplanned activity.

This model assumes that leaders are heavily constrained by the spread of expertise, by the professional autonomy of academics, by inflexible structures, by lack of resources, by institutional status and traditions etc. The influence of leaders in this model is likely to be subtle and incremental, relying on negotiation, interpretation and persistence to achieve marginal changes towards desired outcomes (Middlehurst et al, 1992). Each of the above models provides a useful but partial perspective of the

university. They illuminate different aspects of its functioning and may be reflected in reality more in one institution than in another, or more clearly in certain circumstances, at particular times or under specific conditions.

In the 1980s, the decade of efficiency and effectiveness, governments world-wide pushed strongly for managerial accountability. In the UK, after 1981, when government funding was reduced, government formed the view that universities were incapable of rapid and effective response, due to their poor management practices (Trow, 1994). Following the Jarratt Report (1985) recommendations many changes have occurred in the internal operation of the British university and especially in the committee structure of most universities. These usually involve: a slimming down of the numbers of committees; a full review of the system, which included reassessing the functions, terms of reference and composition of each committee. Joint committees of senate and council (e.g. planning and resource committee), dealing with planning, resource issues and broad policy are increasingly common. Their purpose is to ensure a better integration between academic aspirations and financial realities.

This is a matter of increasing importance not only because government funding has both declined and become more directed during the 1980s, but because, since 1986, the University Grant Committee (and later the University Funding Council and the Higher Education Funding Council) required all universities to provide a university strategic plan, to be updated annually, concerning all its activities-academic and other. Approval of the plan was a necessary step in the funds allocation (Association of Commonwealth Universities, 1986 et seq). There was also an accompanying tendency to promote a more hierarchical style of university governance. A range of informal groups (e.g. Senior Management Groups) was formulated acting in parallel with the formal committee system, and they had great influence in the institutional management and decision making process (Middlehurst et al, 1992).

Jarratt (1985) anticipated that the role of the vice-chancellor would have to change from that of being responsible for the general conduct of the university and, through chairmanship of senate, implementing its approved policy, to one corresponding to a "...shift to the style of a chief-executive, bearing responsibility for the effective

management of the institution". According to Jarratt (1985) the vice-chancellor along with the lay members of the council and his senior management team should lay down the objectives of the university and the power of departments should give way to more corporate planning.

That has still not occurred widely but there is a tendency to appoint senior members of the academic staff, or non-university executives, for a limited term as pro-vice-chancellors, or assistant executive officers with almost complete responsibility for academic planning and development, including resource planning and allocation. (Middlehurst et al, 1992). In this, the universities are following the way of polytechnics, in which a range of managerial appointments, have for long been responsible to the director both for planning and execution of the various activities. Such internal changes represent a shift in the traditional forms of university's operation towards managerial values in its governance. These will be analysed next.

Management or Corporate Model

The characteristics of this model include: an explicit and visible institutional mission and educational and public service orientation. The central functions of the university focus on a "cluster of mutually reinforcing activities along academic or vocational themes" which change constantly in the light of evaluation and new opportunities (Davies et al, 1987). In the management model

"...objectives of higher education are set by the state, the system or the institution, through varying degrees of negotiation with academia... State power may be exercised directly, through the formal control over the curriculum or over senior academic appointments...and indirectly through the assertion of outcome measures and ex ante forms of evaluation...the managerial culture values competence in managing people and finance, accountability and evaluation" (Kogan et al, 1994: pp21).

During the 1980s, as a result of the Jarratt Report (1985) recommendations stating that

"...universities are first and foremost corporate enterprises to which subsidiary units and individual academics are responsible and accountable"

(par.3.41),

many features of the management model were mirrored in the higher education internal governing system. Power at the institutional level grew as a way of responding to economic and financial constraints.

“It was those institutions with strong leadership that seemed best able to survive the periods of cuts” (Sizer, 1987: pp19).

Middlehurst & Elton (1992) analysed the responses of the UK higher education institutions to the 1980s cuts and concluded that both universities and polytechnics had successfully met the immediate threats and difficulties that faced them during that period, but they had done this through increased managerialism. More specifically, universities moved away from the collegial model of governance and became more managerial, while polytechnics made the most of their existing hierarchical structures (MacNair, 1990; Middlehurst & Elton , 1992).

Miller (1994) in his research on the management and change in Australian, Canadian and UK universities, found that a corporate management structure and style was adopted by most universities. He pointed out that in most cases there was an overlay of different structures and pressures. In particular, he observed that there was a departmental and faculty administrative system, focused on heads of departments and deans. There was also a more or less powerful collegial system of academic assemblies, senates and councils, with associated committees. Finally, there was a developing central management system, with increasingly powerful, vice-chancellors and administrators with, in some institutions, appointed deans and ad hoc working parties whose role only partly articulates with older administrative and collegial structures. There was evidence from both senior and junior staff to suggest that crucial strategic decisions are being concentrated in a central management team (Miller, 1994).

Pratt (1994) showed that universities responded to external pressures by employing various managerial tools e.g. strategic plans, performance indicators, quality assessment systems etc. The universities, he continued, adopted an “executive” model of management which assumes that the university and the higher education system can specify objectives within which the tasks of the basic unit can be

specified. This model assumes also that the ability to specify these objectives and control over their achievements can be done through a hierarchy - through various forms of line management (Pratt, 1994).

A recent study (Henkel, 1997) of the impacts of policy reforms in the UK higher education suggests a significant trend towards “centralised decentralisation”. Most higher education institutions had moved to established strong institutional management structures, in particular to set up a senior academic management team in support of the vice-chancellor. More corporate strategies and structures for academic development were perceived to be needed to manage the implications of external policies (Henkel, 1997).

In most of the cases this meant the creation of new roles at the centre with well-defined responsibilities, beginning with pro-vice-chancellors (Scott, 1995). Equally noticeable across old and new universities was the proliferation of cross institutional and non-disciplinary academic support units e.g. quality assurance, staff development, etc. Personnel were often drawn primarily from administrators and occupational groups other than academics. In many cases the units’ role was described as to support departments. But they also generated policies for the university and some were active in promoting change in departments, extending in the strongest cases to redefining of departmental research agendas, so shifting the locus of initiative for development from departments to the centre, from the discipline to the enterprise (Henkel, 1997). It is evident that during the 1980s the institutional level has strengthened its power over the power of the departments. The model of the internal governance resembles that of a corporate enterprise: the institution is seen as a holding company designed to authorise and control the activities of its basic units (Becher & Kogan, 1994).

McNay (1995) has described university change using a model based on the degree of “tightness” or “looseness” on two dimensions: policy definition and control over implementation. He describes the “corporate” university as an organisation with tight control over both policy and implementation. Here the focus on loyalty to the organisation and senior management; the management style is commanding and charismatic. There is a crisis-driven, competitive ethos; decision making is political

and tactical. Standards are related to organisational plans and goals; evaluation is based on performance indicators and benchmarking. Students are units of resource and customers (McNay, 1995).

The concentration of power in the centre of the institution and the subsequent institutional control versus departmental autonomy is a reflection of the state control versus university autonomy debate (Williams, 1994). Pressures from the external environment and especially from a governmental ideology which promotes managerial values above the academic- that management is meant to serve- have made a shift of authority towards the institutional leadership: they have reduced the power of the departments and their individual members in favour of the institution (Becher & Kogan, 1994).

It is clear that the changes in the relationship between governments and higher education institutions have led in a number of countries to a strengthening of institutional governance at the expense of departmental autonomy (Boer, 1996). However the above analysed managerial movement in the governance of higher education institutions is not a passing phase of the UK higher education recent history, but signalled the emergence of a very different set of strategies, those of the market, strongly promoted by the government of that time.

Market or Entrepreneurial Model

What differentiates the market emphasis of the late 80s and the 90s from that of the management is its implication that the prevailing values must be set by the various clients of the higher education system rather than by those who generate the goals (Becher & Kogan, 1994). Higher education success is no longer related solely to educational values but to economic and market. Institutions as well as academic departments within them compete with one another for students, for funds, for staff and perhaps survival (Pratt, 1994).

The organisational characteristics of the entrepreneurial university feature a core of principal academic disciplines organised in departments and faculties, “for the efficient processing of students”, with the university operating as “parent

organisation” or “holding company” for these decentralised budget centres led by academic managers (Davies et al, 1987). Clark (1993) writes about innovative European universities that are characterised by increased entrepreneurship; conflicting academic staff and administrative values; and greater diversification of institutional funding. He points to a shift of cutting-edge institutional action from the liberal arts core to an entrepreneurial periphery.

In the UK, Williams (1992, 1995) describes broad patterns of financial change which reduced government funding for universities and encouraged academic staff to bring in increased external money for their units to survive. Gibbons et al. (1994) study how changes in funding work to bring the university and its academic staff in line with economic production and the managerial revolution taking place as a global economy develops. Although they emphasise the changes in science, engineering and professional schools, which they now see as the centre of the university, they also note that segments of all fields, including the social sciences and the humanities are aligning themselves with the market. Do more with less, increased competition, reduced government funding and search alternative sources of raising money are the imperatives of the new business-like view of institutional operation and management (Ramsden, 1998).

The 1988 Education Reform Act and the subsequent abolition of binary line in the 1992 Act aimed at introducing business-like attitudes into the higher education institutions, and changing their internal structures, functions and operations (Trow, 1994). Putting the polytechnics on a business-like basis would have seemed to politicians an easier and more realistic mission- since they had operated within less autonomy and more hierarchical structures- than accomplishing the same transformation in the universities (Trow, 1994).

Chaston (1994) in his study on “Strategies of management in the new universities” has observed that the internal structuring of new universities is that of a number of faculties or schools responsible for the delivery of undergraduate programme under the overall direction of a senior management team led by the vice-chancellor. A possible analogous structure, he continued, in the private sector might be that of considering the vice-chancellor’s office acting as a holding company, while the main

board and the faculties representing the subsidiary companies within the operating group. Chaston also argued that in such a scheme the individuals with the greatest knowledge of how new strategic philosophies are being developed and the degree to which senior and middle level managers are collaborating over implementation of revisions in management processes will be the faculty deans (Chaston, 1994).

Trow (1994) stated that the government's intention, by ending the binary system, was to permit the application of many of the governing structures and mechanisms developed in the polytechnics governance system to the old universities as well. A recent international study (Henkel, 1997) of the implications of policy reforms in the higher education, finds also that higher education institutions are responding to current pressures with policies and structures that draw substantially on post-bureaucratic or new public management thinking. Particularly, in the UK the results show a significant movement towards the higher education as market-like enterprise in the context of a largely state-regulated market.

Slaughter (1997)-in her analysis of how Australian, Canadian, the UK and the USA developed national higher education policies that responded to the emergence of global markets, argued that globalisation has created new structures and accelerated the movement of academic staff and universities toward the market.

“We think the 1980s were a turning point, when faculty and universities were incorporated into the market to the point where professional work began to be patterned differently, in kind rather than in degree. Participation in the market began to undercut the tacit contract between professors and society because the market put as much emphasis on the bottom line as on client welfare. The reason for special treatment for universities, the training ground of professionals, as well as for professional privilege, was undermined, increasing the likelihood that universities in the future will be treated more like other organisations and professionals more like other workers” (Slaughter, 1997: pp5).

Not all institutions responded in the same way to market ideology, but common features in their internal functioning, were observed e.g. strong leadership combined with maximum devolution of responsibilities or “centralised decentralisation”

(Hoggett, 1991); the substitution in some contexts for rules and procedures (Bleiklie, 1996); flexible forms of organisation and varied conditions of employment between occupational groups (Bleiklie, 1994); the promotion of collective identity, though combined with individual responsibility. At the same time, institutions were increasingly reliant on systematic administration by explicit and generalised rules and procedures; the analysis of work into distinct and well defined units; the functional differentiation of staff (Henkel et al, 1997).

Slaughter (1997) pointed out that universities and colleges seemed to be changing their revenue-generating patterns, moving from funding by general public means toward higher tuition and grants and contracts, private gifts and other competitive sources of money. Very generally, it can be argued that during the late 1980s and 1990s universities have tried to compensate for diminished government revenues through liaisons with business and industry, through partnerships focused on innovative product development, and through the marketing of educational and business services (Slaughter, 1997).

There is evidence (Middlehurst et al, 1992; Kogan et al, 1994; Fulton, 1996; Henkel et al, 1997; Ramsden, 1998) that higher education institutions adapt successfully to external pressures and changing circumstances by adopting many elements of a managerial and market ideology in their governance. The changes between the central level and the institutional level of higher education system are reflected in the resulting pattern of relationships between the institution and its basic units, the departments.

More specifically, as the British government moved from its role as facilitator to one of leading the system, the self-governing institutions became subordinate to the central government and its funding agencies. They are required to submit detailed academic plans, follow instructions and work within the frameworks of tight policies and directions imposed by the central authorities of the system. As a result more authority and power is being drawn toward central institutional leadership and policies are laid down at the centre for the pursuit by those at the periphery (Kogan et al, 1994).

It is evident that the traditional view of the university as a kind of administrative arrangement for co-ordinating the activities and providing basic support services for the autonomous department (Trow, 1976), has given way to the corporate market-like image of institutional governance, which may be contrasted with the classical collegial concept of university operation. According to McNay (1996) survey results of university change in the UK and Australia, there was a decline in the culture of the collegium and an increase in the corporate and enterprise cultures.

However, the long term consequences of this cultural shift remain to be worked through. Whether higher education institutions will succeed in preserving the best features of the old elitist system in conditions of open market and free competition remains to be seen. "Have higher education institutions bought their short term survival by mortgaging their long term future?" (Middlehurst & Elton, 1992).

We have stressed at the outset of this chapter that in order to analyse the British higher education system and to understand its complexity, we should divide the whole system into four discrete levels based on Kogan & Becher (1994) model. Each of the four levels, namely the central, institutional, departmental, and individual, is characterised by a different set of values, norms and operations (Becher & Kogan, 1994). In the previous subsections we managed to examine the changes that have occurred, during the last decades, into the first three levels of the higher education system. We shall now turn to illustrate the effects of the external and internal changes on the final level of the system, that of the individual academic, with particular emphasis on the head of department, who is the main subject of our research.

1.3 Changes in the role of heads of departments

Restructuring in the UK universities as a response to external pressures has increased the level of managerial responsibility vested in head of departments. In the 1980s, government pressure for improved efficiency and accountability in university governance and increased public emphasis on the value of university outcomes to the community and to the economy, resulted in two major reports: the Jarratt Report

(1985) and the Sizer Report (1987). These reports contain direct recommendations concerning the changing role of heads of departments.

The Jarratt Report had considerable implications for senior academics and their role within the management of their institution. With reference to head of department, the report concluded that they should be accomplished academics, but also be good managers. In other words they are to be budget-holders, capable of managing and budgeting resources, in accordance with an agreed academic and financial plan and with responsibility for the plans outcomes. They undertake major personnel functions, including staff management, appraisal and selection. In addition, they continue their traditional roles representing the department internally and externally, promoting discipline, teaching and research as well as bearing their share of committee responsibilities on behalf of the university.

The most problematic recommendation, however, as was suggested by Middlehurst (1988), was the notion of “super don”, where the head should ideally combine the qualities of effective manager and an academic leader.

“...combining the two roles is often difficult, conflicting and always demanding. Many heads regard the increasing responsibilities and accountabilities as line managers impossible to perform effectively without damage to the role of teacher and researcher, not to mention the impact on collegial relations within department and sometimes domestic life and personal health” (Middlehurst, 1988: pp140).

What are then the qualities which a head must possess? The most novel and radical proposal of Jarratt’s Report related to these ideal qualifications of a head and are set out in the following paragraph (the two brief bracketed comments are made by Moodie in 1986):

“There is a dilemma which can arise in the selection of a head of department. The headships of departments are key appointments. Ideally the individual should be both a manager and an academic leader. However the most eminent and able academic, judged by the standards of research or teaching, is not always the person most fitted to manage a department. We take the view that it is preferable to retain the two functions in one person.

[Up to this point few would disagree. The departure from the accepted view occurs in the succeeding sentence]. In circumstances where this is impracticable, we believe the head of department must possess the requisite managerial capabilities and that he should be encouraged to delegate some part of the responsibility for academic leadership to others...[In the past it was management that was more usually delegated] (Jarratt Report, 1985, paragraph 3.70a).

In some recognition of the fact these “super dons” may not be able to maintain the pace indefinitely, they are encouraged only to serve in office for three to five years. This has implications for planned management succession and relevant training earlier in an academic career (Middlehurst et al, 1989). Fixed term and rotating headships have been a long-standing recognised issue internationally. There is much in favour of this arrangement. Lockwood (1985) favours the part-time status of the senior academic management as found in Britain. He claims that the continuing involvement in academic activities is necessary for the heads’ own careers, helps them to remain in close contact with the activities and personnel, and to retain the confidence of the academic staff. On the other hand frequent changes in the headship may result in gaining little administrative expertise and become a disadvantage in the department’s negotiations and continuity.

The second important report that had an impact on the internal functioning of the higher education institutions as well as on the academic leadership roles was the Sizer Report (1987). The Sizer Report draws conclusions from the responses of nine universities to the 1981 cuts in their recurrent grant. It illustrates changes that were made in internal structures and processes in order to respond quickly to conditions of financial stringency, contraction and changing needs. These changes were undertaken before publication of the Jarratt Report. Out of the analysis of the nine universities’ responses twenty “Managerial Guidelines for vice-chancellors and principals” are identified. Many of them are concerned with the development of structures and procedures. However others are likely to have strong implications for management and leadership roles.

With reference to head of department the Sizer Report recommends that the

university leadership should:

“Develop detailed departmental profiles; recognise the changing more demanding and at times conflicting managerial and representative roles of heads and the need for periodic replacement; ensure heads do not neglect staff appraisal and development by implementing formalised departmental and university systems” (Sizer, 1987a: pp366 &367).

Additionally Sizer (1987) in his effort to identify the changing roles of academic leaders concluded that:

“The roles of chairmen and heads changed substantially as a result of the financial reductions. They were under constant and at times conflicting pressures from the administration and their own staff. They became now involved in planning and resource allocation issues and in protecting their department’s interests. Their staff management role became more demanding and critical. Their own teaching, scholarship and research inevitably suffered. Some were unable to cope with the extra demands and the additional stress. They had insufficient time to respond to staff development needs and required more administrative support. There was a widespread belief that headships should rotate about every four to five years if the leadership commitment was to be maintained and the pressure coped with” (Sizer, 1987a: pp368 & 369).

The impact of change on the responsibilities of heads was also presented in Middlehurst’s (1992) research about the changing roles of senior university staff:

“heads of departments reported a decrease in their academic effectiveness through increased administrative burdens generated by requests for information from numerous external agencies as well as by internal requests associated with planning and forecasting or with marketing, financial or quality control and with legislative requirements. They also noted changes in the balance of their own activities (towards management and away from teaching and research as well as changes in the balance of academic staff activities -an increased emphasis on research (encouraged in part by the UGC/UFC selectivity exercises) and more recently on teaching quality” (Middlehurst, 1992).

The effects of the 1988 Education Act and of the abolition of binary line in 1992 were an increase in the managerial burdens of academic leaders and other academic staff, as well as a reduction in career satisfaction. In Carroll & Cross's (1989) survey of stress in universities, increased stress was reported by over three-quarters of the academics, with 62% expecting their jobs to be yet more stressful in the future. Nearly half expressed the view that job satisfaction had been lower in recent years, with fewer than a quarter indicating higher levels of job satisfaction than previously. Sources of job dissatisfaction included conflicting and increased work demands, inadequate resources, the absence of promotion prospects, a lack of public recognition, job insecurity, a lack of autonomy and isolation from colleagues (Carroll & Cross, 1989).

There is also some evidence that one effect of the 1980s was a considerable loss in collegiality across the higher education system, with a resulting loss of a sense of ownership and shared professional responsibility for the operation of the institution. The encouragement of competition at all levels, both intra and inter institutional, the pressure for performance-related pay and the deterioration in communication between centre and units have constituted an active discouragement of collegiality, leading to a loss of morale and trust in many institutions (Middlehurst & Elton, 1992).

As research becomes more important in former polytechnics their hierarchical management limits the freedom which is the appropriate condition for the prospering of research and this has already led to frustration in polytechnics (Middlehurst & Elton, 1992). Indeed, polytechnics have always had stronger central directorates and the academic boards were correspondingly weaker than those in universities. Under the Education Reform Act (1988), the need to account to local education authorities has gone. However the managerial culture in their governance remains dominant. Faculties or schools are often larger and more heterogeneous in function than the university ones. Deans are often full time administrators, working in hierarchical relationship to the director, and less likely to occupy the role of a convenor of colleagues than some heads or chairmen of university departments, schools or faculties (Becher & Kogan, 1994).

In both cases -university or polytechnic- the components of collegium and hierarchy are present but what differentiates them is the balance between these cultural images (Kogan & Becher, 1994). As a consequence of the duality of hierarchy and collegium higher education institutions contain systems of executive roles and systems of committees.

“The executive structure links the head of the institution, the heads of basic units and individual members of teaching staff. This structure of mainly part time academic managers is closely interlocked with the full time administrative system staffed by career administrators and headed by such senior permanent officials as the registrar and bursar” (Becher & Kogan, 1994).

The university vice-chancellor or polytechnic director and each member of the executive hierarchy has thus been, at one and the same time, required to be a leader but the first among equals within the institution; an entrepreneur with external funders and, sometimes, within the university or polytechnic itself; an administrative service-giver to those who maintain the primary tasks and operations of the institution; and a norm-setter, particularly for those requirements not professed within the existing basic units (Becher & Kogan, 1994)

The specific nature of the restructuring of higher education and its impact on the various roles and working conditions, at the individual level of the university's structural system, may be a source of increased stress and anxiety. As Miller (1995) has observed there is an increased density and heightened bureaucracy within modern universities, which profoundly affects the day-to-day lives of staff. Participation, communication and policy making have all become more complex and difficult as the university administration moves typically to a three-tier framework : the departmental, school or faculty committee structure; the collegial system of academic committees, assemblies and councils; and the centralised management system, with the increasingly powerful vice-chancellor and senior management team (Miller, 1995).

This has resulted, among other things, in greater demands on all staff in terms of

paperwork and administration, course analysis, evaluation and review, action planning and development, expanded quality procedures, the need to generate outside income and so on. With the introduction of market forces in higher education system and the subsequent growth of entrepreneurial expectations almost all institutions and their staff are under pressure to widen their range of tasks.

Indeed in most higher education institutions it is no longer enough to be a committed teacher and /or researcher. As Kogan et al (1994) have argued there are expectations, legitimated in promotion and appointments criteria, that academic staff engage in a wide range of activities, some extending into the wider community. They have to contribute to course and departmental committees and initiatives, to involve themselves in faculty and eventually in institutional affairs. Some must demonstrate leadership by initiating, co-ordinating and implementing policies and programmes. They may be impelled to be a prominent member of their professional or disciplinary association, engage in industry, government and community activities, liaise with schools and employers (Becher & Kogan, 1994).

Especially under the current conditions of financial uncertainty academic staff and institutions are encouraged to direct their efforts toward programmes and research that intersect with the market. Academic staff have to compete for funds from external resource providers and become involved in market like efforts. This contemporary reality in which academic staff expend their human capital stocks in competitive situations has been termed as “academic capitalism” (Slaughter, 1997).

“...we call institutional and professorial market or market-like efforts to secure external money academic capitalism...in these situations university employees are employed simultaneously by the public sector and are increasingly autonomous from it...they are academics who act as capitalists from within the public sector...they are state-subsidized entrepreneurs” (Slaughter, 1997:pp8,9).

While not all academics pursue all of these activities, many are expected to engage to a significant degree in many of them, to the point where they may feel distracted from the main traditional academic tasks (Becher & Kogan, 1994). The Carnegie International Survey of the academic profession (1992), which studied academics in

14 countries, found nearly universal and significant alienation of academic staff from administration. There is a generalised lack of trust of administrators, and a feeling that the academic profession is losing its autonomy.

Lewis & Altbach (1996) based on the data of Carnegie International Survey argued that

“if there was a “golden age” for the professoriate it has obviously passed. Academic institutions are increasingly seen by policy makers and opinion leaders as large enterprises which should be managed by the same criteria applied to other sectors of the economy. Our analysis shows that the core of the university, the academic staff, don’t feel comfortable with this view. As a result, they are increasingly alienated from their institutions...if the academic profession remains alienated from institutional leadership and from current changes in higher education world-wide, it is unlikely that higher education will move into the 21st century on a positive note” (Lewis & Altbach, 1996, pp258).

It is evident that the growth of central authority in higher education institutions as well as the shift towards market criteria in their operation have changed the conditions and the nature of academic work, especially at headship level. Department head represents one of the most complex positions in today’s university. It is unique, without common management parallels and equally important in providing the critical link between the administrative requirements of the university and the academic staff values of the academic department (Gmelch, 1993).

Under the recent pressures for stronger institutional management and the resulting loss of departmental power in favour of the institution (Kogan & Becher, 1994) the head of department position is characterised by high levels of role conflict. In the current and complex environment heads must serve as buffers between the individual aspiration of the academic staff, and the press for efficiency, quality and accountability that come from the institution’s strengthened management/leadership executive hierarchy.

In the past deans were not thought of as possessing managerial authority over heads

of departments. Instead they would have to persuade basic units to make collective decisions to be put into action. Unit heads were equal in status, with an equal voice in senate. Characteristically, the deans would work within small oligarchic mechanisms (such as deans' or heads of schools' meetings) and then assert their views collectively, with the support of the vice-chancellor, when matters arose in the senate or its committees (Becher & Kogan, 1994).

They might have to depend for the success of policies which they regard as in the collective interest, but which the basic units left to themselves would not agree, on being present at key meetings, on developing political expertise and on exercising it in the various committees to which they had access. At any one time, however, the decisions reached by deans could be changed or challenged within equivalent meetings of heads of basic units, or in the course boards at which members of basic units were in the majority or in resource committees where the deans themselves might not be a dominant group. So even their informal leadership might be exercised with difficulty (Becher & Kogan, 1994).

The picture given above has changed as a response to external circumstances and “the infrastructure beneath the head of an institution has become correspondingly stronger” (Kogan & Becher, 1994).

Consequently, heads of departments have to deal with the various conflicting forces stemming from the different internal operation modes, running through the system of the institution (e.g. collegium, bureaucratic and market) by finding ways to satisfy the various constituencies (e.g. staff, students, central administration, state, agencies, employers etc.)

Despite the recognition of the department heads as major determinants of institutional success little research has been conducted to investigate the role conflict they might experience as a result of performing headship's multiple and potentially conflicting role requirements. The purpose of the research reported in this thesis is to examine the degree and the nature of role conflict experienced by heads of departments, as well as to determine how the head's role conflict factors are associated with specific institutional, interpersonal and personal characteristics. In the following chapter we shall analyse the role conflict phenomenon in the private as

well as in the higher education sector. However, particular emphasis will be given on the role conflict phenomenon at university departmental level.

Chapter 2: Role conflict phenomenon

The pressures and the developing demands on heads of departments point to the problems and conflicts of headship. One of the main problems is the potential for role conflict experienced by heads in performing their duties. Role conflict may arise as a result of the nature of the position which carries a dual identity as a professional academic and as a leader and manager. The fundamental differences between these roles of professional academic and department head as well as the associated differences in job demands make the simultaneous performance of the two roles very difficult and may increase the level of role conflict experienced by them.

The potential conflict between the traditional collegial culture of the academic department and the managerial demands of governance makes academic department a natural field setting for the study of role conflict. In order to facilitate the presentation of role conflict phenomenon our analysis of the relevant literature is divided into the hypothesised antecedents and consequences or outcomes associated with role conflict. Several aspects of the organisational context and several individual characteristics serve as potential antecedents, while affective and behavioural reactions serve as consequences.

However, before ascertaining the various antecedents and outcomes of role conflict, we must first attempt to conceptualise and define the role conflict variable. In the following paragraphs, therefore, the definition of role conflict, as well as the definitions of various variables related directly to the role conflict construct (e. g. role stress, role ambiguity, role overload) will be presented.

2.1 What is role conflict

Since the 1950s there has been a significant body of literature and research on role theory, especially the constructs of role conflict and role ambiguity, trying to describe and explain the stresses and conflicts associated with membership in organisations (Van Sell et al , 1981). In particular, large scale organisations have become a subject of sustained interest to social scientists for many years. Much of life is lived in organisations and the quality of extra organisational life is to a

considerable extent organisationally determined. Studies concerning organisations correspond to two rather different lines of organisational research, theory and application. One has to do with productivity. Research in organisational productivity looks for differences between effective and ineffective organisations, high producing and low producing work groups, successful and unsuccessful supervisors, motivated and unmotivated workers. Theories that direct from such research concentrate on explanation of organisational effectiveness.

During the late 1950s research had begun to focus on the other major aspect of organisations- their human membership and the effects of organisational demands and opportunities on individual members. The path-breaking work of Kahn et al (1964) on role theory, was followed by many studies which have attempted to identify some hypothesised form of stress in organisations and to determine its effect on individuals. In order to fully understand the various stresses and conflicts confronted by individuals in an organisation context, the constructs of “role”, “role stress”, “role conflict” and their relationship to each other should be clearly defined.

2.1.1 The definition of role and the role episode model

According to role theory a formal organisation is a system of positions and their associated roles. Within an organisational context, the term “role” can be defined as a set of expectations applied to the “focal person” (the incumbent, the person who occupies a particular position) by him/herself, as well as by the “role senders” (the persons within and beyond an organisation's boundaries, who are sending the expectations to the incumbent) (Van Sell et al, 1981).

The total number of the role senders constitute the incumbent's “role set”. Kahn et al (1964) defined “role set” as the set of other positions in the organisation with which a given focal person interacts in the course of accomplishing his/her organisational role. Within an organisation, members of the role set have expectations and preferences regarding the focal person's behaviour. These role expectations may be

communicated to the focal person, at which time they may become role pressures, which potentially structure his/her behaviour (Kahn et al, 1964).

A basic assumption made by role theorists is that an individual, in performing his/her various roles, is highly affected of the actual and/or perceived reactions of a subset of other individuals in his/her environment. In particular, organisations are composed of interdependent positions. Occupants of these positions are exposed to the expectations and social pressures of other organisational members with whom they are interdependent. The main argument is that in any given position, the occupant's behaviour is influenced and constrained by the social pressures emanating from other persons in his/her role set.

In many instances, however, the incumbent personalises the position so that individuals in the same position will exhibit different behaviours (Graen, 1976). It is this range of freedom in role performance which allows people to fill a role without experiencing role conflict (Merton, 1966; Komarovsky, 1973; Van Sell et al, 1981). Kahn et al (1964) in their effort to explain how a role is influenced and enacted, developed the following role episode model

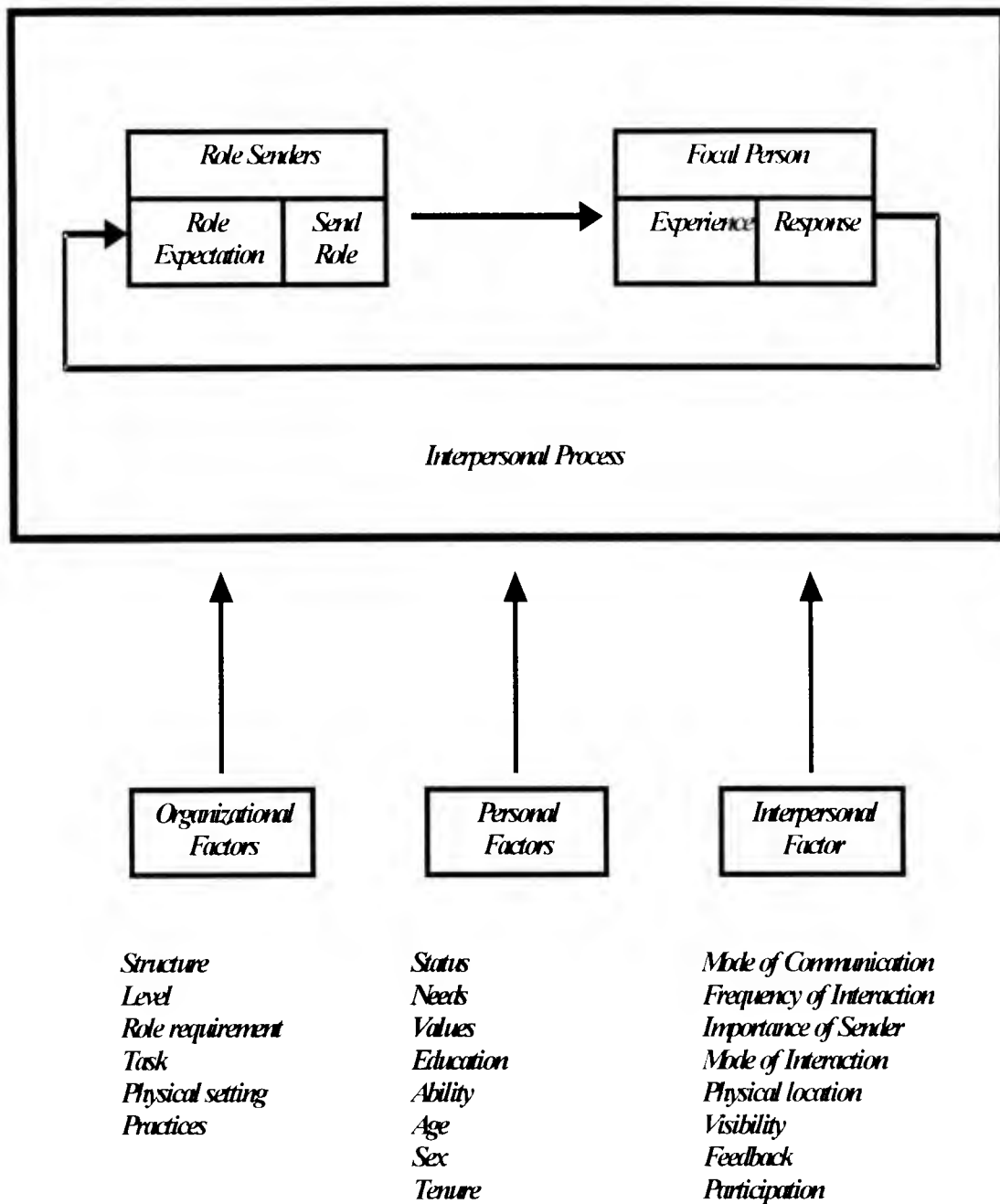


Figure 3 The role episode model (Kahn et al., 1964)

The model depicts the interpersonal process between the person being sent expectations (the focal person) and those sending the expectations (role senders). In addition, the model incorporates organisational, personal, and interpersonal factors which affect the role episode. The organisational factors include structure, level in the organisation, role requirements, task characteristics, physical setting, and

organisational practices. The personal factors (which can be applied to both the role senders and the focal person) refer to such variables as an individual's age, sex, and tenure in the organisation. The interpersonal factors in the relationship between role senders and the focal person include frequency of their interaction, mode of communication, importance of senders to focal person, physical location, visibility, feedback and participation between the senders and the focal person. The role senders can be the focal person's supervisors, clients, co-workers, or subordinates. All three sets of factors may affect the role episode, by influencing the role senders, the focal person or the relationship between the role senders and the focal person.

Individuals frequently are confronted, however, with situations in which they may be required to play a role which conflicts with their value systems or to play two or more roles which conflict with each other. The single or multiple roles which confront the individual may not be clearly articulated in terms of behaviours or performance levels expected. The former situation is referred to as role conflict and the latter as role ambiguity (Kahn et al, 1964). An attempt to define these variables in more concrete terms would seem to have considerable merit.

2.1.2 The definitions of role conflict, role ambiguity and role overload

Role conflict and role ambiguity have for many years received increased attention as the main variables in role stress theory. In some research, however, another variable the so-called role overload was also studied as a separate dimension of role stress. Before focusing solely on the role conflict, which is the variable under study, it is useful here to give the definitions (as they have been conceived in the literature) of all these role stress factors.

Generally, role ambiguity has been defined as the degree to which clear information is lacking regarding: (a) the expectations associated with a role, (b) methods for fulfilling known role expectations, and /or (c) the consequences of role performance (Kahn et al ,1964; Graen, 1976). In other words, role ambiguity could possibly take one or all of the following forms: (a) information is unclear regarding which

potential role expectation: A, B or C, should be performed; (b) it is understood that expectation A should be met, but information is unclear regarding what behaviour will in fact yield A; (c) the consequences of behaviour A are unclear (Van Sell, 1981).

Kahn et al (1964) and Katz et al (1978) defined role conflict as the simultaneous occurrence of two or more sets of pressures, such that compliance with one would make compliance with the other more difficult. Building on Kahn et al, Rizzo et al (1970) defined role conflict in terms of the incompatibility of demands in the form of conflict between organisational demands and one's own values; problems of personal resource allocation; and conflict among obligations to several different people. This conceptualisation has been adopted in numerous subsequent studies.

Van Sell et al (1981) in their attempt to integrate the literature on role conflict defined role conflict as the incongruity of the expectations associated with a role. Several types of role conflict have been identified: (a) intra-sender role conflict - incompatible expectations from a single role sender; (b) inter-sender role conflict - expectations from one role sender which are incompatible with those from another role sender; (c) person-role conflict - incompatibility between the expectations held by the role incumbent and the expectations otherwise associated with his/her position; (d) inter- role conflict -role pressures stemming from one position incompatible with the role pressures arising from a different position; and (e) role overload- expecting the role incumbent to engage in several role behaviours, all of which may be mutually compatible in the abstract within too short a time period (Kahn et al, 1964; Rizzo et al 1970; Miles et al, 1976).

Erera (1991) has tried to capture the multivariate nature of role conflict and provided the following definition:

(1) incompatible policies defined as conflicting expectations and organisational demands in the form of incompatible policies; (2) inter-role conflict defined as conflict between several roles for the same person which require different or incompatible behaviours as a function of the situation; (3) inter-sender role conflict defined as conflicting requests from others; (4) role-overload defined as conflict between the time resources or capabilities of the focal person and the defined role

behaviour; and (5) person- role conflict defined as conflict between the focal person's internal standards or values and the defined role behaviour. Of these five, incompatible policies relates to the impact of organisational control; inter- role and inter- sender role conflict relate to the occupant multiple role senders (which include superiors, peers and subordinates); role overload relates to the quantitative amount of work; and person- role conflict relates to the role occupant personal attributes via his/her role.

Role overload has been conceptualised as the incompatibility between work demands and the time available to fulfil those demands (Rizzo et al, 1970; Caplan, 1971; Beehr,1976). Kahn (1964) defined role overload as the amount of pressure felt to do more work, the feeling of not being able to finish an ordinary day's work in one day, and the feeling that quantity of work interferes with its quality. Newton et al,(1987) discussed time based incompatibilities as a key dimension of role overload; role overload is perceived to exist in those cases in which the role occupant feels that he/she has more work than can be completed in the time allotted. Bacharach et al (1990) conceptualise role overload in terms of the professional's perception that he/she is unable to complete assigned tasks effectively due to time limitations (e.g. the conflict between time and organisational demands concerning the quantity of work to be done). We shall try next to determine role conflict relationship to the other role construct variables, found in the relevant literature, viz. role stress, role ambiguity, role overload.

2.1.3 The relationship between role conflict and:role stress, role ambiguity and role overload

Role conflict is regarded as a critical variable in role stress or occupational stress theory, which in turn, represents the major theoretical development of the stress field in Organisational Psychology area. Reviewing the large number of studies on role stress and role conflict concepts it becomes clear that, there is a need to clarify the relationship between the two constructs, in order to comprehend their nature and their associated antecedents and outcomes. So the question, which we shall try to answer next is “how does role conflict relate to role stress?”

The field of role or occupational stress is multidisciplinary, including not only industrial and organisational psychology but also medicine, engineering and clinical psychology among others (Beehr et al, 1987; Jex et al, 1992). The construct of role stress has been extensively investigated either as a general concept, in the majority of relevant studies, or as a multidimensional phenomenon analysed in its specific four forms or types, (namely: role conflict, role ambiguity, qualitative and quantitative overload), in a much smaller number of studies.

Role stress research has been characterised by lack of agreement about important terms and constructs (Jex et al, 1992). The importance attributed to role stress as a set of constructs is largely due to the work, in the early 1960s, by members of the Survey Research Center and the Research Center for Group Dynamics, both of the University of Michigan (Kahn et al, 1964). In developing role stress theory, the major concern of the Michigan groups was to define role stress constructs and to examine how role stress might arise. A secondary concern lay with investigating the relationship between role stress and psychological strain, since establishing a stress-strain relationship would corroborate the importance of role stress constructs (Newton, 1987). But the primary interest was quite naturally with role stress itself and the factors predictive of it, as a careful examination of the valuable work of Kahn et al (1964) reveals. In 1974 Kahn carried out a research programme on "social environment and mental health" and presented the following framework as a basis for the development of mental health theory.

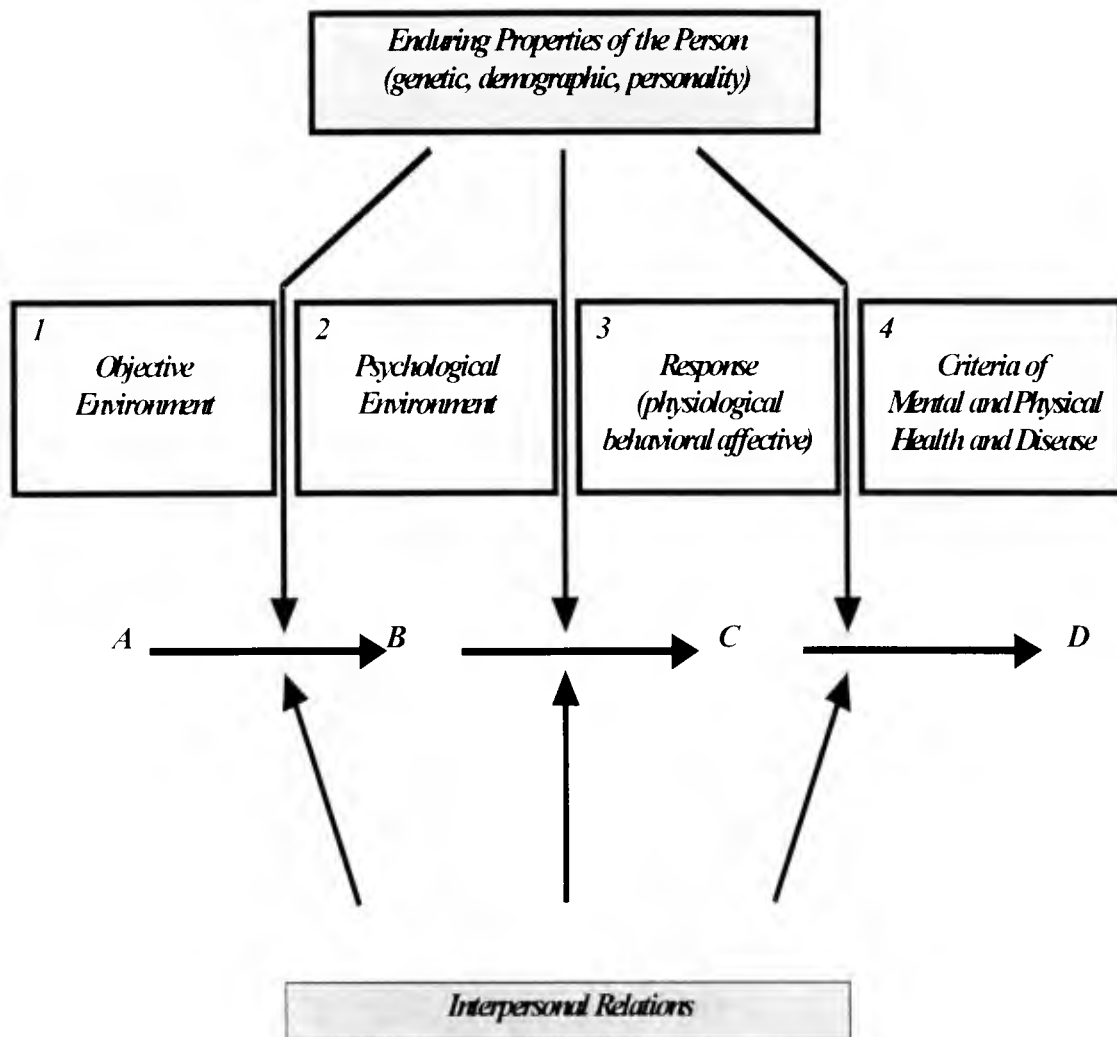


Figure 4 Theoretical framework: social environment and health (Kahn et al., 1974)

This framework clarifies what constitutes an adequate explanatory sequence: a chain of related hypotheses, beginning with some characteristics of the objective environment, and ending with some criterion of health; specifying the intervening variables in the psychological environment and response categories; and stating the ways in which this causal linkage is modified by the differing characteristics of individuals and their interpersonal relations.

In order to clarify his theory Kahn (1974) gave an example within the subject of job stress and more specifically, he used the role conflict variable. Hypotheses of A to B category have to do with the effects of the objective environment on the

psychological environment (the environment as the individual experiences it). He argued that people whose jobs require them to engage in transactions across the organisational boundary (a fact in their objective environment) more often report that they are subjected to incompatible demands, viz. they are exposed to role conflict (a fact in their psychological environment). Hypotheses of the B to C category relate facts in the psychological environment to the immediate responses that are invoked in the person. For example, the perception that one is subject to persistent conflicting demands on the job is associated with feelings of tension. The C to D category deals with the effect of such responses on criteria of health and illness. The relationship of job tension to coronary heart disease illustrates the C to D category.

According to the above model the categories of hypotheses just described were qualified by an additional class, represented by vertical arrows in the figure. This class of hypotheses states that the relationships between objective and psychological environment, between psychological environment and response and between response and criteria of health are modified by enduring characteristics of the individual and by interpersonal relations. For example, the extent to which a person experiences tension on being exposed to role conflict depends very much on the personality characteristic of flexibility- rigidity, viz. people who are flexible rather than rigid respond with greater tension to the experience of role conflict (Kahn et al, 1974). In a similar fashion, other properties of the person and his/her interpersonal relations act as conditioning variables in the hypotheses described above (e.g. interpersonal predictors may include factors such as: co-operation, frequency of communication between focal person and role senders, power of role set etc.)

According to perceptions of Kahn et al (1974) role conflict is a stress arising from the interaction between the social environment of the organisation and the focal person. Trying to give their definition to the term stress they stated that they have adopted Lazarus' (1966) definition of stress, which regards stress as any force directed to an object, and defines strain as the effects of stress. Kahn et al. (1974) regarded role conflict and role ambiguity as certain specific environmental stresses. Although they have observed that role conflict often occurs as overload, they stated that the fact and experience of overload are common in the work situation, that the

qualitative and quantitative overload must be differentiated from the other two forms of role stress, viz. role conflict and role ambiguity.

A careful examination of the relevant literature reveals that there is a confusion with respect to the term stress and its relationship to the other three types or dimensions of role stress. Particularly, in regard to the role conflict variable- which is the main variable of the present study- a survey of the literature on role stress during the period 1985-89 conducted by Jex et al (1991), concluded that 41% of the reviewed research articles were using the word stress to mean role conflict. In 1992 Jex et al surveyed a sample of 300 employees, from two organisations in Michigan, in order to ascertain the meaning of the word stress to these respondents. It was clear from the results that respondents tended to interpret the word stress to refer both to employees' strains or reactions to the work environment and to job stressors or elements of the environment itself.

In general, role stress researchers have typically defined stress in one of three ways: as a stimulus, a response, or a stimulus-response relationship. A stimulus definition of stress refers to a job stressor, which is any environmental event in the workplace requiring some type of adaptive response. Stimulus definitions were derived from physics and were borrowed by organisational psychologists from the field of engineering. In this frame of reference, stress means any outside force on an object and strain is a potentially harmful effect of the force on that object (Kahn et al, 1964; Lazarus, 1966). Using this definition, a wide variety of working conditions have been studied as examples of stresses including role conflict, role ambiguity, and role overload (Kahn et al, 1964; Beehr, 1976; Miles et al, 1976)

In contrast, a response definition of stress is associated with what was referred to earlier as strain. Stress is an individual's response to work-related environmental stressors. Selye (1976) refers to stress as the reaction of the organism, which can be psychological, physiological, or behavioural. Finally, stress may be defined within a stimulus-response approach. Researchers who refer to stress in this way refer to the interaction between environmental stimuli (job stressors) and individual responses (strains) (Schuler, 1980). As recommended by Mc Grath (1976), the word stress is used to label an area of study, as is done in other areas in industrial and

organisational psychology. In this context, the term stressor is often used to refer to job or organisational conditions, and the term strain is used to refer to the individual's response to these conditions.

The evidence from the vast majority of role literature studies suggests that we should treat different types of role stress - role conflict, role ambiguity- as essentially different constructs, in order to better understand how role stress arises and how it is affected (Schuler et al ,1977; Newton, 1987; Fried & Tiegs, 1995). In order to be consistent with previous research results, in our approach, we regard role conflict and role ambiguity as conceptually distinguishable types of role stress, which should be analysed as separate constructs and thus different hypotheses should be tested for each of them. With respect to the role conflict, a careful examination of the literature reveals that in most of the studies on role stress the concept of role overload was viewed as a sub dimension of role conflict (Kahn et al ,1964; Rizzo et al, 1970; Jackson, 1985; Newton et al, 1987). Other researchers, however, argued that nesting role overload within the role conflict construct is problematic; the two should be viewed as separate constructs (Caplan, 1971; Beehr, et al, 1987)

In order to develop our understanding about role conflict more it is important to distinguish between the various levels of conflict found in the relevant literature. These are: the personal level, where the conflict is within the person; the interpersonal level, where an individual comes into conflict with others; the inter group where conflict occurs between or among groups; the inter organisational, between or among organisations and; the international between or among nations (Dentsch,1990; Wall et al, 1995). For the purposes of the present research we shall concentrate on conflict at the personal level.

Summarising, in this section we have tried to conceptualise the role conflict construct, by delineating its relationship to the role stress variable and to the other job stressors constructs, namely role ambiguity and role overload, as well as by giving the definitions of these terms, as they derive from the extensive role stress literature. In the following section we shall concentrate on the review of the role conflict outcomes -which are generally regarded as dysfunctional for the organisation

and for the individual as well- since the existence of such unfavourable effects is the reason for the present research.

2.2 Role conflict outcomes

Over the last two decades research evidence has demonstrated that the experience of role conflict is related to unfavourable personal and organisational outcomes. Evidence has been reported of a direct relationship between the degree of role conflict a focal person experience on the job and the various work related outcomes including job-related tension and anxiety, job dissatisfaction, futility, propensity to leave, lack of confidence in the organisation, inability to influence decision making and unfavourable attitudes toward role senders. Extensive empirical work has generally shown role conflict to be adversely related to a variety of attitudinal, psychosomatic and behavioural outcomes (e.g. Rizzo et al, 1970; Hammer et al, 1974; Miles, 1975; Schuler, 1975; Brief et al, 1976).

Rizzo et al (1970) suggested that role conflict tended to correlate: (1)negatively with measures of need fulfilment; (2)more strongly with leader behaviour indicative of direct as opposed to indirect interactions with subordinates; (3)weakly but positively with anxiety and propensity to leave. Kahn (1974) has concluded that persons subjected to high role conflict report greater job-related tensions, lower job satisfaction, less confidence in the organisation and more intense experience of conflict. His analysis showed that role conflict was associated with poor interpersonal relations: e.g. in comparison to persons subjected to little or no role conflict, persons subjected to high role conflict report that they trust members of their role sets less, respect them less, like them less and communicate with them less.

Johnson and Stinson (1975) in their research of 90-military and civil service personnel, found that role conflict tended to be associated with lower job satisfaction, a greater likelihood of voluntary leaving the organisation and the lower job performance, but these effects were moderated by individual differences. Miles et al (1976) documented also the existence of an adverse relationship between role conflict and a host of work-related outcomes e.g. job-related tension, job satisfaction,

perceived performance effectiveness, attitudes toward role senders. The evidence from Rogers et al (1976) study was that top-level administrators in 110-county offices of federal state and county agencies in USA, who faced incompatible demands described their roles as highly unpredictable, with long delays in feedback on performance, and requiring considerable long-range planning. These administrators also reported a large number of job-related problems and little control over internal and external constraints.

Van Sell et al (1981) in their effort to examine and integrate the research on role conflict pointed out that: the results of the research on the role sender -focal person relationships indicate that the best documented outcomes of role conflict are job dissatisfaction and job related tension, which have been isolated among a variety of occupational groups (e.g. House et al, 1972; Miles, 1976; Beehr, 1976; Brief et al, 1976; Oliver et al, 1977). The studies they reviewed also suggest that role conflict results in: lower performance and productivity; distrust; lack of loyalty; turnover; absenteeism; anxiety; stress; and increased heart rate.

Meta-analysis procedures were applied in order to examine the correlates of role conflict. The first was conducted by Schuler et al (1977) and the second by Fisher and Gitelson (1983). The results of the meta-analyses indicate that role conflict has a host of dysfunctional affective and behavioural outcomes. In particular, role conflict has been associated with lower levels of job satisfaction, commitment and job involvement, as well as higher levels of tension and propensity to leave an organisation. The authors argued that most of the relationships describing the potential consequences of role conflict are likely to be influenced by moderator variables.

The vast majority of the above mentioned researches are correlational in nature. But several studies on role conflict were conducted which had developed and tested causal models of the outcomes of role conflict (Bedian et al, 1981; Kemery et al, 1985). Bedian et al (1981) found that greater role conflict leads to increased job tension, which has a negative impact on job satisfaction. In turn, lower levels of job satisfaction increase the propensity to leave. Role conflict also has negative direct effects on job satisfaction and positive effects on propensity to leave.

Role conflict is associated with a variety of undesirable individual outcomes, which are generally regarded as dysfunctional for the organisation. The consequences of role conflict are of great practical significance regardless of whether their effects are direct or indirect. Efforts to better understand role conflict are justified. In order to fully understand the multivariate role conflict phenomenon the question of how role conflict arises and which variables can predict its degree should also be considered. This will be the subject of the following section.

2.3 Role conflict sources or antecedents

Role conflict has for many years received attention as a critical variable in organisational psychology. Role conflict is associated with unfavourable personal and organisational outcomes. The evidence reported in the contemporary research suggests that the complex nature of relationships linking role conflict with its antecedents and consequences is not fully understood. For example, two individuals may experience the same degree of role conflict, in general, but the nature and sources of conflict they experience may be quite different. These differences may explain variations in outcomes associated with role conflict.

As stated by Miles et al, in 1976,

“only when we are able to comprehend the multivariate nature of role conflict and the various antecedents and outcomes associated with these conflict types, we will be in a position to select with any degree of confidence the appropriate remedial strategy” (pp23).

It becomes necessary to move beyond the general role conflict construct and by examining the various types of role conflict, to determine its specific nature and explore its various sources.

In examining the role conflict literature it is clear that the bulk of the research focused on the role conflict-outcomes relationship (e.g. Rizzo et al,1970; Hammer et al, 1974; Miles, 1975; Schuler, 1975; Brief et al,1976) and on the hypothetical moderators of the relationship. While this research has mapped out and corroborated the relationship between role conflict and its effects

“... it is generally of limited value to our understanding of how role stress (role conflict, role ambiguity and role overload) arise... In effect the primary concern of role stress theory viz. the prediction of role stress itself, has been largely ignored by role stress researchers” (Newton et al, 1987: pp27).

Although the necessity of multivariate designs have been emphasised their attendant statistical difficulties have probably tended to inhibit empirical work in this area.

The importance of role conflict as a prominent variable in role theory is largely due to the work in the early 1960s by the Survey Research Center and the Research Center for Group Dynamics, both of the University of Michigan (French et al, 1962; Kahn et al, 1964). Kahn et al (1964) distinguished three classes of predictor variables: organisational, personality and interpersonal, in their attempt to examine the development of role conflict construct (see figure 3).

With respect to organisational predictor variables, they identified the kind of positions in the objective environment, that were most likely to be characterised by conflicting expectations among role senders. These included: positions that required the crossing of an organisational boundary, namely, dealing simultaneously with people inside and outside the organisation; positions involving creative problem solving, in contrast to routine were also more likely to be conflict ridden; positions in supervision and management, were more often conflict laden, than were non supervisory positions.

There is evidence to suggest that all these kinds of positions and associated role requirements may be useful in predicting the degree of experienced role conflict. Division and specialisation have been regarded as a major source of conflict in organisations (Argyris, 1964; Thompson, 1967) and the delicate system of linkages across these specialisations is viewed as a major source of strain and accommodation in complex organisations (Corwin, 1969). Role requirements which involve co-ordination responsibilities across organisational boundaries may be primary sources of role conflict. For example, integration and boundary- spanning activities are required to co-ordinate interdependent but differentiated individuals and sub-units both within and across organisational boundaries.

White (1974) maintained that boundary -spanning roles are susceptible to role conflict because administrators seldom have control over other groups with which they interact. Relatively high levels of conflict have also been thought to characterise supervisory roles and evidence concerning the inherent conflict in superior subordinate relations in research organisations has been reported by Kaplan (1959) and Evans (1962). Role conflict appears to be associated with organisational linking roles whether they involve the integration of activities across intra and inter organisational boundaries or up and down the chain of command. Kahn and associates have argued that role conflict is directly related to the degree of innovation required by the role; namely, the degree of scientific research responsibilities assigned to focal person may be another objective source of experienced conflict.

Kahn et al (1964) found that the responses of individuals to role conflict were not uniform: they were mediated or conditioned by the personality of the focal person and by the quality of his interpersonal relations. Personality predictors referred to factors such as anxiety- prone versus non-anxiety prone personality; extrovert versus introvert personality; rigid versus flexible personality. Interpersonal predictors included factors, such as: communication and power of the role set (formal authority and status of role senders relative to that of the focal person).

Based on a similar perception of how organisational conditions in the objective environment of the role incumbent might influence the degree of role conflict experienced by him/her, Miles et al (1976) proposed a comprehensive model of the linkages between multivariate role conflict its antecedents and its consequences.

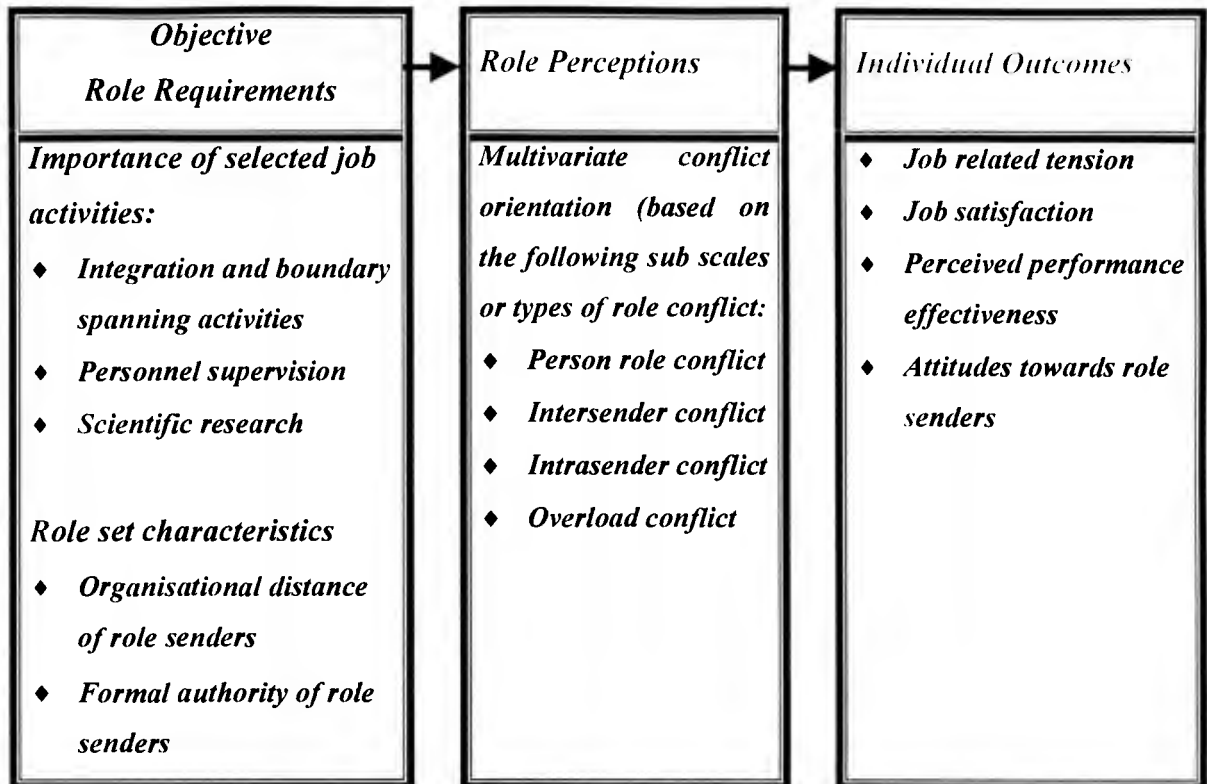


Figure 5 Theoretical role - conflict model (Miles et al., 1976)

The first aspect of Miles et als' model is that role conflict has a multivariate nature. The second aspect posits that the conflict orientations, presented in the second box of the above figure, can be predicted on the basis of objective role requirements or job conditions imposed upon the individual. These objective sources of conflict were drawn from:

- ◆ the importance of major role requirements, including personnel supervision, integration and boundary spanning activities, and scientific research, and
- ◆ the characteristics of the focal person's role set, including the average organisational distance of important role senders (a measure of boundary relevance) and the degree of formal authority role senders as a group have relative to the focal person.

The results of Miles et al (1976) study suggest that individuals vary considerably in the nature of role conflict they experience. This means that the generalised role

conflict variable, frequently considered in recent research in organisational behaviour, may serve to obscure the real nature of the conflict an individual experiences on the job. Another important finding is that while some role requirements do not by themselves lead to conflict, they assume much more importance when they are considered in conjunction with other major demands placed on a focal person. This combined effect of multiple role requirements is best illustrated in Miles's study for the scientific activities. When considered alone these activities were not related to conflict (Miles et al, 1976).

All the above work on the organisational predictors or sources of role conflict concentrates on the examination of role or position-specific antecedent variables. There are, however, many writers who have focused on non- role specific variables in exploring the various sources of role conflict. Particularly, House et al (1972) have found significant relationships between measures of leadership and organisational practices and degree of experienced role conflict. Rogers et al (1976) investigated factors associated with role conflict and role ambiguity in top level administrators in public agencies, in USA. They assessed the relationship between intra organisational variables (e.g. number and types of operations, or programmes provided, multiple goals of organisation, autonomy, formalisation), and role conflict as well as the relationship of inter organisational variables (e.g. the position of the organisation in the field relative to others and the amount of interaction between the organisation and other organisations as reflected by: contacts between directors; the flow of information; the flow of resources; and overlapping members of the boards of directors) and role conflict.

Morris et al (1979) collected data from a sample of non academic employees (professional, secretarial, blue collar) of a major university in the USA, on the impact of organisational structure on perception of role conflict . The results suggest that role conflict significantly related to participation, span of subordination (multiple authority accountable for) and formalisation (structural variables as a set). Participation emerged as the most significant independent predictor of role conflict across all three occupational groupings. The results suggest that the impact on role conflict of particular structural properties may be influenced by the characteristics of the occupational grouping to which a given role is ascribed.

Van Sell et al (1981) tried to examine and integrate the research on role conflict and interpreted it within the framework of the Kahn et al (1964) role episode model (see figure 3). Following a similar perspective they reviewed the literature according to three main categories of variables: organisational; personal; interpersonal. Research focused on organisational factors as potential sources of role conflict indicate that boundary spanning activities; perceived environmental uncertainty; and organisational autonomy, have been linked to role conflict. The activities performed by the boundary spanner, such as linking and co-ordination, information transfer, and feedback dissemination (Miles, 1976), contribute independently to variance in role conflict and are similar to those performed by other role incumbents whose reported levels of role conflict are high: graduate students preparing for doctoral exams (Baird, 1972) middle managers (Kahn et al, 1964) and housewives with part time employment outside the home (Hall et al, 1973)

Organisational level was hypothesised by Sorensen and Sorensen (1974) to moderate the degree of conflict experienced as a result of incongruities between bureaucratic and professional norms. Their hypothesis was supported by data from a sample of public accountants, with lower levels of conflict experienced by partners and managers, than by senior and junior accountants. Schuler (1977) discovered that participation in decision making interacts with the role conflict to affect performance and satisfaction differentially at various organisational levels. Schuler (1977b) also found that other organisational variables, e.g. task design, organisational structure, and technology, were associated with lower levels of role conflict.

The results of Van Sell et al (1981) review indicated that personal factors, such as higher order need strength and need for clarity may be important moderator variables of the relationship between the focal person's perceptions of role conflict and the focal person's responses. It appears that personality characteristics, perhaps particularly individual differences in perception and adaptability, can moderate the association between objective and experienced levels of conflict (Gordon et al, 1972). Miles' (1976) finding that the need for occupational achievement- but not self assurance or supervisory ability - moderates the effect of role requirements on role conflict.

The research evidence reviewed by Van Sell et al (1981), using interpersonal factors for explaining variations in the degree of role conflict, has suggested that power of the role senders, group cohesiveness, closeness of supervision, supportiveness of supervision, autonomy, functional dependence, communication frequency and number of role senders influence the focal person's perceptions of role conflict (Van Sell et al 1981). Fisher et al (1983) applied meta-analysis procedures to the results of 43- past researches in an effort to draw valid conclusions about the magnitude and direction of the relationships of role conflict to numerous hypothesised antecedents and consequences. They argued that, despite all the relevant research on role conflict, definite conclusions about these relationships have been hard to reach, because results have often seemed inconsistent from study to study. In most cases, these inconsistent results consist of some significant correlations of the same sign and others that are non significant or zero. Only rarely have significant positive relationships been reported in some studies and significant negative relationships found in other studies of the same variables. However, the true magnitude of the various relationships is still unclear.

Jackson et al (1985) also used meta-analysis techniques to measure the strength and consistency of the relationships found between role conflict and a number of specific variables. These variables were chosen because of their frequency of appearance in the literature and were divided into the hypothesised antecedents (organisational and individual variables e.g. level, participation, formalisation; and tenure, age, education respectively, etc.) and consequences (affective and behavioural reactions e.g. satisfaction, commitment; and absence, performance respectively).

The results of the meta-analysis have indicated that the average correlations between many organisational context variables and role conflict were substantial. In contrast individual characteristics were generally not strongly related to role conflict. These results also have shown that the average correlations between the affective reactions and role conflict were greater than those between the behavioural reactions and role conflict. These results were consistent with those reported by Van Sell et al (1981) and Schuler et al (1977). Also consistent with the results reported in those studies, the average correlations using role ambiguity were greater than those using role

conflict and these role constructs were not always associated with the same variables whether organisational or individual.

Contrary to Fisher et al (1983) their results have suggested that most of their relationships describing the potential causes and consequences of role conflict were likely to be influenced by moderator variables (Jackson et al, 1985). Newton et al (1987) following the theoretical propositions of Kahn et al (1964), selected three sets of predictors, corresponding to organisational, personal and interpersonal variables, in order to examine their influence on the various types of role stress (e.g. role conflict, role ambiguity, and role overload). Based on a sample of young professional engineers, in UK, this investigation studied the relationship both, within each predictor set (many variables from the role stress literature were included) and between each predictor set and the role stress. The results suggested that among the predictors selected, certain variables stand out as having a greater explanatory strength in relation to role conflict.

“The behaviour pattern” was especially predictive among the person variables. This finding suggests that future multivariate research may benefit from examining other forms of behaviour. With the interpersonal variables both interpersonal climate and social support figured as important predictors (Newton et al ,1987). Finally, what is interesting with the organisational variables is that, as Kahn et al (1964) suggested, factors operating at a fairly distant level (such as the type of economic sector e.g. public or private) can have a notable effect on perceived role conflict.

Bacharach et al (1990) in their study examined five sets of work process variables (e.g. autonomy, participation, formalisation, communication, challenge etc.) with respect to their relationship with role conflict and role overload among samples of public sector nurses and engineers. The findings have suggested that managerial strategies appropriate for minimising role conflict were not necessarily appropriate for minimising role overload. The findings also suggested that, in the context of public sector employment some work process predictors of role conflict and role overload may be similar across professions. Finally in contrast with some of the assumptions of recent job design theory, the findings indicated that for public sector professionals, managerial strategies that reflect professional ethos may not reduce

role conflict and role overload. For example, it was found that increased levels of autonomy for both nurses and engineers were associated with increased levels of role conflict.

Similarly, Bacharach et al (1990) discovered that the more bureaucratically structured the job, the lower the reported level of role overload. Alternatively, those managerial strategies that reflect more bureaucratic norms, such as increased routinisation and formalisation, may effectively reduce role conflict and role overload. Wall et al (1995) in their study of "Conflict and its Management" undertook the task of reviewing the conflict literature and to delineate the causes of conflict, as well as to examine the role process and identify its effects. With regard to the causes of conflict they also pointed out similar results with the above mentioned studies. Namely, they suggested the following sets of predictor variables as potential sources of conflict: individual characteristics, interpersonal factors, communications, structure, previous interaction, behaviour.

In summary, the above review of the literature on the sources of role conflict stresses the need to regard role conflict as a multi-dimensional phenomenon for which a host of conditions appear to be potential sources. As a result, it is possible that two persons may experience the same degree of general conflict, but the specific sources and the types or components of the general conflict they experience may be quite different. For these two persons the choice of strategies to manage the level of role conflict effectively should vary with its sources and components. For example, person role conflict may be more effectively managed through selection and placement of the role candidate, intrasender conflict may be reduced through leadership training, role overload may be alleviated by job redesign, and inter sender conflict, through role sender recognition of training in the complexities of boundary spanning activities. Although the unfavourable effects of role conflict have been widely reported, corrective action will be hampered until more is known about their respective sources.

The sources or antecedents of role conflict may not only be multiple but interactive as well. It appears that role conflict may be a function of an interaction of three classes of predictors: organisational, personal and interpersonal, which might include

variables, such as organisational level, leader behaviour, job content, dimensions of structure, role incumbent characteristics, communication, and power of role set etc. Although the necessity for multivariate designs is emphasised by many researchers most of the previous studies on role conflict have employed bivariate correlational models of data analysis. While more recently some studies have used multivariate approaches, very few of them reported investigations which specifically include and compare organisational, personal and interpersonal variables (Newton et al, 1987)

In the context of these limitations, the purpose of the present research is to examine the degree and nature of role conflict experienced by academic professionals- heads of departments. As well as to investigate how a simultaneous combination of a number of organisational, personal and interpersonal predictor variables may influence the degree of certain role conflict types. The specific aims, objectives, propositions and methodology of the study will be presented in chapters: (4) & (5) of the “Research Strategy”.

Chapter 3: Role conflict in the academic context

Although stress has been the subject of much reported research over the last 30 years, few scholars have studied the academic workplace from the perspective of role stress and even fewer have focused on the most important stress's dimension, namely role conflict (Gmelch, 1989; Benett, 1990; Middlehurst, 1993). The proliferation of job related stress publications in other sectors underscores the importance of understanding stress and its impact on the performance of all professionals. Despite this evident recognition of the need for understanding in this general area there is a lack of information about stress in the specific arena of academe. What is known about stress is usually referred to the faculty and is limited to a few studies that have investigated specific aspects of academic staff life likely to become stressors. In most research on job related stress, either a wide range of diverse workplace stressors have been identified, or dimensions of stress have been generalised to academics from studies of other occupational groups and professions.

A possible reason why university academics have not become a more frequent subject of concern for stress researchers, may be that traditionally the occupation of academics has not been considered stressful (French et al., 1982), since academic freedom and tenure seemed to provide work conditions which were free of common stress producing pressures (Thorsen, 1996). In a study undertaken by researchers working under the auspices of the National Institute for Occupational Safety and Health (NIOSH) at the University of Michigan, it was found that college professors were relatively satisfied with their working conditions and with their work, and they were inclined to report few physical illnesses (Caplan et al., 1980).

While this early positive assessment by Caplan and his colleagues has stood for some time (Milstein and Farkas, 1988), a genuine resurgence of interest in how stressors affect academic staff in the three traditional areas of faculty responsibility - teaching, research and service- has surfaced more recently (Gmelch, 1993). The topic of academic staff stress has become an important issue for both academic administrators

and faculty advocates in institutions of higher education internationally (Ladd and Lipset, 1975; Gmelch, Lovrich, and Wilke, 1984; Blackburn et al., 1986; Bowen and Schuster, 1986; Smith and Witt, 1993). In view of the changes being faced by contemporary universities, it is appropriate that stress and its sources in academic populations be fully understood and analysed. As stressed by Thorsen (1996) “in times of retrenchment, it is important to recognise its (stress) impact on the productivity of the higher education enterprise: it is important to pay attention to what bothers professors”.

It is important to note, here, with respect to the role conflict variable -which is the construct under investigation in our research- that very few studies were found in the literature of academe which examine role conflict as a key variable. The vast majority of studies in academe pertain to role stress variable, in examining role related dilemmas or challenges and not to role conflict. Since role conflict is regarded as one of role stress dimensions, we can assume with a high degree of confidence that the sources of role conflict in the academic context may be similar if not identical to that of role stress. Therefore, the terms role stress and role conflict can be used interchangeably. Within the context of the above limitations, the formulation of the conceptual role stress model in higher education is presented in the following paragraphs.

3.1 Role stress model in higher education, as an instrument of capturing role conflict phenomenon in academe

As we have already noted in the preceding chapter (2), the review of the psychological, sociological, and psycho- social literature on stress reveals no firm, generally accepted definition of the concept of stress. In a 1973 paper, Selye (1973) noted that “stress, like relativity, is a scientific concept which has suffered from the mixed blessings of being too well known and too little understood”. The confusion over the term stress is partially attributable to the differing world views social scientists bring to their work.

Most of the current research on workplace stress evolved from early behavioural definitions (Selye, 1956). Kahn and his associates (Kahn et al., 1964) presented a broadly accepted sequence of events depicting the stress process. His characterisation adapts itself to both individual and organisational stress. Four stages are identified, beginning with a set of factors in the objective environment that causes a demand on the individual or the organisation. The next stage is the perception of the demand that leads to an immediate reaction or response. The resulting response, the third stage, comes typically in the form of psychological, physiological, and/or behavioural changes. The fourth stage, termed enduring consequences, differs from the immediate responses because it involves long-range effects (i.e., the changes beyond the immediate grief that might occur in one's life because of catastrophic events) (see figure 4).

A scholar who has advanced these views in a systematic manner has been McGrath (1970). According to his opinion, the development of stress take the following form: The stress problem involves a series of at least four classes of events or stages. The first of these takes place in the environment, the physical-social system in which the "focal organism" is embedded. This class of events can be called demand or "stressor". Second, there is the reception of that "objective" demand by the focal organism. This class of events can be labelled subjective demand. Third, there is the focal organism's responses to the "subjective" demand at physiological, psychological, behavioural and social interactive levels. Fourth, there are the consequences of response, both from the focal organism and for the larger system or environment in which it is embedded.

Expanding on McGrath's four stages of stress, a stress cycle for managers was developed by Gmelch et al (1982), and refined into a stress cycle for faculty and administrators in higher education. The stress cycle in higher education is composed of four distinct stages. Stage (I) is concerned with the identification of stressors present in the environment. In the case of academics, sources of stress may include such things as excessively frequent or overly protracted meetings or conflict with students and/or colleagues. In Stage (II) the academic staff member's perception of the demands from the environment determines how much stress is caused by these factors. The individual's stress response is the start of Stage (III). Stress is associated

with the individual's perception of limited resources to meet the requirements of dealing with the stressor or demand. Whether or not the academic staff member is able to garner the resources needed to meet these demands is part of the third stage of the stress cycle. Stage (IV) is termed the consequences stage of the stress response. Researchers have seen this stage as the lasting, long-term negative effects of stress.

Consistent with the steps of the stress cycle, stress is defined as

“one's anticipation of his or her inability to respond (Stage III) adequately to a perceived (Stage II) demand (Stage I), accompanied by the anticipation of negative consequences (Stage IV) due to an inadequate response” (Gmelch, 1982).

The perception of a situation as stressful is a key component in much stress research. As Wolff (1953) stated,

“the stress accruing from a situation is based in large part on the way the affected subject perceives it” (pp233).

Kahn et al (1964) similarly maintained that there is considerable variation in individual response to stressful conditions, one person viewing an experience as stressful while another sees it as a neutral or even enjoyable occurrence.

Although many researchers have identified the existence of occupational stress in academe (Gmelch, 1984, 1986), most such findings are general and do not reflect the full character of profession-specific stress in terms of its multidimensionality nor its uniqueness in comparison with other professions. Since the multivariate nature of stress has not yet been analysed, it is not surprising that we found very little research concerning the construct of role conflict in academe -which is the main subject of our present study.

It has become fairly clear from the foregoing section (2.1) on the conceptualisation of role conflict in other sectors -mainly the private one- that role conflict is regarded as one of the two most important dimensions of role stress- the other being role ambiguity. Moreover it has been stressed that there is a confusion in the literature on occupational stress with respect to the terms role conflict and role stress. Jex et al. (1991) results revealed that 41% of the reviewed articles on this subject area were using the term stress in order to denote role conflict.

With respect to our study of role conflict among department heads in UK universities, we perceive role conflict as the main dimension of stress event in academe. We suggest that the previously described, model of stress cycle in higher education (Gmelch, 1982) can be used, in a similar way, to interpret the role conflict phenomenon in the academic environment. The basic theoretical construct of role conflict underlying our investigation is also that role conflict is the result of the heads' interpretation of stimuli and other events in their environment. More specifically, based on Kahn et al's (1964) model, we argue that heads' whose jobs require them to engage in transactions across the organisational boundary (a fact in their objective environment) may more often report that they are subjected to incompatible demands, viz. they are exposed to role conflict (a fact in their psychological environment). We anticipate that role conflict only comes when the individual head perceives a situation as producing conflicting demands upon him/her.

For the purpose of the present study, however, we focus on the first two stages of the four-stage process (of Gmelch's model): the identification (Stage I) and perception (Stage II) of the role conflict, experienced by heads of departments in performing as an academic staff member and as a manager as well. The specific theoretical model we propose for this study (based on Kahn et al's, 1964 model and Gmelch's, 1982 model) is presented in detail in the next chapter (4) of Research Strategy. Within the framework of the above considerations, the crucial question that arises is "what job dimensions- identified in the relating literature- are perceived as conflicting by the university department heads". In the following section we try to cover this issue.

3.2 Role conflict at departmental level

From the recent experience of most university systems in the western world, it has become clear, that higher education is characterised by an increase in size and complexity and by a multiplicity of functions and roles. The challenge that higher education is facing in today's turbulent external environment is, how to maintain flexibility, viability, preserve quality, and respond effectively to the changing needs of society, within the context of continuing inflation and steady state or even declining resources.

Success on that objective implies strong leadership at all levels in the university system. A key position in the academic administration hierarchy is that of department head. The increasing complexities of operating higher education institutions have led deans to delegate more and more responsibilities to heads of department, who are being confronted with a range of challenges and threats, as well as changing expectations of what the head's role should be. It is the head who must provide leadership to the academic staff and at the same time supervise the translation of institutional goals and policies into academic practice.

Numerous lists of head duties ranging from Siever's (1979) 12- functions to Tucker's (1992) list of 54- tasks have appeared in the literature. Practically speaking only a superhuman head could perform all these duties. More realistically, department heads select - what they feel is important- from areas of responsibility according to personal style and particular circumstances. Across departments, the jobs of department heads have many similarities but "Department heads differ in their definition of the headship role. The differences in definition, however, represent differences in emphasis and priorities rather than differences in kind" (Bragg, 1981: pp24).

University department head represents a complex position. It has few management parallels in being equally important in providing the critical link between the administrative requirements of the university and the academic staff values of the academic departments. Despite the unique and important role heads play in the universities, few researchers have ventured to study this multidimensional position. With the exception of few books in the recent years which have begun to address department head concerns (Bennett et al, 1990; Creswell et al, 1990; Tucker, 1992; Middlehurst, 1993) the attention heads have received in literature over the past ten years has been mostly anecdotal (Gmelch, 1993). Even less attention has been paid in respect of the most important impediments to attracting professors into academic leadership: the stresses, conflicts and dual pressures associated with the department head position.

Role conflict was suggested as a strong predictor of job satisfaction among academic administrators in American Colleges and Universities, in a study undertaken by

Glick (1992). Job dissatisfaction in turn was regarded as one of the main reasons for the high turnover rates (which had been noticed from the American Council of Education) among top level administrators. The complexity of the department head role results from attempting to bridge the managerial and academic cores of the university, which are organised and operated differently (Bare, 1964). The academic core of teaching and research operates freely and independently in a loosely coupled system, whereas the managerial core maintains the mechanistic qualities of a tightly coupled organisation. The department head is at the heart of the tension between the two systems and suffers from conflict inherent in the position (Booth, 1982). This type of conflict is also found in other professional organisations. It is generated by the combination of the two divergent modes of work structuring: the bureaucratic and the professional.

It has been observed since late 1960s (Scott, 1966) that the profession and the bureaucracy rest on fundamentally different principles of organisation, which generate conflict between professionals and their employers. The divergences between these two institutional forms are reviewed by Davies (1983: pp253) who summarises them as follows:

“Bureaucratic tasks are partial and training is short and within the organisation, while professional jobs are complete and training takes long years outside the organisation. Bureaucrats are loyal to organisation and legitimate their acts by invoking organisational rules, while professionalism requires loyalty to the profession and legitimising of action based on technical competence. In bureaucracies, compliance is supervised by hierarchical superiors. As a contrast, professionals' compliance is elicited through socialisation and internalisation of ethical norms set by a community of peers” .

Professions impose a set of expectations on individual professionals. Professionals practice an accepted body of knowledge, regulate or govern themselves, enforce a code of ethics, and work autonomously (Kerr et al,1977) These elements of professionalism combine to form a shared set of expectations concerning professional behaviour. Such professional expectations are underscored more

formally by professional codes of ethics, which state the purpose for the body of knowledge and the manner in which the body of knowledge may be practised.

Organisations also invoke expectations, minimally expecting employees to complete some tasks in return for compensation and usually to perform the tasks in a prescribed manner. The goals of the organisation, however, may differ from those of the profession. Conflict between professional and organisation expectations may arise in various forms in the context of professional organisations. The frictions and strains that result from the merger of these two modes of operation (bureaucracy and professionalism) in professional organisations have been pointed out by a multitude of researchers (Corwin, 1967; Moore, 1970; Sorensen et al, 1974; Hall, 1985; Raelin, 1986).

An important aspect of these conflicting principles is the role incompatibilities experienced by professionals. These incongruences stem from three sources (Raelin et al 1985) First, is unrelenting demands of professionals for autonomy over the content and conditions of their work. They bring specialised expertise to organisations and expect to be left alone to decide how they will utilise it. Second, professionals tend to be committed to their chosen profession and identify with it rather than with the employing organisation. Third, professionals adhere to norms and standards established by their professional organisations, which frequently are not compatible with those set by their employers, and this may lead to conflict.

In summary, the merger of the bureaucratic and professional modes of organising the work in professional settings is a potential source of conflict, as has been suggested from the growing literature on: "professional role conflict" ever since Parsons (1947). These divergent principles are also combined in the university's structure which is regarded as "the ideal professional organisation" (Etzioni, 1959; Scott, 1965). The study of academic professionals' role conflict need to be viewed from the perspective of adaptive responses in universities to inevitable coexistence of these two different modes of functioning within one formal structure (Copur, 1990).

As universities and departments grow larger their organisation becomes more complex. The tension between the need of some hierarchy and exertion of authority on the one hand, and the need to encourage autonomy and independence on the other is a primary source of conflict and stress for academic leaders. While this dynamic tension between administration and academia is critical for higher education institutions, it does place the department head in a difficult position to mediate the demands of administration and concerns of academic staff. In effect, the position is like that of the Roman god Janus with two faces oriented in opposite directions, or what some have referred to as “swivel” effect, not knowing which way to turn (Creswell et al, 1990). Heads are trapped between the stresses and pressures of performing not only as administrators but also as academic staff members. Their academic future is tied firmly to the department, but their ability to represent the department effectively in budgetary and personnel matters is directly related to the quality of their working relationship with the dean (McCarthy et al, 1987).

As an academic staff member the department head has been described as being first among equals, a representative of the academic staff members willing to devote a portion of a career in service to the department and the academic staff. The department head is often viewed as an academic staff peer, who sacrificially subordinates primary professional responsibilities (teaching, research) to serve temporarily his/her colleagues, by performing essential departmental administrative tasks. This sacrifice is made so other academic staff members can pursue their teaching, research and writing interests in unencumbered by administrative trivia (Milstein, 1987).

Under the recent pressures on higher education institutions for stronger institutional management and the resulting loss of departmental power in favour of the institution (see chapter 1) the head of department position is characterised by high levels of role conflict. In the current and complex environment heads must serve as buffers between the individual aspiration of the academic staff and the press for efficiency, quality and accountability that come from the institution's strengthened executive hierarchy (Kogan & Becher, 1994).

The dual pressures and conflicts on the head position were also reconfirmed by the study of Gmelch (1993) who concluded that, department heads appear to be caught between the common managerial stress themes of time, conflict and organisational constraints, along with the regular academic staff pressures of “keeping current in their discipline” and “preparing manuscripts and presentations”. This situation is unique to managerial positions and further weakened by the fact that the assignment is usually temporary, with the head returning to the academic position when the period in head’s office is finished.

In addition to this paradoxical situation of trying to fill a “swivel” position, the department head has to perform a plethora of roles e.g. leader, teacher, researcher, advocater, mentor, facilitator, decision maker, delegator, representer, colleague, motivator, evaluator, recruiter; which may produce conflicting expectations in terms of what deans, academic staff members, students, agencies and heads themselves expect the functions of the head to include. Research evidence (Kahn et al, 1964; Miles et al, 1976; Rogers, 1976) from the private sector, has demonstrated that role conflict appears to be associated with organisational linking roles, whether they involve the integration of activities across intra and inter-organisational boundaries or up and down the chain of command.

Miles et al (1976) in their research on role conflict among professionals from nine-governmental research and development organisations, found that individuals who rated only scientific research activities as an important part of their jobs, were characterised by low levels of conflict. When these activities were considered simultaneously with other role requirements, such as boundary spanning and supervisory responsibilities, then the individuals who were performing those multiple roles were reported as suffering the highest levels of role conflict. These individuals were characterised as manager scientists who have integration responsibilities which require them to span inter organisational boundaries. Miles et al (1976) also argued that the boundary spanning manager scientist is one who has demonstrated expertise in a research speciality which is vital to the organisation and has been chosen to develop and lead a sub-unit specialising in this area of research and to represent this part of the organisation to relevant sectors of the environment (funding agencies, contractors etc.).

The university analogue is the person who is selected to chair a department, on the basis of demonstrated excellence as a teacher and researcher, and to represent the department to outsiders on matters regarding funding, recruiting and interdisciplinary research and training projects. As part of their strategy to put the best on top and out front, organisations may be exposing their most talented members to multiple role requirements involving chronic stress, for which, there appear to be substantial health costs (Selye, 1956; Caplan, 1971; House 1974). The lack of progress in developing and reinforcing a dual scientific administrative ladder of advancement in research and other professional organisations is likely to exacerbate the propensity to encourage more effective individuals to rise to positions involving chronic role conflict (Miles et al, 1976).

Many of the stress related dilemmas may arise because of the differences in skills needed to perform the roles of professor and department head successfully. The fundamental differences between roles of academic professor and department head make the transition from one role to another difficult and this may be a potential source of role conflict. Lack of preparation for role fulfilment is another characteristic of the head position that makes the role a problematic and stressful one. Heads still often come to the position without leadership training without prior administrative experience; without a clear understanding of the ambiguity and complexity of their role; and without recognition of the stresses inherent from the Janus- like position (Gmelch et al, 1993).

Bennett (1990) outlines three major transitions made, by moving from a faculty role to that of head: (1) demonstrating breadth as opposed to specialisation (2) working co-operatively and collectively rather than competitively and individually; and (3) shifting from an orientation to the discipline to an orientation to the institution. The differences in the job demands between the two roles were depicted by Gmelch et al (1984). In the following figure this unique position of the department head is represented schematically.

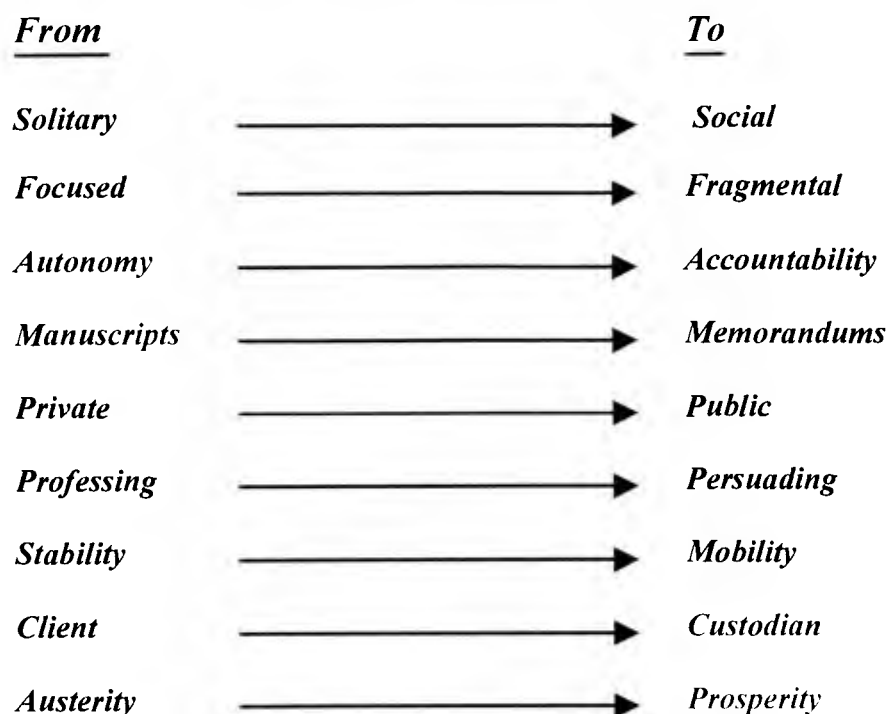


Figure 6 The metamorphosis of the department chair (Gmelch et al., 1984)

In summary, it can be argued that the head of department's position is characterised by high levels of role conflict since the heads must serve as buffers between the individual aspirations of those who do the organisation's production work (teaching, research and service), and the press for efficiency, quality and accountability, that come from the organisation's management hierarchy. Heads have to deal with these conflicting pressures by finding ways to satisfy the various constituencies e.g. staff, students, dean, agencies, central administration etc. The role of the head is not only pluralistic but is paradoxical in nature and this causes department heads to feel double pressure to be effective manager and productive academic staff member. The fact that academic department heads constitute a major source contributing to insitutional success has long been established. However, little research has been undertaken to examine the role conflict that might result from the performance of multiple and potentially conflicting role activities.

In times of financial stringency, a situation especially evident in the current academic environment, it is important to recognise the sources of role stress and conflict so that effective coping strategies may be developed, in order to tackle with their detrimental consequences. In the following paragraphs an attempt will be made to review the literature on the consequences and various sources of role stress and /or role conflict in academe.

3.3 Role conflict outcomes in the academic context

The outcomes of negative responses to role stress and role conflict, in the private sector, are well known. Research evidence from the private sector has demonstrated that the experience of role conflict is related to unfavourable personal and organisational outcomes. Evidence has been reported of direct relationships between the degree of role conflict a focal person experiences on the job and various outcomes such as: tension, anxiety, job dissatisfaction, propensity to leave, lack of confidence, low performance, turnover intention etc. (Miles et al, 1976), which are generally regarded as dysfunctional for the organisation.

In the academic sector the negative relationship of role conflict and job satisfaction has also been confirmed. The study of Solmon & Tierney (1977) on the "Determinants of job satisfaction among college administrators" in USA, found that the more the congruence between a manager's perception of the organisational reward structure and behaviours he/she values in subordinates, the less the intrarole conflict for that person. In turn, this reduction in intrarole conflict would result in increased job satisfaction on the part of the role occupant.

A dissertation by Boone (1987) also studied the job satisfaction of university administrators. He used existing measurement tools to survey a sample of 536 members of the American Association of University Administrators. The findings showed that the job characteristics that were significantly associated with job satisfaction of the respondents were feedback, variety, autonomy, participation and role conflict.

Copur (1990) in his research on “Academic Professionals: a study of conflict and satisfaction in Professoriate” indicates that role conflicts among professors arise mostly in the area of collective decision making and are associated only with dissatisfaction in decisions and not with the job as a whole. The findings of Glick (1992) study show that academic administrators in selected American institutions of higher education perceive dissatisfaction in the nature of the work they are required to perform, because of the presence of certain unpleasant job conditions, like role conflict.

The results of Gmelch et al. (1993) also suggest that the “conflict-mediating” role of the department head position is most stressful and discourage them from continuing on this position. They indicate that those heads unwilling to serve again had higher levels of role conflict when dealing with rules and regulations, obtaining programme support and approval, and resolving differences with and among colleagues. The investigation of Smith et al.(1995) of stress among university academic staff, at a university located in the Western region of the US., reaffirms the suspicions of others that if academic staff members are experiencing stress when attempting to accomplish tasks and likewise feel high levels of “inter-role” conflict (e.g. conflict over their roles within the university and at home) it is possible that their work will suffer. This is particularly true for female academic staff.

It is evident that the consequences of role conflict on job satisfaction may be detrimental not only to the quality of working life of the individual higher education leader, but to their institutions and the public they serve. Early identification of the causes of role conflict phenomenon in academia, should help in the retention of effective academic leaders, who can provide long term leadership in higher education. A short review of the sources of role conflict in the universities, as they have been identified by several researchers in recent years, is in order.

3.4 Role conflict sources in the academic context

Very little research has been conducted, however, which examines the sources of role stress and role conflict experienced, either by academic staff or by academic leaders, in institutions of higher education. As it will become clear in the following review the majority of these studies examines the sources of role stress variable and only few of them are focusing solely on role conflict sources. In one of few existing studies of college academic staff stress, Eckert and Williams (1972) cited routine duties, long hours, poor facilities, friction in intrafaculty relations, and administrative red tape as important sources of stress. The lack of time for professional reading was the top stressor discovered in Koester and Clark's study (1980) of college faculty, while bureaucratic red tape and finances were two other sources frequently mentioned by professors. While these general areas of stress-inducing concerns are of interest, they are not activities directly attributable to the primary functions of teaching, research, and service.

Gmelch et al. (1982) in their study of stress among public school administrators found four factors as potential sources of stress which also indicated the multidimensionality of the construct. These factors were consistent with McGrath's (1976) theoretically derived model of occupational stress. In particular, the Role-Based Stress factor is consistent with a similarly-named dimension in McGrath's (1976) six-factor framework, and it includes items that reflect both role ambiguity and role conflict (Kahn et al., 1964). Task-Based Stress includes both task overload (Kahn et al., 1964) and task difficulty components, as postulated in McGrath's (1976) Task-Based Stress dimension. Finally, both Boundary-Spanning Stress and Conflict-Mediating Stress reflect factors that are, within McGrath's (1976) framework, intrinsic to the behaviour setting.

However, stressors found in many occupational settings are now routinely recognised in educational settings (Clagett 1980; Cunningham 1982; Milstein, 1987; Blix & Lee 1991). Based on research indicating that occupational stress adversely affects productivity, performance, job satisfaction and health of professionals. Gmelch et al (1984) conducted a study on the determinants and consequences of academic staff stress in a sample of American research universities. This study noted that more than

interpersonal problems. Beyond the distress caused by coping with concerns for people, the rate of response demanded by institutional deadlines and budget constraints were ranked high as stressors. Similarly, in a study by Melandez and Guzman (1983), which looked at the stress experienced by academic staff and administrators in two and four year colleges in USA, workload was a major stressor. Other occupational variables found to affect the stress experienced by the professoriate, include institutional factors, as well as rank and tenure status (Gmelch et al. 1984; Perlberg & Keinan 1986; Richard & Krieshok 1989). In addition other studies suggest that these factors are experienced more keenly by women (Ceccio 1991; Acker 1992).

With respect to university administration, Rasch and her associates (1986) investigated the administrative side of the department head role and discovered basically three factors of stress among university administrators: task-based stress or stress arising from performance of day-to-day administrative tasks (similar to the academic staff's time constraints factor); role-based stress or the role-set interactions and beliefs or attitudes about the role of the head in higher education; and conflict-mediating stress which reflected pressures from resolving conflicts with colleagues and the dean, and handling student problems. A fourth factor, social confidence, had too weak an association to be forwarded as a separate dimension of administrative stress.

With respect to academic staff stress, based on observations from nation-wide cross-sectional empirical research in USA (Gmelch, Lovrich, and Wilke, 1984; Gmelch, Wilke, and Lovrich, 1986), one third of academic staff sample identified ten stressors that exert considerable pressure upon them. The three most common stressors identified were (1) imposing excessively high self-expectations; (2) securing financial support for my research; and (3) having insufficient time to keep abreast in my field.

In 1987 Gmelch conducted a large-scale study concerning dimensions of academic staff stress of all comprehensive doctorate-granting institutions in the USA in order to: (1) identify interpretable clusters of academic staff stressors; (2) determine how such clustered stressors are associated with the professional characteristics of

discipline, rank, and tenure; and (3) describe how the stressor clusters relate to the key personal characteristics of age, gender, and marital status. The multidimensionality of the 45-item academic staff Stress Index, investigated through factor analysis, resulted in five distinct dimensions of perceived stress: reward and recognition; time constraints; departmental influence; professional identity; and student interaction. Each factor was also analysed according to professional and personal characteristics and the analysis resulted in significant differences in the areas of tenure, rank, age, gender and marital status. No differential pattern was discovered among disciplinary categories.

In the modern university, the academia must accommodate to increased and more various demands and expectations (Acker, 1992). As the tasks of the professor have increased and become more diverse control over one's workplace is less possible. Increases in class size, static budgets and imposed forms of review and accountability all contribute to the potential for an increase in negative stress outcomes among members of the profession (French et al, 1982; Cecio, 1991; Acker, 1992; Thorsen, 1996).

In coming to an understanding of the contemporary incidence of academic staff stress there are some good reasons to suspect that academic staff life at universities is somewhat more stressful today than it has been in the past (Blackburn et al 1986; Gray, 1992). Contemporary university academic staff in the USA not only have to teach classes, grade student examinations and papers, produce grant applications, mentor graduate students, get their work published, and- time permitting- keep current in their own field of study they also must cope with significant restraints on the resources required to complete these difficult tasks (Bowen et al , 1986).

Moreover, academic staff salaries in USA have declined over the past 20 years in relation to private sector incomes. Academic staff salaries have not kept pace with inflation over this period, salary disparities across disciplines have grown, and salary compression across ranks has occurred- all helping to create serious morale problems in the academic workplace (Carnegie Corporation, 1989). The expansion in colleges and universities in USA has come to an end and inexorable cutbacks threaten both the work climate and job security. The work climate enjoyed by those who entered

the profession 30 years ago has altered significantly (Corcoran & Clark, 1985). Academics now experience similar pressures as any other professionals in large corporations (Aisenberg et al, 1988; Cecio, 1991)

These pressures are also evident in the European university. Tavernier (1991) stressed that for the European university the world of tomorrow is a world of competition: competition with foreign universities; competition with open university, with tele-classing, satellite education; competition with specialised institutions; competition with the big multinationals which often have their own institutes for their higher learning; competition also in the field of permanent education, without mentioning fundamental research in industrial laboratories.

The traditional university, he continued, faces so many challenges that even its survival is threatened. This is believed to be so because today the very product of the university, the creation and dissemination of knowledge are the centrepiece of the changing world. Where universities are unable to meet the expectations of society their tasks will be taken over by others and by other methods of production. (Tavernier, 1991). In this respect he argued, four important changes should be considered.

A first change relates to the observation that the production of knowledge is no longer location bound. Previously, for a university education one had to go to a particular place: Oxford, Paris etc. This is no longer true: the modern technology and world-wide communications is making this location bound nature of teaching and research unnecessary. A second change is that the university is not any longer the sole conservator of science and culture. In older universities symbolically the library tended to be the central building. Today's information technology with its enormous and ever cheaper memory capacity, is also radically changing this task.

The third change concerns the fact that scientific work is more than ever resource intensive. It is far from obvious that it is the university which is best suited to mobilise the necessary men and money. Powerful multinationals might prove better at it. Finally and certainly the most important change is that knowledge has become a real production factor. The student knows that the quality of his/her education is

essential for his/her success in the international labour market; the companies know that they are only viable as long as they keep integrating new knowledge into their products and production processes; the government finally knows that more and more critical scientific inquiry is needed to maintain a liveable society and that its economic success depends on the extent to which it is able to shift the frontiers of scientific research.

“Not surprisingly, in the eyes of many the two essential tasks of the university: production and dissemination of knowledge, have become too important to be left to the university” (Tavernier,1991).

Tucker (1993) in his book on “Chairing the Academic Department” focused on role conflict experienced by department head and argued that the causes of the stress for the heads were numerous. In short the most important job situation that Tucker recognised as sources of stress were:

- ◆ trying to obtain academic staff consensus on important issues ;
- ◆ performing academic staff evaluation;
- ◆ making decisions for which is difficult to foresee the consequences;
- ◆ receiving conflicting or unclear expectations from dean;
- ◆ having unreasonable workload;
- ◆ not having enough time to devote to their research and teaching interests.

In 1993, over 800 heads from 100 doctorate granting and research universities were surveyed (Gmelch and Burns, 1993) using the Department Chair Stress Index to assess: (1) their most stressful situations (2) emergent themes from these stressors and (3) the differences between head and academic staff stressors. The results showed that heads experienced most stress from their heavy workload and the general stresses of time pressures, confrontation with colleagues, organisational constraints and their academic staff duties. Heads were found to be in a paradoxical situation, feeling double pressure to be an effective leader and productive academic staff member.

Smith et al (1995) looked at stress among university academic staff at a land - grant university located in western region of USA. Their primary task has been the process

of identifying common and distinct patterns of stress among university academic staff. They identify those patterns of stress by delineating major categories of academic staff such as rank, gender, discipline, and personality disposition. Their results reconfirm previous national cross sectional research (Gmelch, 1987) that the areas of work place stressors which are salient for university academic staff are task based stress, role based stress and person based stress.

Finally, Thorsen (1996) in his study tried to identify the nature and extent of occupational stress in the professoriate. He found that quantity, rather than the nature of the academic work was stressful. Teaching was the least stressful of the work functions and research the most, particularly among professors in the humanities. The hours spent on the job and tasks which had a time constraint were significant sources of stress for this sample. Rank rather than tenure status appeared to be more significantly related to perceived stress.

In summary, many conclusions can be drawn from the preceding literature review on role conflict. Despite the fact that the unfavourable individual and organisational outcomes of role conflict are well known, the multivariate nature of role conflict and the various antecedents associated with these conflict types are not yet fully understood. This is especially true in the academic context where there are very few studies concerning role conflict among academic professionals. We have seen that most of the studies in academe investigate the construct of role stress and through its analysis they referred to role conflict variable and characterised it as one of the main stress's dimensions. It is also evident that because of the important changes that the contemporary universities are facing the role conflict phenomenon in academe and in particular the role conflict related to the headship position must become a subject for investigation. This is the issue we are trying to develop next.

Research Strategy

Research strategy deals with the process of the research as a whole, namely, the conceptualisation and the operationalisation of the study are discussed and analysed in detail. In particular, the conceptual framework underpinning this research and a number of testable propositions that derive from it, will be presented in chapter (4). The research design, along with the measurements of each of the hypothesised relationships between the possible antecedents and the role conflict variable are explored and evaluated, in chapter (5).

Chapter 4: Conceptualisation of research

4.1 Research purposes and objectives

It is apparent from the foregoing survey of literature on role conflict among academic leaders and more specifically among heads of departments, that very little research has been conducted to investigate this phenomenon. As we have already stressed, the head of department is at the heart of the tension between the academic core of the university, which operates freely and independently in a collegial system and the managerial core, which maintains the mechanistic qualities of a top down structured bureaucratic system. Heads are trapped between the pressures and conflicts of performing as academics and also as managers. Although role conflict has been shown to be associated with unfavourable personal and organisational outcomes and despite the fact that role conflict may also be the most important impediment to attracting professors to become heads of departments, yet there is not systematic effort made to comprehend its various types and antecedents.

To help bridge the gap in literature regarding role conflict and academic department heads, this study is concerned with a multidimensional investigation of role conflict at departmental level. The majority of studies on role conflict have either examined a generalised concept of role conflict or have focused on the sum total of different types of role conflict, apparently assuming that role conflict is one dimensional.

However, this study argues that role conflict is a multidimensional phenomenon and therefore the first purpose of the research is to explore the multivariate nature of role conflict by examining the level and various types of role conflict of academic staff, who find themselves in managerial positions as department heads in the U K universities.

A careful examination of the literature reviewed in the previous chapter (2) revealed that, the bulk of the research on role conflict was concerned with the role conflict-outcomes relationship and with the hypothetical moderators of that relationship. Very few studies were found focusing on role conflict as a key dependent variable. Thus, it becomes necessary to move beyond the role conflict- outcome relationship and try to discover the specific and multiple sources of role conflict, since it is the knowledge of the various antecedents of role conflict that dictates the choice of the appropriate strategies, in order to effectively cope with this unpleasant phenomenon.

The preceding critical evaluation of literature also suggested that the sources/antecedents of role conflict might not only be multiple but interactive as well. It appeared that role conflict might be a function of the interaction of three classes of predictor variables: organisational, personal and interpersonal. Although there are some studies which have used multivariate analyses in approaching role conflict antecedents, very few of them reported investigations that specifically include and compare, at the same time, the three classes of predictor variables. The second purpose of the present research, therefore, is to examine the relationship of a number of organisational, personal and interpersonal variables and their simultaneous combination, with the degree of certain role conflict types, experienced by heads of department in the U K universities.

Consequently the following objectives guided this study:

- ◆ to determine the degree to which heads exhibit role conflict from their dual academic staff and managerial roles and to identify the various types of this conflict;
- ◆ to determine the association of heads role conflict factors with personal attributes of department heads;

- ◆ to examine the influence of university and departmental characteristics on heads role conflict
- ◆ to explore the relationship between interpersonal factors and the various forms of role conflict experienced by heads;
- ◆ to investigate the effects of the simultaneous combination of the three clusters of predictor variables on heads specific role conflict dimensions.

4.2 Definition of role conflict used in this research

We have already given analytically in the relevant subsection (2.1.2) how the concept of role conflict is defined in literature. It is useful to present here, how we conceptualise role conflict for the purposes of this study. Kahn et al (1964) and Katz et al (1978) defined role conflict as the simultaneous occurrence of two or more sets of pressures, such that compliance with one would make compliance with the other more difficult. Building on Kahn et al, Rizzo et al (1970) defined role conflict in terms of the incompatibility of demands in the form of conflict between organisational demands and one's own values, problems of personal resource allocation, and conflict among obligations to several different people.

Miles (1976) also defined role conflict as an incongruity of the expectations associated with a role and identified 4- types of role conflict: intra-sender, inter-sender, person- role conflict, role- overload. The majority of subsequent studies have a relatively high degree of consensus on the conceptualisation of role conflict. Using the same terms, they define role conflict as the incompatibility of demands. We also adopt this definition.

Most of the studies have either examined a generalised concept of role conflict or have focused on the sum total of different types of role conflict, assuming that role conflict is one dimensional. In contrast, for the purposes of the present study we hypothesise that role conflict is a multidimensional variable, and the following 5- different types of role conflict are examined in addition to the generalised concept: (1) incompatible policies, defined as conflicting expectations and university demands in the form of incompatible policies; (2) inter role conflict, defined as conflict

between the several roles of heads which require different or incompatible behaviours as a function of the situation; (3) inter sender role conflict, defined as conflicting requests from others; (4) role overload, defined as conflict between the time resources or capabilities of the head and the defined role behaviour; (5) person role conflict, defined as conflict between the head's internal standards or values and the defined role behaviour.

4.3 Theoretical foundation of role conflict - the research model

In Chapter (2): subsection (2.1.3), we have pursued a clarification of the terms role stress and role conflict, and their relationship and we have argued that we view role conflict as the most important but less studied of role stress dimensions. Since the major concern of the leading scholars in developing role stress theory was to examine how role stress might arise, it was obvious that the theoretical framework developed to support their hypotheses would focused on role stress variable and only indirectly would investigate role conflict. Consequently, in order to produce our model of role conflict for the purposes of this research, we built upon the original theoretical constructs of role stress (Kahn et al 1964; McGrath 1970; Gmelch et al 1993), and by their modification and adaptation to the aims of our study, we offer our conceptual framework of role conflict.

In particular, the basic theoretical construct of role conflict underlying our investigation is that, role conflict is the result of heads' interpretation of conflicting demands and other incompatible pressures in their environment. More specifically based on Kahn's model, we argue that heads' jobs require them to engage in transactions across the organisational boundary (a fact in their objective environment) and they more often report that they are subjected to incompatible demands (a fact in their psychological environment) and therefore would be particular sensitive to role conflict.

The perception of a situation as conflicting by heads is a key component for our research. It is anticipated that the role conflict arising from a situation is based, in large part, on the way the affected head perceives it. Using McGrath's (1976) broadly accepted sequence of events model -depicting the stress process- in connection with the four stage stress cycle model for academic staff in higher education institutions elaborated by Gmelch (1982), we propose the following stages for capturing the role conflict process among heads of departments.

Stage (I) is concerned with the identification of pressures and developing demands on heads of departments present in or because of their environment. In stage (II) the heads' perception of the demands from the environmental factors determine the degree to which role conflict is experienced. Stage (III) is the heads' role conflict response. High role conflict is associated with the heads' perception of limited resources to meet the specific demands. Stage (IV) is concerned with the consequences of the response to role conflict. This stage is associated with long term negative effects. In this study we focus on the first two stages, namely we examine heads' identification of perceived conflicting occupational demands [stage (I), and stage (II)] in performing their dual roles. The following figure is an attempt to visualise and thus better comprehend the various stages of the role conflict process in our model.

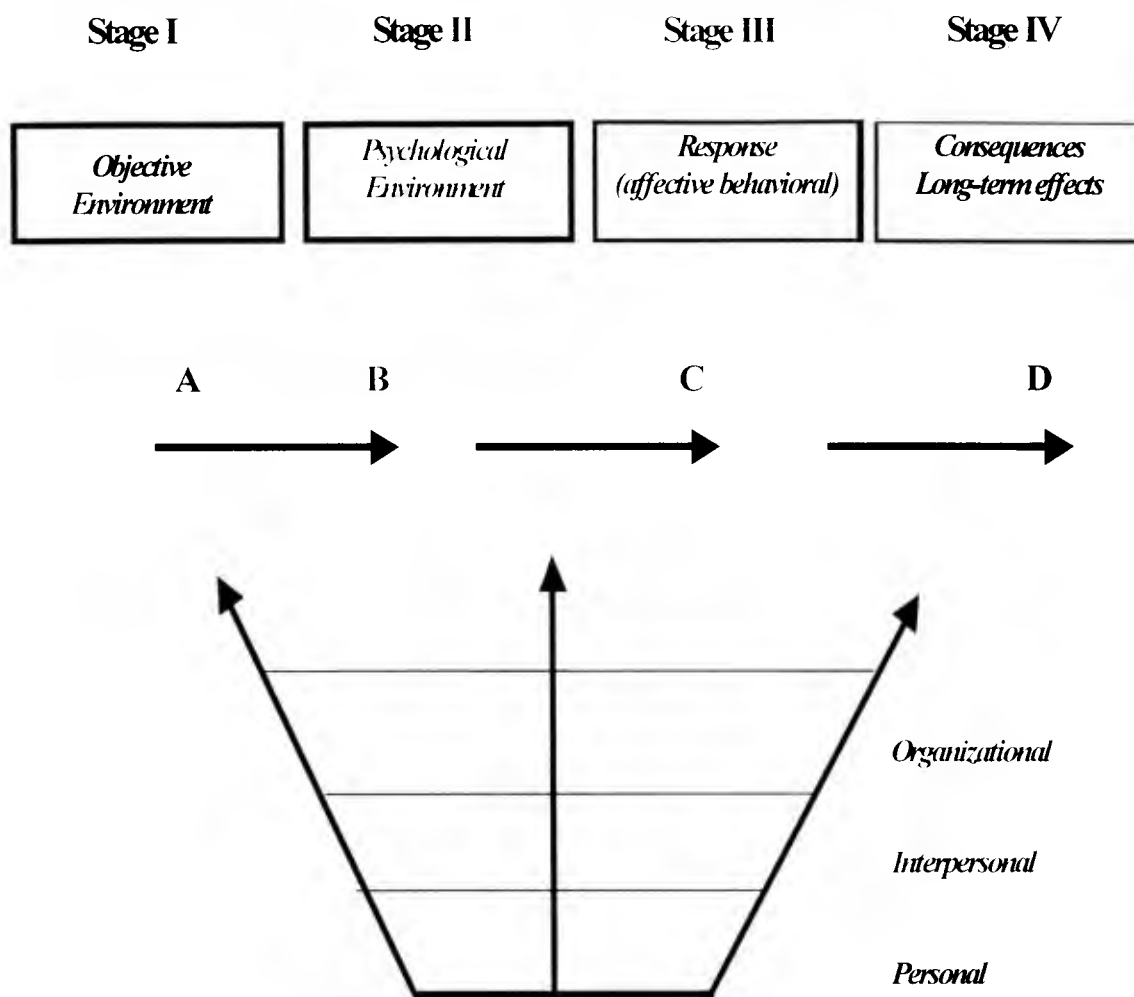


Figure 7 The role conflict model of the present research (adapted from Kahn et al., 1964 & Gmelch et al., 1982 models)

Our model depicts the role conflict process as a sequence of events beginning with some characteristics /demands of the objective environment (A); continuing with the effects of these on the psychological environment (the environment as the head perceives it) (B); followed by the immediate responses to that facts in the psychological environment (C); and ending with the consequences or long term

effects of the experienced role conflict (D). In addition, our model incorporates organisational, interpersonal and personal factors, which affect the role conflict process. We argue that the relationships between objective and psychological environment, between psychological environment and response and between response and enduring consequences may be influenced by characteristics of the individual head of department, his/ her interpersonal relations and by the organisational/ university context in which he/ she enacts the role.

Within the context of our research study, we focus specifically on stages (I) and (II) of the above theoretical model. More specifically, we propose that, the identification and perception of role conflict, as well as its various types, experienced by heads of departments [stage I, II] may be affected by three sets of factors: personal; interpersonal; and organisational. In addition, we argue that these three clusters of factors are acting not only as separate groups but in a simultaneous combination as well.

The rationale for examining these specific clusters is based on three criteria. First, we regard university as a system operating through the complex interaction of its structure and its human assets. Consequently, three distinct levels of analysis can be chosen representing the structural and human side of the university: the institutional/organisational; the interpersonal; and the personal, respectively. Second, each cluster of factors, included here, was also selected on the basis of its empirical or theoretical relevance to the concept of role conflict and work roles, as studied in the relevant literature (see chapter 2).

Finally, for the purposes of multivariate model building, care was taken to identify factors, which were thought to be conceptually and operationally distinct components of the above three levels of university analysis. For example, following this latter criterion at the institutional level we had further subdivided this level in: university; departmental; and role- specific units of analysis, hoping that each set of variables chosen, according to this sub classification, would provide a relatively encompassing and non-overlapping representation of structural influences on the role conflict perception.

It was expected that, following such a selection criterion for the set of variables in each of the three levels of analysis- institutional, interpersonal, personal- the intercorrelation of these predictor variables would be reduced. The next table presents the three sets of variables which correspond to the above described levels of university analysis and follow the selection criteria of our study.

<i>Units of Analysis</i>	<i>Set of Variables</i>
<i>Institutional</i>	<p><i>University Level</i></p> <ul style="list-style-type: none"> ◆ <i>Type of University</i> ◆ <i>Reward System of University</i> ◆ <i>Structuring of Head's Job in the University</i> ◆ <i>Participation Patterns in the University</i> <p><i>Departmental Level</i></p> <ul style="list-style-type: none"> ◆ <i>Area of Discipline</i> ◆ <i>Department Orientation</i> <p><i>Role-Level</i></p> <ul style="list-style-type: none"> ◆ <i>Role Requirements</i>
<i>Interpersonal</i>	<ul style="list-style-type: none"> ◆ <i>Influence/Power of Academic Staff on Decision Making Processes</i>
<i>Personal</i>	<ul style="list-style-type: none"> ◆ <i>Organizational Commitment</i> ◆ <i>Professional Commitment</i> ◆ <i>Educational Level</i> ◆ <i>Years of Experience</i>

Table 1 The Role Conflict Sets of Antecedent Variables in the Present Research

All in all, the conceptualisation presented above provides the basis for the present empirical research on the role conflict experienced by heads of departments in the contemporary university. It is also evident, that according to the objectives of the present research, all the previously considered clusters of variables represent sets of potential antecedents of the role conflict construct. For each set of antecedents there are specific propositions that this study aims to test. These propositions are discussed, in detail next.

4.4 Institutional antecedents of role conflict

In the following paragraphs, we will propose three distinct clusters as institutional antecedents of role conflict, viz. university-level antecedents; departmental-level antecedents; and role- level antecedents, according to the structural classification of the institution's system of operation, already developed.

4.4.1 University- level antecedents

At university- level the variables we identify as possible antecedents of role conflict are: type of university, reward system of university, job structuring of headship position and participation pattern in the university.

(i) type of university

We have already stressed (see chapter-1), that universities are complex organisations with a unique set of features quite different from the many profit making organisations. Baldrige (1978) showed that the functioning of universities can be defined by a bureaucratic, a collegial or a political model. Cohen and March (1986) viewed universities as “organised anarchies” and Mintzberg (1979) explained the uniqueness of universities as “expertocracies”. Weick (1976) characterised academic institutions as loosely coupled systems. All these authors argued that, compared to other organisations, universities goals are more ambiguous; their focus is on people not on profit; their techniques are unclear and non routine; they are vulnerable to environmental changes and experts dominate the decision making process.

Especially in the UK, higher education institutions were established in different ways at different times, and their mission, structure and organisation reflects this diversity. More recently, as a result of the Education Reform Acts of 1988 and 1992, the polytechnics and colleges were removed from local authority control and became corporate bodies in their own right. In 1992, the binary line between universities and polytechnics was removed and a new higher education sector was created. Higher education funding councils with responsibility for funding universities and colleges of higher education were established in England, Scotland and Wales to replace the Universities Funding Council and the Polytechnics and Colleges Funding Council.

The abolition of the binary divide in British universities brought the former polytechnics (new universities) into direct competition with the traditional (old) universities, for research funds from the Funding Councils based on periodic Research Assessment Exercises (RAEs).

“The outcome of the 1992 RAE showed a predictable gap in research performance between the two groups of institutions. The challenge facing the new universities will be for some, at least, to narrow the gap and /or develop a small number of centres of research excellence and thus challenge the long standing research hegemony enjoyed by the old universities” (McKenna, 1996: pp110).

This gap in research between old and new universities was also mentioned in the Dearing Report (1997). The authors reported that there are differences in time distribution in the primary activities, between staff in “pre-1992” (old) and those in “1992” (new) universities, with the latter spending very much less time on research activities. It is not unreasonable to suggest that this is because, traditionally, all “pre-1992” universities, see research as a critical, if not the most important, component of their mission, while the “1992” universities continue to assert the primacy of teaching. Except for the differences in their mission statements, differences in their assessment systems were also reported by the Dearing Survey.

“Staff from “1992” universities were more likely than those from “pre-1992” universities to see their assessment systems as measuring communication skills and as serving to motivate students and provide a

source of self confidence for them and to diagnose strengths and weaknesses” (Dearing Report, 1997: pp108).

Generally speaking, and at the risk of oversimplification, there is a tendency for the “pre-1992” and “1992” universities to be concentrated towards opposite ends of a spectrum. Old universities at the one end of this spectrum can be characterised as more heavily engaged in research; having a higher proportion of postgraduate students, and more selective entry requirements for undergraduate students; and playing a predominantly national or international role. Those at the other end, the new universities, tend to concentrate on teaching activities; have a higher proportion of sub degree students, and to promote the access of non conventional students; and focus on serving the locality or region. There is great and increasing variation not only between institutions but also between departments within one university (Trow,1994; Becher, 1994; Dearing Report, 1997).

Differentiation and heightened competition between and within institutions characterises post- binary higher education.

“In post-binary system universities are ceasing to be closed and self-referential institutions, buffered from the direct impact of both politics and the market. They have also become large and highly complex organisations with diverse functions held together not by a shared professional culture but by managerial direction” (McNay et al, 1995: pp194).

We hypothesise that old universities in our sample will be typical of traditional sector in the freedom enjoyed by basic units and in the predominantly discipline- led structures and participative modes of decision making. While the new universities in our sample will be more bureaucratic, with hierarchical structures and more centralised systems of decision making and control procedures.

Recent changes in political, economic, social, and technological conditions (see chapter 1) have affected the situation of universities strongly. They are now facing almost the same problems that business and companies are encountering. A new more competitive environment, less public funding, changes in the role of the state, or the claim for more academic management, accountability, and autonomy let

universities encounter problems like adaptation, co-ordination, communication, evaluation or effectiveness (Sporn, 1996). In order to confront these new problems, management knowledge needs to be applied to universities (Sporn, 1996). Tools like strategic management and planning, marketing, or the initiation of fund raising campaigns need to be investigated.

We hypothesise, therefore, that academic professional heads of departments in old universities will exhibit higher levels of role conflict than heads of departments in new universities, since they are less accustomed to operate in a centralised, market oriented or business-like environment. In the post-binary era the values of autonomy, academic freedom and professionalism embedded in the traditional university sector will continue to characterise the behaviour patterns of heads of departments in old universities. Our 1st proposition is : heads of departments in old universities will report greater levels of role conflict, than those in the new universities.

(ii) reward system of the university

Research on professionalism notes that professionals practice an accepted body of knowledge, regulate or govern themselves, enforce a code of ethics and work autonomously (Barber, 1963; Raelin, 1986; Grover, 1993). These elements of professionalism combine to form a shared set of expectations concerning professional behaviour. Organisations also invoke expectations, expecting employees to perform some tasks in a prescribed manner. Conflicts between professional and organisational expectations arise in various forms for many professionals (Corwin 1969; Hall, 1968, Sorensen et al 1974). Several researchers have suggested that compatibility between professionalism and the organisation may depend on the organisation's willingness to reward professional behaviour (Hall,1968; Kerr, et al, 1977). The notion is that professionals will experience less role stress in organisations in which they perceive the reward system as giving significant weight to professional behaviour (Hrebiniak et al, 1972).

By and large, professionals are career oriented. As such, they expect that the work they do will not only relate to organisational goals, but will also provide opportunities for their career progression. Professionals who view their own organisational career progression as consistent with their profession's accepted career

progression pattern, and who are given a realistic preview of the job, can be expected to be more highly committed to the organisation (Mowday et al 1982; Conley et al, 1989). This congruence between professional expectations and bureaucratic reality, and the resulting organisational commitment and internalisation of organisational goals, makes it less likely for a professional, working under such conditions, to experience feelings of role conflict.

“Academics are a subset of professionals, although in some way they are the paramount professionals because they have monopolies on advanced degrees and train and credential all other professionals. In this respect their professional status is almost unique” (Slaughter, 1997: pp5).

Given that certain academic professional values and expectations (e.g. autonomy, independence of thought and freedom to express it) characterise heads of departments value system, we can argue that the realisation of these values within the university will influence the degree of role conflict experienced by them.

The contemporary situation in university context, however, characterised by a managerialist ideology, might be thought to undermine traditional conceptions of academics professionalism and might put the academic ethos under threat. We propose, therefore, that heads of departments will perceive less role conflict in universities which encourage and reward more their professional behaviour (e.g. efforts in research and teaching), rather than their managerial behaviour (e.g. efforts in fund raising activities).

Our 2nd proposition is: The more the reward system of the university is promoting and valuing the professional behaviour of heads of departments the lower the reported role conflict. In other words, the more the heads of departments perceive the university as being concerned with their academic career development the lower the reported role conflict.

(iii) job structuring

As more and more professionals are employed in complex organisations (Bacharach et al, 1990), how to design their jobs, in such a way as to assure that role conflict is minimised, has become a primary problem for these organisations (Bachrach et al,

1990). If job design efforts for professionals are to be effective, we need to examine empirically how to achieve a balance between the professional's need for individual identity and autonomy and the organisation's need for collective co-ordination and control. In the private sector, researchers and managers alike are increasingly attending to the way jobs are designed as an important factor in determining the motivation, satisfaction, and performance of employees at work. The need to design the jobs of professionals properly is also important in the public sector which over the last 20 years has become the single largest employer of professionals, including engineers, accountants, doctors etc.

This is also the case in the university context. The recent changes in the current academic environment (see chapter 1) towards institutional competition, accountability and quality assurance processes point to a number of emerging issues that relate to the preservation of academic culture. The likely internal restructuring of academic roles- especially at the head of department's level- should be considered on the basis of how to design effective work patterns conducive to the traditional academic values, such as academic freedom, autonomy, participation etc.

Public sector professionals expect to be recognised as possessing a degree of expertise, which gives them the right to a high level of work autonomy (Hackman et al, 1975), the ability to serve as their own judges, and to be highly involved in decision making. The rights that professional expect, however, are often in conflict with their roles as members of an organisation (Bacharach et al ,1990). In a formalised organisation, efforts are directed toward the creation of certainty through such mechanisms as the centralisation of authority, and the routinisation and formalisation of work (Bacharach et al 1990).

The degree of centralisation in an organisation may be defined either as the degree of participation in decision making, or the degree of reliance on the hierarchy of authority (Hage et al, 1965). Participation in decision making represents how much the occupants of various positions participate in decisions about allocation of resources and the determination of organisation policies. These decisions affect the organisation as a whole. Hierarchy of authority refers to decisions involving the work associated with each social position. If the occupants are allowed to make their own

work decisions, then there is little reliance upon the superordinates and thus a low reliance on hierarchy of authority for social control (Hage et al 1965).

Hackman et al (1971) define centralisation in a similar way, viz. as “the locus of authority to make decisions affecting the organisation”. But, they argue, there are two important aspects of centralisation. First, organisations vary in the extent to which members are assigned tasks and then provided with the freedom to implement them without interruption from superiors; they call this the degree of hierarchy of authority. A second and equally important aspect of the distribution of power is the degree to which staff members participate in setting the goals and policies of the entire organisation; they call this the degree of participation in decision making.

Formalisation is defined as a degree of work standardisation or the existence and use of rules and regulations in an organisation (Aiken et al, 1976). A high degree of formalisation implies not only a preponderance of rules defining jobs and specifying what is to be done, but also the enforcement of those rules. Autonomy refers to the extent to which employees have a major say in scheduling their work, and deciding the procedures to be followed (Hackman et al, 1971). The autonomy dimension as specified by these authors would seem to on tap the degree to which employees feel personal responsibility for their work. In jobs that are high on autonomy employees will tend to feel that they own the outcomes of their work; in jobs low on autonomy an employee may more often feel that successes and failures on the job are more often due to the good work of others.

For most employees the creation of certainty could be expected to reduce role conflict, because uncertainty blurs expectations and minimises predictability, placing employees in a turbulent work environment (Kahn et al, 1964; Zeitz, 1984). Indeed, nearly all of the studies (reviewed by Jackson et al, 1985) that examined the relationship between formalisation and conflict found that the greater the formalisation, the lower the role conflict. For professionals, however, the creation of certainty through bureaucratic job structuring comes into direct conflict with the professional ethos (Bamberger et al, 1990; Jackson et al, 1985). While, when the organisation insures that the job is accomplished not by bureaucratically structuring it, but by assuring that the professional is given the resources and the opportunity to

assume direct responsibility for the job, as well as enough autonomy to carry out their job, then less role conflict is expected.

One way to recognise a professional's expertise is through participation in organisational decision making (Jackson, 1983). The power represented by participation or involvement in decision making operates on two levels: first, the amount of input that the professional has into policy (strategic) decisions, and second, the amount of input that the professional has into operational decisions. Limited input into policy and operational decisions may result in conflict between the professional's expectations for influence in decision making, based on the expertise of the professional and the reality of position based authority (Jackson et al, 1985; Bacharach et al, 1990).

Within the framework of the above considerations and with respect to the present research objectives, three propositions are developed, which address the potential effects of job characteristics on the role conflict of department heads in the university sector.

Proposition 3. the greater the degree of perceived job formalisation among heads of departments the greater the level of reported role conflict.

Proposition 4. the greater the level of job autonomy the less the reported level of role conflict.

Proposition 5. the greater the perceived level of participation in institutional decision making, the lower the reported level of role conflict.

4.4.2 Departmental- level antecedents

(i) area of discipline

The research literature on the academic professions is replete with descriptions of broad variations in the attitudes and activities of academic staff in various academic disciplines. Light (1974) characterised this literature, as a series of encapsulated research reports that lacks theoretical continuity, since most investigations were not

conducted within the framework of a conceptual model that permitted the researchers to offer plausible hypotheses of why these discipline based variations emerged.

Within each discipline a unique subject matter defines the dimensions of knowledge, the modes of inquiry, the significant reference groups, the work experiences, and the rewards of the academic staff within them. Within institutions, a stratified system of multiple academic staff roles preserves a hierarchical arrangement of diverse goals and achievements (Stoecker, 1993). Although both the disciplinary and the institutional components of the matrix can be strong, Ladd et al (1975) as well as Bowen et al (1986) conclude that disciplinary characteristics are stronger influences on academic staff than institutional affiliations.

The influence of unique disciplinary attitudes, beliefs, and behaviours is so obvious to some that they have stated that academic disciplines constitute discrete professions within the world of scholarship (Light, 1974). In particular Light claimed that:

“the academic profession does not exist. In the world of scholarship , the activities..., centre on each discipline. Thus, theoretically at least, we have the academic profession one for each discipline...each has its own separate body of knowledge, each trains its own new members and each licenses, admits and regulates its own recruits, judging its members according to different norms and expectations...”.

As Clark (1983) argued, a national system of higher education is also a set of disciplines and professions, but each isolated from the others and with its own particular set of norms , values and culture. The accelerating process of knowledge specialisation leads to constant disciplinary fission and to a steadily increasing fragmentation of academia (Clark, 1983).

Becher (1989) in his analysis of the academic profession regards it as a set of discipline oriented academic tribes, sometimes at war and sometimes at peace. In the case of academics it should not be surprising that

“...the attitudes, activities and cognitive styles of groups of academics representing a particular discipline are closely bound up with the

characteristics and structures of the knowledge domains with which the groups are professionally concerned” (Becher, 1989: pp20).

The disciplinary context is so significant that it can transcend national cultural boundaries. In Becher’s (1989) metaphor,

“disciplines provide a carrier wave on which the signals of distinctive national groups are modulated” (pp22).

However, he points out that, in some respect, academic profession still operates as a single profession. For example, despite the specialisation, members of the medical profession all share a common core of useful knowledge which they gain at medical school.

More recently Piper (1992) in his study “Are professors professional?” concludes that

“The key to exploring the professionalism of academics lies in explicating the interplay between their two sources of professional identity: the occupation of teaching and the occupation for which their students are being prepared” (pp147).

Tucker (1993) investigated the culture of the departments and asserted that

“there is no single set of values or symbols that fits all departments. Some prize human relationships above all else. Other honour creativity and independence. Some are bound to certain ideas and others to a more general atmosphere of inquiry”.

Finally Becher (1994) in “The significance of disciplinary differences”, after offering an overview of the various disciplinary cultures, he examines different facets of academic activity at the micro, meso and macro levels and suggests that in each case the differences between disciplines are important enough to merit general recognition. The argument above was that there is much greater scope for using the idea of culture to enrich the study of higher education. Becher (1994) has shown how this perspective may be applied at every level, from the academic profession as a whole to the subdisciplinary specialism. The starting point for cultural perspective is to begin to recognise those underlying assumptions, attitudes and values which shape how people make sense of their context.

There have been few attempts, however, to identify dimensions that might constitute the basis of a conceptual framework that would assist research on academic departments. One of the few conceptual approaches to studying the diversity of the academic disciplines is the work of Biglan (1973a, 1973b). Emphasising that the disciplinary subject matter characteristics may be the critical elements of the academic puzzle, he developed a classification scheme for the academic disciplines which is presented in the following table.

Task Area	Hard		Soft	
	Non-life System	Life System	Non-life System	Life System
Pure	Astronomy Chemistry Geology Math Physics	Botany Entomology Microbiology Physiology Zoology	English History Philosophy Communications	Anthropology Political Science Psychology Sociology
Applied	Ceramic Engineering Civil Engineering Computer Science Mechanical Engineering	Agronomy Dairy Science Horticulture Agricultural Economics	Accounting Finance Economics	Educational Administration Secondary & Continuing Education Special Education Vocational & Technical Education

Table 2 Clustering of Academic Task Areas in three Dimensions; The Biglan's model (1973a)

Biglan (1973a) surveyed the perceptions of academic staff at one large university and one small college regarding the similarities among academic disciplines. Analysis of the data, using multidimensional scaling techniques, resulted in the well known three dimensions of the Biglan classification: the hard-soft dimension, the pure-applied dimension, and the life-non life dimension. Biglan concluded that these three dimensions were characteristics of the disciplinary subject matter and relevant to the cognitive style of the discipline.

In a subsequent study Biglan (1973b) applied these dimensions to the study of the characteristics of departments and the output of their academic staff. The academic staff in the hard disciplines were found to be more socially connected, more interested and involved in research and more likely to publish in the form of journal articles, when compared with the soft disciplines. Applied scholars were more

socially connected, more interested and involved in service activities, and more likely to publish in the form of technical reports, than their counterparts in the pure areas of study. A comparison of life and non life disciplines suggested that while life scholars were more socially connected they were less interested and involved in teaching than non life academic staff.

Other investigations of this classification system have shown that it can consistently discern systematic differences in the academic disciplines. Smart et al (1975) examined the goal orientations of academic departments as expressed by the department head. The hard departments placed greater emphasis on goals related to research, graduate education, and development of academic staff and students. Applied departments promoted development of students, graduate programs and the provision of direct services in their goals. Life department goals included, not only an interest in direct service but also focused on research and administrative efficiency. Results indicated that the differences in the departmental goals were generally consistent with the three Biglan dimensions.

Further research by Smart et al (1978) investigated the reward structures within the academic disciplines. After surveying academic staff on time spent on selected categories of professional responsibilities, they attempted to predict academic staff salaries. They concluded that the financial rewards associated with disciplinary responsibilities were highly variable and were best predicted using eight separate regressions based on the eight disciplinary clusters of Biglan.

Further testing of the Biglan classification on a multiinstitutional national sample was done by Creswell et al (1990) using the 1977 survey of the American professoriate. Focusing on research output and sources of academic staff funding, they found clear distinctions among academic staff outputs consistent with the Biglan dimensions. The scholarly output in the hard disciplines was most often journal articles, whereas scholars in the soft disciplines published most in the form of books. Research funding distinguished pure academic staff who received more federal money, from applied academic staff who received more money from private sources. Life and non life academic staff were also distinguished by funding sources with life

disciplines receiving more state level support and non life disciplines receiving more federal support.

A later study on a national sample of academic staff from a heterogeneous group of institutions was made by Smart et al (1976), to further validate the classification scheme using a more comprehensive set of output measures, than in previous studies. Factor analysis of 71-variables resulted in four second order factors (professional success, research opportunities, academic staff conservatism and character development) that were able to significantly distinguish among the academic disciplines. The hard disciplines were characterised by their conservative stance on issues and their emphasis on research. Conservative attitudes were shared by applied academic staff; however their time was more often spent in administrative functions. Life discipline academic staff exhibited strong perceptions of professional success and satisfaction, while non life academic staff reported more interest and time in teaching activities.

These research studies contributed significantly to identifying how Biglan's concept of dimensions could be used to understand department and academic staff characteristics; however they did not continue the process of classifying previously unclassified disciplines. One study by Malaney (1986) that was done for the purpose of ascertaining graduate department support for a computerised information system, used the Biglan dimensions as an independent variable. In that study Malaney devised a 12- point Biglan scale and categorised 114 graduate academic degree programs at a large public research university. However, possibly because the focus is not the Biglan classification, the author neither adequately specifies the sampling procedures used for coders nor does he specify the discussion methods that were used to arrive at the classifications. Also the Malaney study is representative of a single institution.

Stoecker (1993) in his study "The Biglan classification revised" focused on 4-set of variables e.g. the manner in which academic staff spend time; the type of scholarly output generated; the type of funding sources; and the attitudes of the individuals themselves; and he found that the Biglan classification system can be used to discriminate academic staff groups according to these clusters of variables.

In the present research we aim at studying the effects of disciplinary differences on the role conflict experienced by heads of departments, by using Biglan classification scheme, since the accumulating literature suggests that this model provides a valid framework for studying diversity within the higher education system. We argue that under the current context of globalisation, competition and market approaches in higher education, heads in applied departments, such as engineering, biotechnology etc. are providing policy guidelines and offering incentives to encourage their academic staff to discover and develop products and processes for the market. They use new organisational structures to create interdisciplinary knowledge that will increase department's income.

Moreover, they engage in entrepreneurial research for the discovery of innovative products for global markets, concentrating on making their departments operate like small firms expanding commercial activity and generating increased amounts of profit. As a result, their positive attitude towards market and market-like activities will reduce the levels of role conflict they might experience. Our 6th proposition is that : heads in hard -non life- applied departments e.g. engineering, may accept more willingly the market orientation of their institution and thus experience less role conflict than heads in soft- pure- non life departments e.g. history.

(ii) department orientations

Considerable controversy has existed in academia, for many years, concerning the relative emphasis that should be placed on teaching and research. However, appropriate standards for these and other scholarly activities may depend on the nature of the area. Evidence that exists indicates that the emphasis on and significance of teaching differs in physical and social science fields. Scholars in social sciences emphasise educating the whole person while those in physical sciences educating the expert (Smart et al, 1975; 1978).

The social structure and output of scholars at the university of Illinois are examined by Biglan (1973) in terms of the characteristics of their academic subject matter on the basis of his model. He found that, depending on the characteristics of their area, scholars differ in (a) the degree to which they were socially concerned with others; (b) their commitment to teaching, research and service; (c) the number of journal

articles, monographs, and technical reports that they published, and (d) the number of dissertations that they sponsored. In 1975, Smart et al. in their study "Goal orientation of academic departments" concluded that there are differences in the goal orientations of departments (teaching, research, administration, community service) classified according to the Biglan's three dimensional model.

The contemporary university faces so many challenges that even its survival is threatened. Where universities are unable to meet the expectations of society, their tasks will be taken over by others and by other methods of production. In a study "Strategic evaluation in university management" undertaken by Tavernier (1991) the need of a managerial approach in the government of the university is stressed. He pointed out that for the European university the world of tomorrow is a world of competition: competition with foreign universities; competition with open university, with tele classing, satellite education; competition with specialised institutions; competition with big multinationals which often have their own institutes for higher learning; competition also in the field of permanent education; competition in the field of continuing professional development.

Globalisation of the economy is destabilising patterns of university professional work developed over the past hundred years (Slaughter, 1997). Universities are facing a revolution. The pressures of massification, the reduction of public money and the greater pressures from employers and students to be more accountable, efficient and business-like create irreversible changes in their operation. Since conditions of constancy cannot return, debates about the nature and purposes of the modern university occupy the current thinking in higher education.

The university is faced not just with complexity but with "supercomplexity" in which our very frames of understanding, action, valuing, and self-identity are all continually challenged (Barnett, 1997b). To this assertion we should add the "postmodern" thinking (Smith & Webster, 1997; Filmer, 1997) about the contemporary university. Postmodernism asserts that there are no universals in knowledge, ideologies, views of the world, conceptual frameworks, the self and values, as society is undergoing massive forms of change. No stability or durability is

available in this era and university has to live and help us to live with uncertainty (Barnett, 1997b).

Research evidence (see chapter 1) reveals that the challenge higher education is facing in today's turbulent external environment, is how to maintain flexibility and viability, preserve quality, respond effectively to the changing needs of society within the context of continuing inflation and declining resources and increased competition. It is evident that changes in the mission of the university will affect the goal orientation of its departments. In facing up to the challenges of supercomplexity, heads must also cope with the pressures and threats generated by the adoption of market principles in the current higher education context.

We propose, therefore, that heads of departments who view themselves mainly as academics will confront many difficulties in accepting a university's strategy oriented towards market approach in education, and will expose themselves to high conflict when attempting to translate this strategy to specific departmental goal policies. Our 7th proposition is: the more a department is oriented towards managerial and entrepreneurial goals the more the reported level of role conflict by head of department (depending on the area of discipline).

4.4.3 Role- level antecedents

(i) role requirements

A review of major empirical studies made in previous chapter (2), suggests that role requirements associated with specific kinds of positions may be potential predictors of experienced role conflict. In brief, role conflict appears to be associated with organisational linking roles, whether they involve the integration of activities across, intra and inter organisational boundaries (boundary spanning roles) or up and down the chain of command (supervisory/ managerial roles) (Kahn et al, 1964; Miles et al, 1976; Van Sell et al, 1981).

Kahn et al (1974) have argued that role conflict is directly related to the degree of innovation required by the role; consequently the degree of scientific research

responsibilities assigned to focal persons may be another objective source of experienced conflict. Miles et al (1976) in their research on role conflict among professionals from nine- governmental research and development organisations, found that individuals, who rated only scientific research activities as an important part of their jobs, were characterised by low levels of conflict. When these activities were considered, simultaneously with other role requirements, such as boundary spanning and supervisory responsibilities, then the individuals who were performing those multiple roles were reported the highest levels of role conflict. These individuals were characterised as manager scientists who have integration responsibilities which require them to span inter organisational boundaries.

Since then, many researchers have pointed to the pressures and conflicts on the head's position, as a result of the multiple role requirements associated to this "swivel" position (see chapter 2). Tucker (1981) identified the department head's responsibilities as: department governance, instruction, academic staff affairs, student affairs, external communication, budget and resources, office management, and professional development and concluded that the head's job was obviously difficult and complex. It is not surprising that of all the administrative positions in higher education, headship seems to have the most role conflict (Fife, 1982). The question that arises is which of these activities undertaken by heads of departments create high levels of role conflict and therefore less satisfaction in performing their roles.

McLaughlin et al (1975) in their study "Selected characteristics, roles, goals and satisfaction of department chairs in state and land grant institutions" (USA), found that heads were involved in three major roles: academic, administrative and leadership. The academic role consists of duties of student involvement and research activities. Heads enjoy this role and report high emphasis on concurrent goals, but feel frustrated in terms of time to pursue commensurate activities. The administrative role requires the majority of time and also contains some of the less desirable duties. Administrative goals are seen as over emphasised. The leadership role involves tasks related to academic personnel and program development. It is a major satisfaction realised by accepting the position of head. Developing abilities of academic staff

members and maintaining academic freedom are the two most important goals in this role.

Contrary to these results, Singleton (1986) reported that role conflict among educational administration department heads (who belong to the USA University Council for Educational Administration), was associated with the following activities: department governance, academic staff affairs, student affairs, external communications and professional development. The conflict pertaining to the head's ability to foster professional development is the largest source of role conflict for the heads in this sample. Professional development contained such tasks and duties as fostering good teaching in the department, stimulating academic staff research and publications, and representing the department at meetings of professional societies. Areas that did not add significantly to the head's perceived role conflict, included the conflict associated with instruction, budget and resources, and office management.

More recently, Mc Innis (1996) examined the change in the self reported allocation of academic work activities, over a 20- year period, based on the results of national survey of Australian academics conducted in 1993-94. He concluded that while the time given to the core activities of teaching and research has remained fairly stable, since the 1970s, changes at the margins of academic workload are of considerable importance well beyond the actual time involved. Additional tasks have been largely generated by the demands of institutional competition, accountability and quality assurance processes. These work trends are considered in the context of highly stable academic work values and point to a number of emerging issues that concern staffing policy and practice including: the likely internal restructuring of academic roles on the basis of performance; increasing status differentiation on the basis of teaching and research; and the press for collective effort to improve productivity and efficiency in teaching and research.

In Britain, there have been a number of surveys of the hours of work and use of time by academic and related staff at higher education institutions, but they vary according to the reasons they were carried out, their methodology, results and conclusions (Court, 1996). It should be noted that, while academic staff in the new universities have a contractual limit on the number of hours, they are expected to

teach per week (Court, 1996), hours of work are not so defined for academic staff in the old universities.

Teichler (1993) reported that psychological stress was a feature of occupational stress for academics. In one study, 75% of academic staff reported experiencing work overload always or frequently. According to Teichler: "The demands on academics have risen rapidly over the last years. In theory the freedom indicative of high control still exists, but in practice there has been a steady erosion of job control. All the signs are that this will continue". Teichler (1993) noted also that the lack of back up for academics has meant that many staff were coping with overload in three areas- teaching, research and administration.

Court (1996) reviewed a series of surveys of the use of time by academic staff, between 1962-94 in the UK and provided strong evidence that the workload of university staff is both heavy, and increasing. Many hours are being worked outside office hours, because of timetable pressures arising from administration and the greater numbers of students. Academic staff are working an average of nearly 55 hours a week in term time, or almost 11 hours a day for a five day week. Nearly half of personal research and scholarship- vital for achieving academic excellence- is being done outside office hours.

Finally, in 1997 a survey was undertaken by the Dearing Committee in the UK, in order to find out- among other higher education issues- how academics used their time at work. Respondents were also asked questions which allow a comparison between the actual amount of time they spent on particular activities and the amount of time they felt that they ought, ideally, to be devoting to these activities. The results show that the largest discrepancies between actual and desired allocation of time relate to research and administration/ management. Across the board staff would like to spend half to twice as much time again on research as they currently do, and to cut the amount of administration and /or management by half. This finding was regarded as a possible reason for explaining academics' desire to leave the sector before normal retirement age (Dearing Report, 1997).

In summary, the new work realities for academic professionals are seriously challenging their focus on the core activities of teaching and research. The growth in the time required for non-core activities over the last decade and the resulting dissatisfaction is a serious problem, which need to be studied and tackled. This is especially true for the head who is exposed to different and contradictory demands through the performance of his/her multiple role activities. Especially, in a climate of pressure and increasing competition for the scarce resources that exist, heads of departments should try to compensate for these financial constraints through market-like activities, which involve competition for funds from external resource providers.

The emergence of a global market has created conditions that mean less money for social welfare and education and more money for building entrepreneurial competitiveness (Slaughter, 1997). In this new reality, policy makers at national level allocate more state money on institutions and departments that aid in managing or enhancing economic innovation and competitiveness. As Slaughter (1997: pp14) has argued

“some departments, colleges, gain revenue shares (e.g. some areas of the physical and biological sciences and engineering, business and law), whereas areas such as the humanities, some physical sciences (e.g. physics), and most social sciences lose shares, as do fields such as education, social work, etc.”.

Under the current context heads of departments had to devote much of their time to secure adequate resources, in addition to the creation and maintenance of an ethos which aims at sustaining and enhancing quality teaching and research. Maintaining quality with diminished resources may be a task of great conflict for heads of departments, in addition to the other multiple role requirements of his/her position. Thus with respect to the present study, we shall try to analyse the effects of different role requirements on the role conflict experienced by head of department. Our 8th proposition is: The more the time devoted to market-like and entrepreneurial activities the more the reported role conflict, while the more the time spent on core activities the less the role conflict.

4.5 Interpersonal antecedents of role conflict

(i) influence of academic staff members

As has already been mentioned in chapter 2, numerous scholars have documented the effects of interpersonal variables on role conflict. In brief, it has been shown that interpersonal factors, such as formal authority, power and status of role senders, communications patterns (e.g. communication frequency and number of role senders, group cohesiveness, closeness or supportiveness of supervision) influence the focal person's perceptions of role conflict.

We have argued in chapter (2), that traditionally departments were structured and operated in a collegium system - especially in the old university sector. Academic staff members had a great influence on departmental policy issues and decision making processes, while heads were viewed as "first among equals" in a management by consensus model of department governance. The departmental colleagues were frequently cited as being important forces of control over heads' decisions. For the purposes of our research we shall examine the power and/or support of role senders -academic staff members- in influencing the departmental decisions as a possible predictor of the role conflict experienced by head. Our 9th proposition is: the higher the contribution of academic staff members on the specific decisions of the department the lower the reported level of role conflict for its head.

4.6 Personal characteristics of heads as antecedents of role conflict

(i) Professional and/ or organisational commitment

Commitment has been the focus of a considerable amount of research over the past decades. Many major reviews of commitment theory and research have been completed during this time (Morrow, 1983; Meyer et al, 1991). Especially in the past decade, there has been a steady increase in the attention given to studying it.

"Not only has the number of studies directly concerned with the development and consequences of commitment increased dramatically, but also commitment is often included as a variable in studies where it is not the primary focus of attention. Indeed, commitment has begun to rival job satisfaction" (Meyer et al, 1993: pp538).

Generally speaking, these reviews have indicated that commitment is a rather complex construct. For example, it has been suggested that commitment can come in different forms (Meyer & Allen, 1991), as well as having different foci (Reichers, 1986; Becker, 1992). The different foci of commitment examined in the literature are: commitment to organisation, professions, unions, employment, careers, top managers, work group and so on. For the purposes of the present study we shall focus on the organisational and professional foci of commitment. The empirical literature concerning organisational commitment is potentially confusing because it is characterised by a diversity of definitions and operationalisation of organisational commitment (Reichers, 1986).

Numerous terms are used to refer to organisational commitment, including for example, affective commitment (Meyer et al, 1984), or organisational identification (March & Simon, 1958; Patchen, 1970) and organisational involvement (Gould, 1979). A dominant theme that runs throughout is the individual's psychological attachment to the organisation. It is the state of psychological attachment that appears to be the construct of interest in much of the commitment literature (O'Reilly et al, 1981). As suggested by Welsch et al (1981) commitment is distinguished from simple attachment or membership in that the employee is willing to go beyond normal required compliance.

The most popular definition and measure of organisational commitment was set forth by Porter et al (1974) and represented by the organisational commitment questionnaire (OCQ). They define organisational commitment as (a) a belief in and acceptance of organisational goals and values; (b) a willingness to exert effort towards organisational goal accomplishment; and (c) a strong desire to maintain organisational membership. The increasing popularity of this measure has begun to lend some consistency to the study of organisational commitment and its antecedents.

More recently, Meyer & Allen (1991) described three forms of organisational commitment, all of which have implications for the continuing participation of the individual in the organisation. Affective commitment refers to a psychological attachment to the organisation (e.g. individuals stay with the organisation because

they want to). Continuance commitment refers to costs associated with leaving the organisation (individuals stay with the organisation because they need to). Normative commitment refers to a perceived obligation to remain with the organisation (individuals stay with the organisation because they feel they should).

On the other hand, the definitions and measures of professional commitment tend to be modelled after the Porter et al (1974) approach to organisational commitment. Professional commitment refers to a person's belief in and acceptance of the values of his or her chosen occupation or line of work and a willingness to maintain membership in that occupation (Sorensen and Sorensen 1974; Morrow and Wirth 1989). Numerous terms are used to refer to what is defined as professional commitment, including occupational commitment (Ferris, 1981; Aranya et al, 1983), career commitment (Blau, 1985, 1988), and career salience (Morrow et al, 1986). Common to all of these terms is the critical notion of being committed to one's career or occupation. It should be noted that the terms occupation, profession and career have been used somewhat interchangeably in the commitment literature.

Meyer et al (1993) preferred the term occupational commitment over professional commitment, because they believed that non-professionals could also demonstrate commitment to their chosen occupation. Similarly the term career commitment was avoided, because career can be defined as a planned pattern of work from entry into the work force to retirement, or as involvement in a particular job, organisation, occupation, or profession. For the purposes of our research in order to conceptualise the constructs of organisational and professional commitment we choose the widely spread and accepted definition given by Porter et al (1974).

Along with the increased attention given to the definition and operationalisation of the two commitments, research has long been concerned with the relationship between these two variables. In particular, different and sometimes contradictory assumptions can be found in literature about the relationships between the commitments of professionals to their profession and to the employing organisation, and the consequences of these relationships for other work attitudes.

The professional and organisational -bureaucratic value systems have commonly been assumed to be incompatible with each other and to lead to different role orientations. The organisational- bureaucratic value system has been assumed to emphasise values, such as hierarchical control and authority, conformity to organisational goals, norms and regulations, and organisational loyalty. On the other hand the professional value system has been assumed to emphasise values, such as professional (collegial or self) control and authority, conformity to professional goals and standards, professional autonomy, and client orientations and loyalty (Gouldner, 1958; Corwin, 1969).

The perception of incompatible value systems had initially led to a unidimensional theory of inherent conflict between the two commitments. Its proponents have proposed that because of the incompatibility in values, professionals can orient themselves either to the professional or the organisational value system (Gouldner, 1958). Professionalism in this sense has been operationalised mainly as a global, unidimensional concept or as one end of “cosmopolitan-local” dichotomy (Gouldner, 1958). According to Gouldner (1958) there are two types of latent organisational roles or identities:

1. Cosmopolitans: those low on loyalty to the employing organisation, high on commitment to specialised role skills, and likely to use an outer reference group orientation.
2. Locals those high on loyalty to the employing organisation, low on commitment to specialised role skills, and likely to use an inner reference group orientation. Types of locals and types of cosmopolitans are differentiated and it is suggested that these two identities may reflect the tension between the organisation's simultaneous need for both loyalty and expertise.

This view has later developed into a two dimensional conception in which the commitments are assumed to be independent and therefore not inherently conflicting. Advocates of this approach have argued that the conflict in commitments is determined by the extent to which the employing organisation allows for the realisation of professional work expectations, or rewards professional behaviour (Hall, 1968; Engel, 1970). A 4-fold typology of commitments found in a number of studies (Miller et al, 1971; Greene, 1978), is based on this assumption of

commitment independence. The typology constitutes combinations of degree of commitment to either the organisational or the professional values-identification with one's profession and not with the employing organisation (professional identification), identification only with the organisation (organisational identification), identification with both (mixed) or with neither (indifferent).

A different approach has been adopted by others who have contested the assumption of commitment independence and claim that the two commitments are related. They maintain that facilitation of work expectations of professionals by the employing organisation induces commitment to the organisation and hence leads to congruence in commitments (Hrebiniak et al, 1972; Bartol, 1979). These two basic alternative theoretical formulations, which assume inconsistency or congruity between organisational and professional commitment, were examined and tested on a sample of 1200 Canadian Certified Accountants, by Lanchman and Aranya in 1986. The positive significant correlation found between them, brings some support to the congruence assumption, while the alternative, independence assumption does not seem to gain empirical support.

Some researchers have also argued that the congruence perspective suggests that the professional commitment is causally antecedent to organisational commitment (Mortimer et al, 1979; Frese 1982). Confidence in occupational commitment's antecedent status builds from research noting that, a moderately stable level of occupational commitment forms prior to organisational entry, during the process of occupational socialisation (Kanter, 1977; Mortimer et al, 1979). Wallace (1993) used a meta- analysis technique to integrate previous findings from the relevant literature, about the nature of the relation between the two commitments. The results indicate a moderately strong positive association between commitments, which is consistent with the views that have prevailed for the last decade.

Although several studies have assessed the general relationship between occupational/professional and organisational commitment, none have attempted to establish the causal priority between the two constructs. In a study undertaken by Vandenberg et al (1994) occupational /professional commitment was viewed as a causal antecedent to organisational commitment. Based on longitudinal data from

100 management information systems professionals, working in a multinational software, research and development firm, in the USA, this view was supported. The findings demonstrated (a) a causal priority from occupational to organisational commitment (b) a significant positive influence of occupational commitment upon organisational commitment.

In summary, the commitment of professionals to the values and norms of their profession, as well as to those of the employing organisation, has for long been a major issue of concern in the study of professionals. In the relevant literature different sets of propositions about the relations between the professional and organisational commitments of professionals, and their consequences on work attitudes and turnover intentions, were presented. Within the context of our research we aim to investigate the relationship between professional and organisational commitment of heads of departments in the higher education institutions and its effect on role conflict level. The comparison of the competing theoretical positions may constitute an important step toward the clarification of these theoretical differences and to a resolution of the debate. With respect to role conflict, most of the studies argue that commitment is a consequence of role conflict, rather than the other way round (Jackson et al, 1985; Leong et al, 1996). Viewing commitment as an antecedent of role conflict is an interesting possibility.

The literature on academic professionals suggests that “the academic profession is a set of discipline oriented academic tribes” (Becher, 1989). Tucker(1993) also argued that

“the rise of department grew out the need to improve the organisation and management of the academic process as knowledge expanded at an ever accelerating pace. Allegiance to the discipline has become more important, than loyalty to and concern for the college or university. Publishing, research and concern for tenure have pushed teaching into a subordinated position”.

In the contemporary university heads of departments are at the heart of a tension between the managerial and academic core subsystems, operating in quite different modes. They are in a difficult position to mediate the demands of administration and

concerns of academic staff. Our 10th proposition states that: to the extent that university pressures at the departmental level are stronger towards managerial orientations, heads of departments who identify more with their discipline and its academic traditions would be more likely to experience high levels of role conflict.

(ii) Educational level and years of experience

Jackson et al (1985) used meta-analysis techniques to measure the strength and consistency of the relationships found between role conflict and a number of specific variables. These variables were chosen because of frequency of their appearance in literature. The individual variables -which were examined as one of the hypothesised cluster of antecedents in Jackson et al.'s meta-analysis - include: tenure, age, education level, years of experience etc. The results showed that individual variables were not strongly related with role conflict, but suggested that these associations were likely to be influenced by moderator variables.

In our research, we anticipate (11th proposition) that the educational level (namely, the possession or not of a post-graduate degree) and the years of experience will have a direct effect on role conflict :“(i) the higher the level of education and (ii) the greater the number of the years of experience of heads of departments the lower the role conflict reported by them”

It is suggested that both of these variables have influenced the socialisation process of professionals. Many researchers (Miler et al, 1971; Stark et al, 1986; Vandberg, 1994) have argued that there are two types of socialisation of professional employees in an organisation, which influence their commitment orientation. The first, professional socialisation is concerned with the acquisition of the values, attitudes, skills and knowledge of the professional subculture. This type of socialisation is reflected, in part, in the length and type of training received in graduate school. Professional socialisation occurs primarily during the early stages of a work career and is an essential part of getting persons committed to careers and prepared to fill organisational positions. The second, the organisational socialisation has to do with the learning and situational adjustments necessitated when the professional leaves graduate school and enters an organisational setting. In the following paragraphs, a

summary of the above developed propositions, as well as the subsequent research questions is presented.

4.7 Research propositions and the research questions- a summary

1st proposition: Heads of departments in old universities will report greater levels of role conflict, than those in the new universities.

2nd proposition: the more the reward system of the university is promoting and valuing the professional behaviour of heads of departments the lower the reported role conflict. In other words, the more the heads of departments perceive the university as being concerned with their academic career development the lower the reported role conflict.

3rd proposition: The greater the degree of perceived job formalisation among heads of departments the greater the level of reported role conflict.

4th proposition: The greater the level of job autonomy the less the reported level of role conflict.

5th proposition: The greater the perceived level of participation in institutional decision making the lower the reported level of role conflict.

6th proposition: Heads in hard-nonlife-applied departments e.g. engineering may be accept more willingly the market orientation of their institution and thus experience less role conflict than heads in soft-pure-nonlife departments e.g. history.

7th proposition: The more a department is oriented towards managerial and entrepreneurial goals the more the reported level of role conflict by its head.

8th proposition: The more time devoted to market-like and entrepreneurial activities the more the reported role conflict, while the more the time spent on core activities the less the role conflict.

9th proposition: the higher the contribution of academic staff members on the specific decisions of a department the lower the reported level of role conflict, by its head.

10th proposition: To the extent that university pressures at the departmental level are stronger towards managerial orientations, heads of departments who identify more with their discipline and its traditions would be more likely to experience high levels of role conflict.

11th proposition: (i) the higher the level of education and (ii) the greater the number of the years of experience of heads of departments the lower the role conflict reported by them.

Within the above framework of arguments the questions to be asked are:

- ◆ What are the types of role conflict experienced by heads of departments;
- ◆ Are there differences in the degree of role conflict experienced by heads in different universities (old versus new);
- ◆ How well would a common set of structural properties (e.g. formalisation, autonomy, and participation) predict levels of heads' role conflict;
- ◆ To what extent would such predictions be sensitive to discipline differences;
- ◆ What influence does academic discipline have on heads' role conflict;
- ◆ How much influence has the department's goal orientation on the role conflict reported;
- ◆ How wide are the differences in the way heads distribute their time across the primary activities of their role? And how the various activities influence the degree of role conflict experienced by them;
- ◆ How much the degree of staff's contribution to departmental decision making can influence the level of the heads' role conflict;

- ◆ How is professional and organisational commitment of heads related; and how do they affect the degree of role conflict experienced by them? Are there differences in the role orientations of heads among the different academic disciplines [e.g. are the members of certain disciplines/ professions more inclined to adopt a more “local” (organisational) orientation than are members of other disciplines /professions];
- ◆ What influence do other personal attributes (educational level, years of experience) have on heads’ role conflict?

To summarise, in the previous subsections we have proposed such a conceptualisation and derive from it a number of predictions, about the influence that specific antecedents of the university context along with certain personal characteristics of department heads, might have on the degree of role conflict experienced by them. It is apparent that the three distinct clusters of propositions outlined above must be described in more measurable terms, if the validity of the conceptualisation proposed here is to be tested. The design of the research and its operationalisation will be considered in turn.

Chapter 5: Survey research approach

“Research strategy” or “research procedure” refers to the way in which one particular empirical study is designed and carried out, which approach is appropriate to be chosen, or what type of research design is used, and which particular combination of available research techniques is employed (Bulmer, 1978; Rose, 1977; Bell, 1989).

The literature on Research Methodology varies widely as to its degree of specificity, from the most general to the most specific detail, about how to employ a particular research strategy. The choice of the research strategy is dictated by the purpose of the research. In general, research can be classified according to its purpose in two large categories: descriptive and explanatory. The former describes the patterns of variation in a particular phenomenon within a number of individuals, while the latter seeks to account in explanatory terms for such patterns of variation. A study under the first heading would be answering questions of “how many” “how much” “what number” etc., while a study under the second heading would be answering the questions of “why” and “how” (Rose, 1971; Bulmer, 1984; Kidder et al, 1991)

Descriptive studies may focus upon individual variables (e.g. univariate) or upon combinations of variables (e. g. multivariate). Explanatory studies need to be at least bivariate, viz. concerned with two variables, because at least a second variable (a so called independent variable) is needed to account for the variation in a first variable (the so called dependent variable). A dependent variable is therefore one whose variation the researcher is seeking to explain, while an independent (or explanatory) variable is one used to explain the variation in the dependent variable. A descriptive study tries to explore, and in the process to describe, the relationship among variables, while an explanatory study attempts to interpret such descriptive relationships.

With regard to our research, it is evident that the explanatory research strategy matches the problem under investigation. The dependent variable whose variation we are seeking to explain is role conflict, while the independent or explanatory variables are the institutional, interpersonal and personal clusters of variables, presented earlier

(see table 1) in the chapter (4). We seek a systematic relationship or a so called correlation between the dependent and explanatory variables. Namely, we are seeking to define how role conflict of heads of departments is correlated with the three distinct clusters of variables, we chose to investigate in our research.

In correlational studies, data on two or more variables are obtained and an attempt is made to determine whether or not the variables are correlated. Correlation refers to the degree to which two variables consistently vary in the same direction (positive correlation), or in the opposite direction (negative correlation). If two variables are positively correlated one tends to be high when the other is high and low when the other is low. A negative correlation exists when one variable tends to be high when the other is low, and vice versa (Denzin et al, 1994).

The next stage in a research strategy process -after the formulation of theoretical propositions and the illustration of the dependent and independent variables- is the choice of the particular research approach to be used. The research approaches most commonly identified in the relevant literature can be subsumed under three major types: experimental which covers the subjects of experiments and quasi-experiments; non experimental which is sometimes referred to as survey; and field research a term which is used more or less as a synonym for participant observation, although strictly speaking this type of approach could also be included under the second type (Bryman, 1989; Morse, 1994; Yin 1994)

In an experimental research approach, a researcher manipulates one or more independent variables to observe the effect on the one or more dependent variables. It involves the allocation of individual research subjects randomly to one or two groups, a so called treatment (or experimental) group that receives the experimental treatment, and a so called control group that does not. Any difference between the two groups after the application of the treatment should be attributable to the effect of the treatment. In a non-experimental research approach, the researcher usually observes relationships between two or more variables as they exist, without trying to manipulate them. The most extensively used non experimental research approach is the survey, which is also the most widely practised alternative to experimentation.

Survey research can be classified according to its purpose as: descriptive or analytic. The purpose of the former is to count. It counts a representative sample and then make inferences about the population. In most descriptive surveys the principal consideration is sampling. In contrast, the purpose of the analytic survey is to explore relationships between particular variables. Oppenheim (1979) suggested that the analytic survey is less oriented towards representativeness and more towards finding associations and explanations, less toward description and more toward prediction, less likely to ask “how many” or “how often” than “why” and “how”.

Three distinct types of survey research can be identified in the literature (Nachmias, 1982; Kidder et al, 1991). The first, is the so-called cross sectional study, which is a single study of a sample of subjects at one point in time. Cross sectional studies cannot be used for unambiguous statements about causation between two variables, measured at the same point in time, when the direction of causation between them may not be determined from theoretical principles. In some situations, there are reasons for arguing that the direction of causation between two variables is more likely to be in one direction than the other; however sometimes one may argue that it could occur in either direction.

The major survey research tool to overcome this difficulty of the cross sectional study is the so called panel (or longitudinal) study, which involves interviewing the same sample of respondents on two or more occasions. Data on individuals at three separate points in time provide access to more sophisticated statistical techniques, than with merely two points in time. In general, panel studies are the best survey based method of assessing causation, because one has measurements on individuals at two or more points in time that may be related to the time of occurrence of any supposed cause (Judd et al, 1991).

A third type of survey research is the trend study, which involves interviewing different samples of respondents drawn from the same population at different points in time. Trend studies give estimates of gross change at the aggregate level, between different points in time, and they may frequently be suitable for some reasonably robust inferences about the cause of observed change, often in the light of events that have occurred between successive surveys (e.g. change in the popularity rating of a

government, in the light of some intervening political event) (Morse, 1994). Trend studies are in general less useful than panel studies for the assessment of reasons for change, because the latter provide individual level data on patterns of switching. Panel study data show whether individuals have changed between two points in time, even though the final effect of these switches may have been self-cancelling, in terms of the result at the aggregate level. On the other hand, trend data will not record individual switching if its effects are self-cancelling (Judd et al, 1991).

Within the context of the above theoretical considerations, the cross sectional survey approach must be selected and used in our study, since this approach corresponds absolutely to the purposes of the research. After choosing, the survey approach to be used, in order to achieve the objectives of our research, we can turn to the next stage of the research process which is the operationalisation of the study.

5.1 Research operationalisation

Operationalisation refers to the choice of the appropriate technique or method of data collection and the subsequent decisions about concepts/ indicators and their measurements. "Research techniques" or "research methods" are specific manipulative and fact finding operations, which are used to yield data about the research problem. Examples include the use of questionnaires or interview schedules to elicit people's social characteristics, beliefs, and attitudes, the use of official statistics and archival records, and the use of historical documents (Bell, 1989; Bryman, 1989; Erikson, 1992)

5.1.1 Method

For the purposes of our survey we choose the use of questionnaire as the most suitable method of data collection. We based our decision on two factors. First, as we have already stressed in the conceptualisation section we intend to use a multivariate design of data analysis, in order to test our objectives. In a multivariate design, a large number of cases is needed in order to use most of the available statistical techniques. This fact, along with the time and resource constraints- present in all PhD

studies- made us to choose the postal questionnaire as the appropriate method of data gathering, comparing to other more time consuming methods e.g. interviews. Secondly, most of the reported researches in the literature used the survey questionnaire design in order to determine the relationships of role conflict with its various antecedents and outcomes.

5.1.2. Sample

The survey was conducted by the administration of a postal questionnaire to heads of departments in different universities (new and old) in the UK. The postal questionnaire (see Appendix I) was distributed to the sample of heads with an accompanying letter (Appendix III). The population upon which the survey was focused was the heads of departments in all UK universities. Because of the large size of the population a sampling strategy was adopted.

The subject of sample design is concerned with how to select the part of the population to be included in the survey. A basic distinction to be made is whether the sample is selected by a probability mechanism or not. With a probability sample, each element has a known nonzero chance of being included in the sample. Consequently, selection bias are avoided and statistical theory can be used to derive properties of the survey estimators.

Nonprobability sampling covers a variety of procedures including the use of volunteers and the purposive choice of elements for the sample on the grounds that they are representative of the population. The weakness of all nonprobability sampling is its subjectivity which precludes the development of a theoretical framework for it.

Probability sampling was chosen for the present research, therefore, based on the survey sampling theory propounded by Moser & Kalton (1971) and developed by many other authors later on (Kalton, 1983; Henry, 1990; Babbie, 1990; Fink, 1995). The sampling frame that was used was the list of heads of departments kept and published by the Association of Commonwealth Universities and updated by them

each year. The most important principle in sampling is that each member of the population from which the sample is drawn, should have an equal and known probability of being selected.

A variety of probability sampling techniques has been developed to provide efficient practical sample designs. Among the most widely used are: simple random sampling, systematic sampling, stratified sampling and cluster sampling. The form of probability sampling selected was systematic random sampling, so that each alternate name on the heads of departments' staff list was selected for the survey. Namely, in order to select a uniform random sample of 200 heads of departments from the whole population, we divided the total number of heads in the list (about 2,000) by the sample size chosen (200). The sampling fraction is $2000/200$ and yields 10. That means that 1 of every 10 heads will be in the sample. To systematically sample from the list of heads of departments, a random number between 1 to 10 was selected to determine the first head in the sample and taking every tenth head thereafter. The random number was 9. Thus, the 9th name on the list was selected first, then the 19th, 29th, 39th and so on up to 200 names.

The sample size chosen (10% of the whole population) was considered sufficient to achieve the purpose of the survey, which as has already been stressed is to explore and interpret the relationship between the dependent and the explanatory variables- as defined in the present enquiry- and not just to describe or count a representative sample, and then make inferences about the population. The sample size was also large enough to fulfil the secondary objectives of the survey research, relating to comparisons between new and old universities, as well as between the various departments.

5.1.3 Measurements

The major task in a research is often the elaboration of appropriate concepts, by which to express theoretical propositions and their subsequent operationalisation, using indicators for the purpose of conducting actual research. In devising indicators the major problem is that they have to satisfy two crucial criteria. The criterion of

validity which examines if the indicator measures what it is supposed to be measuring. And the criterion of reliability, which refers to the degree to which a measure is consistent in producing the same readings, when measuring the same things on different occasions and when tested on the same population (Kirk et al.1986)

In the operationalisation process where the concept - indicator relations must be handled, the key issue is the scales of measurement developed to measure the variables under investigation. In general, each variable has two or more different values, within a sample or population. The meaning of the numerical score (value) assigned to a variable depends on the type of scale that was used to measure the specific variable.

It is usually considered that there are four scales of measurement: a nominal scale which uses numbers as “names” for certain categories or individuals. Numbers in a nominal scale have no relationship to one another; an ordinal scale in which numbers are in a definite order, but there is nothing known about distance between each number; an interval scale in which scores differ from one another by the same amount, but there is no meaningful zero point; and a ratio scale which is an interval scale with a true zero point (Norusis, 1988; Silverman, 1993)

Variables such as gender or level of education may be easy to measure as nominal, or ordinal scales, respectively, but attitudes and other cognitive variables are usually quite difficult. However, there are some scaling techniques for measuring direction and extremity of attitudes, such as Thurstone scales, Likert scales, Guttman scales and Semantic scales. By these attitude scaling techniques, we try to find out where along a scale ranging from extreme unfavourableness to extreme favourableness a particular attitude lies. This is termed an "attitude measurement" (Moser & Kalton, 1971).

However, for most types of attitude variables, there exist well validated widely used scales. In general it is better to use such scales, than to attempt to create a new one, since the construction is a difficult and time consuming process. According to the above considerations most of the variables we have chosen to test in our research are

attitude variables. Moreover, not only for the role conflict variable, but also for the independent variables that are proposed as antecedents in the present research, there are specific measurements scales, which have been developed and validated in previous studies. With few exceptions, the Likert scale technique was used in measuring these attitudes variables.

In particular, the respondent was asked to choose between five response categories indicating various strengths of disagreement and agreement with an item. Consequently, with respect to our enquiry the measures we used for the operationalisation of the dependent and independent variables were based on well established scales tested in other studies. They are the following:

(I) DEPENDENT VARIABLE

Role conflict: Rizzo et al (1970) 10- item scale was used to measure role conflict. As noted by Jackson et al (1985) the vast majority of research on role conflict has used the scale developed by Rizzo et al (1970). Because of its extensive use it has come under close scrutiny (Schuler et al, 1977; House et al 1983). The results of these studies suggest that the Rizzo et al scale has been and is a satisfactory and reliable measure of the role conflict construct (see questionnaire items: B2a- B2j).

Role conflict was defined in terms of the dimensions of compatibility-incompatibility in the requirements of the role. It has been stressed (see chapter 2) that incompatibility or incogruency may result in various kinds of conflict.

Within the framework of the present research the following forms of conflict were measured:

- (1) incompatible policies defined as conflicting expectations and organisational demands in the form of incompatible policies (questionnaire items: B2d- and B2f);
- (2) inter-role conflict defined as conflict between several roles for the same person which require different or incompatible behaviours as a function of the situation (questionnaire items: B2g and B2a);
- (3) inter-sender role conflict defined as conflicting requests from others(questionnaire item:B2h);
- (4) role-overload defined as conflict between the time resources or capabilities of the focal person and the defined role behaviour (questionnaire item: B2e);
- and (5) person- role conflict

defined as conflict between the focal person's internal standards or values and the defined role behaviour (questionnaire items: B2b, B2c, B2i and B2j). Of these five, incompatible policies relates to the impact of organisational control; inter- role and inter- sender role conflict relate to the heads' multiple role senders (which include superiors, peers and subordinates); role overload relates to the quantitative amount of work; and person- role conflict relates to the heads of departments' personal attributes via their role.

(II) INDEPENDENT VARIABLES

(a) University level:

1. Reward System: was measured by asking respondents to rate the importance that they think the university places on 12- factors related to their performance, based on Bartol's (1979) scale. (see questionnaire items: A2a- A2i)
2. Formalisation: was measured on a 4- item scale based on Aiken & Hage (1966) scale. (see questionnaire items: A3a- A3d)
3. Autonomy: was measured on a 2- item scale based on Bacharach & Aiken (1976) scale (see questionnaire items: A3e- A3f)
4. Participation in policy level decision making and in financial level was measured on the basis of a 5- point scale similar to the scales of Hage & Aiken (1967) and Leifer & Humber (1977) (see questionnaire items: A4a- A4f)

(b) Departmental level

1. Area of discipline: the clustering of academics disciplines was according to Biglan's (1973a) model. (see questionnaire items: c3)
2. Department orientation: the orientation of the departments was measured by asking the respondents to rate the importance the department places on 12- typical goals in a 5- point scale, based on Smart & Elton (1975) scale. (see questionnaire items: A1a- A1l)

(c) Role level

Role requirements: were measured by asking respondents to estimate the amount of time spent in the 11- categories of responsibilities identified by Tucker (1993) as being generally associated with head of department position. (see questionnaire items: B1a- B1k)

(d) Interpersonal level

Power/ support of academic staff: was measured by asking respondents to indicate the degree of influence that academic staff has on each of the 5- main decision areas, which were of great importance in the view of academic staff members (Middlehurst et al ,1992) (see questionnaire items: A5a- A5e)

(e) Personal level

1. Organisational commitment: was measured by the widely accepted commitment questionnaire developed by Porter et al (1974). It includes 12- items with a 5- point Likert type response scale. (see questionnaire items: B3a- B3l)

2. Professional commitment: to reduce the possibility that observed differences in commitments were the results of differences in forms of the measures the two orientations were measured in a similar way. So the organisational commitment questionnaire was adapted to measure professional commitment by substituting the word profession in place of organisation in the questionnaire items. This approach originally taken by Alutto et al (1971) was followed by most studies of professional commitment identified in the relevant literature. (Aranya et al 1981; Alder et al, 1984; Morrow et al, 1989; Vandenberg et al, 1994) (see questionnaire items: B4a - B4l). Both scales of commitments have been used extensively in previous studies and tested for their validity and reliability. The results showed that these scales can be used without any reservation in subsequent studies (Morrow & Wirth, 1989; Meyer et al,1991).

To summarise, all the items/questions that constitute the basis of the above measurement scales were selected based on suggestions in the relevant literature. The review of the above referred literature offers evidence that these scales possess sufficient reliability and validity to warrant their continued use. However, specific

statistical procedures were applied in the present questionnaire scales to reconfirm their reliability and validity and are presented in detail in the data analysis chapter. The exact questions which were used to express the above variables constitute the questionnaire items and are presented in Appendix (I).

5.1.4 Pilot

In order to test out the constructed questionnaire, it was considered necessary to pilot it on a group similar to the one that would form the main sample of the population under study. The purpose of a pilot survey is to check that all questions and instructions are clear, to identify weak items, confusing items, and any difficulties in computing it, so as to enable a revision of the questions or a removal of any items that do not yield usable data.

A pilot mail survey was undertaken with a sample of 24 potential respondents- heads of departments- from two universities (one old and one new). To encourage a high response to the questionnaire a follow up letter was sent. The response to the pilot survey was a return of 16 completed questionnaires representing 66% of the sample. As a result of the pilot study, several changes were made to the questionnaire in order to be ready for the main distribution. Comparing Appendix (I) and (II) the changes -that were made after the pilot survey, are evident. In particular, the questionnaire items A6-A13 of the pilot questionnaire were not included in the main survey questionnaire. However, it was regarded appropriate to add a new questionnaire scale (B1a-B11: Appendix-I) measuring the role behaviour of heads of departments. New questionnaire items, such as: A6, A8, A9 and A10 (Appendix-I) concerning the cost of headship position in addition to the size of the department and the university were also included for the main research survey.

To conclude, in the previous two chapters (4) & (5), which constitute the Research Strategy of the study, we have tackled the main issues of the research process. Namely,

- ◆ specification of the problem and the purposes of our research;

- ◆ formalisation of the conceptual model of our research, along with the development of the propositions to be tested;
- ◆ selection of the appropriate research approach;
- ◆ operationalisation (e.g. method, sample, measurement) of our research.

In the next chapter we shall present the data analysis techniques used to interpret our survey data.

Appendix I

QUESTIONNAIRE

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General Instructions: Please note that some of the questionnaire items may seem not to have much relevance in the academic context. We have included them on purpose, as one objective of the research is to compare the results with similar studies from other sectors. We would be most grateful to have responses on all the questionnaire items, even where they do not appear to have immediate applications to academic management.

SECTION A: UNIVERSITY AND DEPARTMENTAL/SCHOOL DATA

1. Please consider the following list of 12 typical departmental/school goals, and indicate the importance that in your view the Department/School places in practice on each goal, by selecting **ONE** position on a 5-point scale:

DEPARTMENTAL/SCHOOL GOALS	No Importance (1)	little importance (2)	some importance (3)	great importance (4)	Very great Importance (5)
a. Producing new knowledge through research					
b. Providing students with balanced education					
c. Developing an efficient Department/School through the use of appropriate managerial decisions					
d. Providing a direct service: (1) to other departments in your university; (2) to the community; (3) to the state
e. Improving the quality of the Department/School relative to peer departments in other universities					
f. Encouraging the personal and professional development of academic staff in your Department/School					
g. Maintaining the goals and requirements of the University central authorities					
h. Developing and/or maintaining an outstanding departmental post-graduate programme					
i. Educating students for a future career					
j. Ensuring that adequate financial resources exist					
k. Providing the faculty and staff with a congenial place to work					
l. Maintaining a spirit of inquiry and academic freedom					
m. Other (please specify) _____ _____ _____ _____					

2. Please indicate, by ticking in the appropriate boxes, the importance that you think the University as a whole places on the following factors related to your performance as a Head of Department/School:

	no importance (1)	little importance (2)	some importance (3)	Great Importance (4)	very great importance (5)
a. Demonstrating a concern for students					
b. Production by you of high quality research in your field					
c. Stimulating research and publication in your Department					
d. Undertaking quality teaching in your field					
e. Fostering good teaching in your Department/School					
f. Participation in relevant professional organisations					
g. Demonstrating effective leadership with the Department/School					
h. Fulfilling managerial/administrative roles in your Department/School					
i. Keeping up to date with the latest developments in your field					
j. The ability to work effectively in teams					
k. The ability to work autonomously on your own					
l. Your fund-raising record					
m. Other (please specify) _____ _____ _____ _____					

3. Please indicate how the job of Head of Department/School is structured in your university by indicating the degree of validity of each of the following statements:

	definitely false (1)	probably false (2)	neither true or false (3)	possibly true (4)	definitely true (5)
a. There is a detailed written description for my job					
b. There are explicit formal guidelines about Departmental/School policies and practices					
c. There is a well-defined performance evaluation procedure which is implemented					
d. There are explicit performance targets that I have to achieve					
e. I can make work decisions without consulting anyone else					
f. Most people here make up their own rules					

4. Please indicate how much influence in your view Heads of Departments/Schools in your University have in:

	no influence (1)	little influence (2)	some influence (3)	much influence (4)	too much influence (5)
a. Academic policy making (e.g. goals, structure,...) (1) at Institutional level (2) at Faculty level (3) in your own Department/School
b. Financial decision making (e.g. budgets, expenditure priorities,...) (1) at Institutional level (2) at Faculty level (3) in your own Department/School

5. Please indicate the extent to which your departmental academic colleagues contribute to specific Departmental/School decisions in each of the following areas:

	To no extent (1)	To little extent (2)	To some extent (3)	To great extent (4)	To very great extent (5)
a. Departmental/School policy (e.g. structure, objectives,...)					
b. Monetary issues (e.g. budgets, expenditure priorities,...)					
c. Personnel issues (e.g. hiring, promotion, evaluation,...)					
d. Control issues (e.g. discipline, grievances,...)					
e. Work organisation issues (e.g. assignments, work methods,...)					

6. Please indicate what happened to your immediate predecessor after she/he has completed her/his period of office as HoD:

1. Returned to full time academic work:

YES NO

a b

If YES:

(i) in the same institution of higher education

(ii) in another institution of higher education

2. Returned to part time academic work:

YES NO

a b

If YES:

(i) in the same institution of higher education

(ii) in another institution of higher education

3. Took sabbatical leave:

YES NO

a b

4. Moved to:

(i) another management position in the same institution of higher education

(ii) a management position in another institution of higher education

(iii) employment outside higher education

5. Retired []

6. Other (please specify):

7. What was the “score” of your Department/School in 1993 HEFC Research Assessment:

8. Size of the Department:

number of staff (full time and part time)-----

number of students (full time and part time)-----

SECTION B: ROLE RELATED DATA

1. Please give an approximate estimate of the hours spent during last week in each of the following activities:

Note: please try not to double count items

	Hours spent during last week (1)	Hours spent during an average week in term time (2)	Hours spent during an average week in vacations (3)
DEPARTMENTAL ACTIVITIES			
a. Department Governance (e.g. conduct department meetings, develop long-range departmental plans, goals...)			
b. Instruction (e.g. schedule classes, update curriculum, courses...)			
c. Managing Staffing affairs (e.g. recruit and select staff, assign responsibilities to staff: teaching, research, committee work...)			
d. Student affairs (e.g. recruit and select students, advise and counsel students...)			
e. External communication (e.g. improve department image and reputation, liaison with external agencies...)			
f. Budget and resources (e.g. prepare and propose departmental budget, prepare annual reports...)			
g. Office management and administration (e.g. manage departmental facilities and equipment, monitor building security...)			
h. Departmental development and creativity (e.g. foster good teaching in the department, stimulate research and publication...)			
i. Personal teaching j. Personal research			
k. External consulting work			
l. Other (please specify) ----- ----- -----			

2. With respect to your own views about your work as a Head of Department/School, could you please indicate, by ticking as appropriate, the degree of your agreement or disagreement with each of the following statements:

	strongly disagree (1)	disagree (2)	neither agree nor disagree (3)	agree (4)	strongly agree (5)
a. I have sufficient time to complete my academic work					
b. I often perform tasks that are too boring					
c. I have to do things that should be done differently					
d. I work under incompatible policies and guidelines					
e. I often receive assignments from the university without the resources to complete them					
f. I sometimes have to break a University rule or policy in order to carry out an assignment					
g. I work with groups of people who expect different things from me					
h. I have incompatible requests from different people at work					
i. I often work on unnecessary things					
j. In general, I perform work that suits my values					

3. According to your own views about your University please indicate, by ticking as appropriate, the degree of your agreement or disagreement with each of the following statements:

	strongly disagree (1)	disagree (2)	neither agree or disagree (3)	agree (4)	strongly agree (5)
a. I am willing to put in a great deal of effort beyond that normally expected in order to help this University be successful					
b. If I had a chance to advance professionally by going to another University, I would go					
c. I would stay in this University even if I was offered a much better salary elsewhere					
d. I find that my values and the University's values are very similar					
e. I am proud to tell others that I am part of this University					
f. This University really inspires the very best in me in the way of job performance					
g. It would take very little change in my present circumstances to cause me to leave this University					
h. There is not too much to be gained by sticking with this University indefinitely					
i. Often, I find it difficult to agree with this University's policies on important matters relating to its academic staff					
j. I really care about the future of this University					
k. For me this is one of the best Universities for which to work					
l. Deciding to work for this University was a definite mistake on my part					

4. Listed below are a series of statements that represent possible views about your own discipline or subject area. To reduce the possibility that observed differences in your feelings towards either the University or Discipline would be the results of differences in forms of the measures, **the two orientations are measured in a similar way.** Namely, by substituting the word Discipline in place of University in the questionnaire items of the previous table. In light of the way you yourself feel and behave as a member of your particular **Discipline/Subject area**, please indicate the degree of agreement or disagreement with the following statements:

	strongly disagree (1)	disagree (2)	neither agree or disagree (3)	agree (4)	strongly agree (5)
a. I am willing to put in a great deal of effort beyond that normally expected in order to help my Discipline area to develop					
b. I feel very little loyalty to my Discipline					
c. I would remain in my Discipline area even if my income was reduced					
d. I find that my values are very similar with the values of my Discipline					
e. I am proud to tell others that I am part of this field of Discipline					
f. My Discipline really inspires the very best in me in the way of job performance					
g. It would take very little change in my present circumstances to cause me to leave my area of Discipline					
h. There is little to be gained by remaining within my Discipline					
i. Often, I find it difficult to agree with the standards of my Discipline					
j. I very interested in the future developments of my Discipline					
k. For me my subject area is one of the best Disciplinary fields for which to work					
l. Deciding to work in this field or Discipline was a definite mistake on my part					

SECTION C: PERSONAL DATA

1. First degree in: _____

2. Highest degree held: _____

3. Area of Discipline: _____

4. Is your position as a Head of Department/School (please tick as appropriate):

permanent fixed-term

a b

5. As a Head of Department/School are you (please tick as appropriate):

elected appointed

a b

6. Years (or months) in your present position as a Head: _____

7. Years in the present University: _____

8. Years of experience: _____

Would you like to be provided with the results of this survey?

yes

no

If yes, please give us your name, University and full address:

THANK YOU FOR ALL YOUR HELP

Appendix II

QUESTIONNAIRE

General Instructions: Please note that some of the questionnaire items may seem not to have much relevance in the academic context. We have included them on purpose, as one objective of the research is to compare the results with similar studies from other sectors. We would be most grateful to have responses on all the questionnaire items, even where they do not appear to have immediate applications to academic management.

SECTION A: UNIVERSITY AND DEPARTMENTAL/SCHOOL DATA

1. Please consider the following list of 12 typical departmental/school goals, and indicate the importance that in your view the Department/School places in practice on each goal, by selecting **ONE** position on a 5-point scale:

DEPARTMENTAL/SCHOOL GOALS	no importance (1)	Little importance (2)	some importance (3)	great importance (4)	very great importance (5)
a. Producing new knowledge through research					
b. Providing students with balanced education					
c. Developing an efficient Department/School through the use of appropriate managerial decisions					
d. Providing a direct service: (1) to other departments in your university; (2) to the community; (3) to the state
e. Improving the quality of the Department/School relative to peer departments in other universities					
f. Encouraging the personal and professional development of academic staff in your Department/School					
g. Maintaining the goals and requirements of the University central authorities					
h. Developing and/or maintaining an outstanding departmental post-graduate programme					
i. Educating students for a future career					
j. Ensuring that adequate financial resources exist					
k. Providing the faculty and staff with a congenial place to work					
l. Maintaining a spirit of inquiry and academic freedom					
m. Other (please specify) _____ _____ _____ _____					

2. Please indicate, by ticking in the appropriate boxes, the importance that you think the University as a whole places on the following factors related to your performance as a Head of Department/School:

	no importance (1)	little importance (2)	some importance (3)	great importance (4)	very great importance (5)
a. Demonstrating a concern for students					
b. Production by you of high quality research in your field					
c. Stimulating research and publication in your Department					
d. Undertaking quality teaching in your field					
e. Fostering good teaching in your Department/School					
f. Participation in relevant professional organisations					
g. Demonstrating effective leadership with the Department/School					
h. Fulfilling managerial/administrative roles in your Department/School					
i. Keeping up to date with the latest developments in your field					
j. The ability to work effectively in teams					
k. The ability to work autonomously on your own					
l. Your fund-raising record					
m. Other (please specify)					

3. Please indicate how the job of Head of Department/School is structured in your university by indicating the degree of validity of each of the following statements:

	Definitely False (1)	probably false (2)	neither true or false (3)	possibly true (4)	definitely true (5)
a. There is a detailed written description for my job					
b. There are explicit formal guidelines about Departmental/School policies and practices					
c. There is a well-defined performance evaluation procedure which is implemented					
d. There are explicit performance targets that I have to achieve					
e. I can make work decisions without consulting anyone else					
f. Most people here make up their own rules					

4. Please indicate how much influence in your view Heads of Departments/Schools in your University have in:

	No Influence (1)	little influence (2)	some influence (3)	much influence (4)	too much influence (5)
a. Academic policy making (e.g. goals, structure,...) (1) at Institutional level (2) at Faculty level (3) in your own Department/School
b. Financial decision making (e.g. budgets, expenditure priorities,...) (1) at Institutional level (2) at Faculty level (3) in your own Department/School

5. Please indicate the extent to which your departmental academic colleagues contribute to specific Departmental/School decisions in each of the following areas:

	To no Extent (1)	To little extent (2)	To some extent (3)	To great extent (4)	To very great extent (5)
a. Departmental/School policy (e.g. structure, objectives,...)					
b. Monetary issues (e.g. budgets, expenditure priorities,...)					
c. Personnel issues (e.g. hiring, promotion, evaluation,...)					
d. Control issues (e.g. discipline, grievances,...)					
e. Work organisation issues (e.g. assignments, work methods,...)					

6. Does the Department/School, in your University, have a Departmental/School Management Team to take key decisions (please tick as appropriate)

YES NO

a b

7. Does the Department/School, in your University, have a Departmental/School Board to take key decisions (please tick as appropriate)

YES NO

a b

8. Do all members of academic staff participate in the Departmental/School Board (please tick as appropriate)

YES NO

a b

9. Is there a formal Faculty Board in your University (please tick as appropriate)

YES NO

a b

10. Are all Heads of Departments/Schools members of Faculty Board in your University (please tick as appropriate)

YES NO

a b

11. Does the Faculty Board, in your University, take financial decisions concerning resources allocated to Departments/Schools (please tick as appropriate)

YES NO

a b

12. Are all Heads of Departments/Schools members of a Senate/Academic Board (or similar body) in your University (please tick as appropriate)

YES NO

a b

If the answer to any of the questions: 6, 7, 9, 12 is "YES" it would be helpful if we could have copies of any terms of reference

13. What was the "score" of your Department/School in 1993 HEFC Research Assessment:

SECTION B: ROLE RELATED DATA

1. With respect to your own views about your work as a Head of Department/School, could you please indicate, by ticking as appropriate, the degree of your agreement or disagreement with each of the following statements:

	strongly disagree (1)	disagree (2)	neither agree nor disagree (3)	agree (4)	strongly agree (5)
a. I have sufficient time to complete my academic work					
b. I often perform tasks that are too boring					
c. I have to do things that should be done differently					
d. I work under incompatible policies and guidelines					
e. I often receive assignments from the university without the resources to complete them					
f. I sometimes have to break a University rule or policy in order to carry out an assignment					
g. I work with groups of people who expect different things from me					
h. I have incompatible requests from different people at work					
i. I often work on unnecessary things					
j. In general, I perform work that suits my values					

2. According to your own views about your University please indicate, by ticking as appropriate, the degree of your agreement or disagreement with each of the following statements:

	strongly disagree (1)	disagree (2)	neither agree or disagree (3)	agree (4)	strongly agree (5)
a. I am willing to put in a great deal of effort beyond that normally expected in order to help this University be successful					
b. If I had a chance to advance professionally by going to another University, I would go					
c. I would stay in this University even if I was offered a much better salary elsewhere					
d. I find that my values and the University's values are very similar					
e. I am proud to tell others that I am part of this University					
f. This University really inspires the very best in me in the way of job performance					
g. It would take very little change in my present circumstances to cause me to leave this University					
h. There is not to much to be gained by sticking with this University indefinitely					
i. Often, I find it difficult to agree with this University's policies on important matters relating to its academic staff					
j. I really care about the future of this University					
k. For me this is one of the best Universities for which to work					
l. Deciding to work for this University was a definite mistake on my part					

3. Listed below are a series of statements that represent possible views about your own discipline or subject area. To reduce the possibility that observed differences in your feelings towards either the University or Discipline would be the results of differences in forms of the measures, **the two orientations are measured in a similar way**. Namely, by substituting the word Discipline in place of University in the questionnaire items of the previous table. In light of the way you yourself feel and behave as a member of your particular **Discipline/Subject area**, please indicate the degree of agreement or disagreement with the following statements:

	strongly disagree (1)	disagree (2)	neither agree or disagree (3)	agree (4)	strongly agree (5)
a. I am willing to put in a great deal of effort beyond that normally expected in order to help my Discipline area to develop					
b. I feel very little loyalty to my Discipline					
c. I would remain in my Discipline area even if my income was reduced					
d. I find that my values are very similar with the values of my Discipline					
e. I am proud to tell others that I am part of this field of Discipline					
f. My Discipline really inspires the very best in me in the way of job performance					
g. It would take very little change in my present circumstances to cause me to leave my area of Discipline					
h. There is little to be gained by remaining within my Discipline					
i. Often, I find it difficult to agree with the standards of my Discipline					
j. I very interested in the future developments of my Discipline					
k. For me my subject area is one of the best Disciplinary fields for which to work					
l. Deciding to work in this field or Discipline was a definite mistake on my part					

SECTION C: PERSONAL DATA

1. First degree in: _____

2. Highest degree held: _____

3. Area of Discipline: _____

4. Is your position as a Head of Department/School (please tick as appropriate):

permanent fixed-term

a

b

5. As a Head of Department/School are you (please tick as appropriate):

elected appointed

a b

6. Years (or months) in your present position as a Head: _____

7. Years in the present University: _____

8. Years of experience: _____

Would you like to be provided with the results of this survey?

yes

no

If yes, please give us your name, University and full address:

THANK YOU FOR ALL YOUR HELP

Appendix III

Department of Policy Studies
Centre for Higher Education (CHES)
Institute of Education
University of London

Date.....

Address.....

Dear Professor...

May I ask for your contribution in a study we are conducting? Our purpose is to learn more about Heads of Departments (or Schools) perceptions of their roles.

More specifically, we are trying to gather the opinions of more than two hundred randomly selected heads on the role conflict experienced in performing not only as professional academics but also as leaders and managers. By analysing this information we hope to be able to point to appropriate coping strategies that reduce the level of role conflict and its unpleasant consequences.

The questionnaire is enclosed. We estimate it will require about twenty minutes to complete. We hope that you will take the time to complete it and return the questionnaire in the enclosed self-addressed envelope, by not later than.....All replies will be treated with complete confidentiality and presented only in a summary form.

We appreciate your willingness to help us in our research. We believe that you will find the questionnaire interesting and look forward to receiving your reply.

Yours sincerely,
Professor Gareth Williams
Director of CHES

Appendix IV

Department of Policy Studies
Centre for Higher Education (CHES)
Institute of Education
University of London

Date.....

Address.....

Dear Professor...

A month ago we sent you a questionnaire about a study we are conducting on role conflict experienced by heads of departments in performing their duties as professional academics and as leaders and managers.

In case you have not received the questionnaire we are sending another copy and we hope that you will take the time to complete and return it in the enclosed self-addressed envelope, if at all possible by

If you have already sent a reply or have positively decided you cannot reply we apologise for troubling you again. Otherwise we are looking forward to your reply.

Yours sincerely,

Professor Gareth Williams
Director of CHES

Research Results

Chapter 6: Data analysis

This chapter presents the details of the statistical analyses performed on the data collected, in order to test the survey propositions and give an answer to the primary questions of the present research. Taking into account the large amount of information gathered, in pursuing our survey objectives, it was thought that the presentation of the data analysis will be more manageable and comprehensible, if focused on each of the 11-propositions separately.

As it has become clear in the previous chapters (4) and (5) (pp 158, 166) each proposition represents a hypothesised relationship between specific antecedent variables and role conflict variable. The investigation of these relationships was pursued mainly through the use of three statistical techniques. First, factor analysis was employed in each original questionnaire scale of independent and dependent antecedent variable, in order to identify the common underlying dimensions of these variables. Second, correlational analysis was performed in order to test the degree and nature of association between each antecedent variable (new factor variables) and role conflict variable. Third, multiple regression was conducted in order to assess how well the role conflict variable could be explained by the various antecedent variables (new factor variables). A detailed analysis of the statistical procedures used and the results obtained for the 11-research propositions are illustrated below.

6.1 Sample characteristics

From the 200-questionnaires sent, 142 (71% response rate) were returned fully answered and constituted the data base for the extraction of our results. The data were collected from 142 departments of 56 Universities. In particular, the actual data derived from:

-41 departments that were selected from 16 new universities and

-101 departments that were selected from 40 old universities. The total UK university population is 96 universities, based on the Association Commonwealth Universities Yearbook (List of University Department Heads) publication. In the following Table

(3) the size of the departments in our sample is presented.

Table 3 Departmental Size *

	<i>New University</i>					<i>Old University</i>				
	<i>M</i>	<i>SD</i>	<i>Med</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>Med</i>	<i>Min</i>	<i>Max</i>
Staff size	50	24	48	18	115	40	35	28	2	173
Student size	700	498	560	13	1800	400	502	330	4	4580
Ratio	1/14					1/10				

*staff size: total number of full time and part time academic staff

student size: total number of full time and part time students

There is a great variation in the size of staff and students between universities and departments within them, as it is evident from Standard Deviation, Median and Range of values (Max-Min), shown in the above Table (3). All the 142 questionnaire survey respondents were heads of these departments. Throughout this research we shall use the term “Head of Department” and we intend it to include “Head of School” and “Chairman”. Although there may be in some contexts a difference between them in responsibility, the difference is more often simply one of terminology. There are large and diverse departments with several sub-disciplines which are called “schools” elsewhere, and there are small schools which resemble in their homogeneity departments. Some schools are subdivided into departments and disciplines, but generally we have found it safe to imply in our use of the term “head of department” that we are addressing those who have academic and managerial responsibility for the basic organisational academic unit in universities (Moses & Roe, 1990; Becher & Kogan, 1994). The Table (4) below shows the distribution of heads in the sample according to several personal characteristics.

Table 4 Personal Data of Heads of Departments

<i>Personal Data</i>	<i>New University</i>		<i>Old University</i>	
	<i>(%)</i>		<i>(%)</i>	
<i>Educational level</i>				
- Graduate	17		28	
- Post graduate	83		72	
MA	30		9	
Mphil	2		1	
PhD	51		62	
<i>Department category*</i>				
- Applied	39		44	
- Non applied	61		56	
<i>Headship position structure</i>				
- Permanent	68		16	
- Fixed term	32		84	
<i>Way of appointment in Headship position</i>				
- Elected	100		32	
- Appointed	-		68	
<i>Years of experience</i>				
	M	SD	M	SD
- Number of years as a Head	4.39	3.11	4.60	4.18
- Number of years in the present University	12.02	8.96	15.07	8.84
- Total years of experience	24.43	9.42	25.09	6.54

* Applied: Engineering, medicine, law, computer science, business and professional, economics, accounting, education, finance, medicine-related, agricultural and similar subjects.

Non-applied: Physics, mathematics, chemistry, political science, psychology, sociology, english, history, philosophy and similar subjects .

6.2 Proposition (1) & (6)

“Heads of departments in old universities will report greater levels of role conflict, than those in the new universities. And the Department Category (applied, non-applied) will influence the degree of role conflict experienced by heads”.

Role conflict was measured by a 10-item Likert scale, originated by Rizzo et al (1970). The response categories ranged from strongly disagree(1) to strongly

agree(5) (see Appendix questionnaire items: B2a-B2j). Factor analysis was used in order to search for and define the fundamental constructs or dimensions assumed to underlie the original role conflict variables.

The multivariate statistical technique of factor analysis has found increased use, during the past decade, in the various fields of organisation -related research. Factor analysis can be utilised to examine the underlying patterns or relationships for a large number of variables and determine if the information can be condensed or summarised in a smaller set of factors or components. Before proceeding to factor analysis in our survey data it is helpful to review the key terms and the most important factor analysis concepts.

Factor analysis (unlike multiple regression in which one or more variables are explicitly considered as dependent variables and all others the predictor or independent variables) is an interdependence technique in which all variables are simultaneously considered. In a sense, each of the observed (original) variables is considered as a dependent variable that is a function of some underlying, latent and hypothetical set of factors (dimensions). Conversely, we can look at each factor as a dependent variable that is a function of the originally observed variables.

The basic terms that we shall use in interpreting the factor table are the following.

Factor: A linear combination of the original variables. Factors represent the underlying dimensions (constructs) that summarise or account for the original set of observed variables.

Factor loadings: The correlation between the original variables and the factors, and the key to understanding the nature of a particular factor.

Percentage of Variance (pct of var): The percentage of variance in the set of original variables explained by each factor.

Cumulative Percentage (cum pct): The total percentage of variance in the set of original variables explained by the factor solution (all factors together).

Eigenvalue: The sum of squared factor loadings for each factor; also referred to as the latent root. It represents the amount of variance accounted for by a factor. Additionally, it indicates the relative importance of each factor in accounting for the variance associated with the set of variables being analysed.

Factor matrix: A table displaying the factor loadings of all variables on each factor.

Factor rotation: The process of manipulating or adjusting the factor axes to achieve a simpler and pragmatically more meaningful factor solution.

Factor score: Factor analysis reduces the original set of variables to a new smaller set of variables (factors) in use in subsequent analysis, some measure or score must be included to represent the newly derived variables. This measure (score) is a composite of all of the original variables that were important in making the new factor. The composite measure is referred to as a factor score.

Orthogonal factor solutions: A factor solution in which the factors are extracted so that the factor axes are maintained at 90 degrees. Thus, each factor is independent of or orthogonal from all other factors. The correlation between factors is determined to be zero.

The results of this multivariate statistical method in our survey data, and more specifically in the role conflict scale, identify two main factors of role conflict that were latent (not easily observed) in the original set of the role conflict variables. The following Table (5) displays the findings of factor analysis procedure.

Table 5 Factor Analysis of Role Conflict Variables**(Orthogonal, Varimax Rotation)**

<i>Role Conflict Variables</i>	<i>Factor</i>	
	<i>I</i>	<i>II</i>
B2a. I have not sufficient time to complete my academic work.	0.31	
B2b. I often perform tasks that are too boring.		0.74
B2c. I have to do things that should be done differently.		0.66
B2d. I work under incompatible policies and guide lines.	0.64	
B2e. I often receive assignments without the resources to complete them.	0.63	
B2f. I sometimes have to break a rule or policy to carry out an assignment.	0.71	
B2g. I work with groups of people who expect different things from me.	0.84	
B2h. I have incompatible requests from different people.	0.83	
B2i. I often work on unnecessary things.		0.76
B2j. In general I perform work that does not suit my values.		0.64
Eigenvalue	4.2	1.3
Pct of var	42.1	13.1
Cum pct	42.1	55.2

As shown in the above Table(5), the varimax rotated component factor analysis extracted two factors as the best linear combination of the initial role conflict variables. Factor (I) accounts for 42,1% of the variance in the data, while Factor (II) accounts for 13,1%. These factors (extracted by the orthogonal solution) are independent to each other. Therefore, collinearity is eliminated and statistically better results will be obtained if the factors are used in subsequent statistical techniques.

The cumulative pct shown in the factor matrix, Table (5), can be used as an index to determine how well a particular factor solution accounts for what all the variables together represent. If the variables are all very different from each other this index will be low. The index for the present solution shows that 55,2% of the total variance is represented by the information contained in the factor matrix. Therefore, the index

for this solution is high enough and the variables are highly related to each other. Additionally, the Alpha-coefficient for the original role conflict scale was 0,84. This means that the reliability of the original role conflict scale is ensured. While the high values of factor loadings corroborate the validity of the original role conflict scale.

Based on the factor loadings pattern shown in Table(5) we see that the first Factor (I) has five significant loadings, while the second Factor (II) has four. Looking at the original variables that are related to both factors, a logical name can be assigned, representing the underlying nature of these factors. Thus, we name Factor (I) as “janusian” role conflict, and Factor (II) as “value” role conflict.

The first Factor (I) reflects the conflict which might arise from the mediating, boundary- spanning, and academic professional role of heads of departments. As we have already stressed, the complexity and difficulty of headship position can be attributed to the conflicting expectations, that the different groups of role senders are sending to the heads of departments.

Factor (II) represents the conflict that might occur when the internal value system of heads of departments is incompatible with the behaviour expected by them, in performing their multiple roles. Consequently, the factor-analytic findings of the present research support the notion that role conflict is not a unidimensional phenomenon, but has two distinct dimensions. Table (6) presents the percentage of heads of departments reporting high degree of agreement with each original role conflict variable. Specific summary measurements for each of these variables is also displayed.

Table 6 Summary Measurements of Role Conflict Scale

<i>Role Conflict Variables</i>	<i>% agreement</i>	<i>Mean</i>	<i>Std Dev</i>	<i>Median</i>	<i>Mode</i>
B2a. I have not sufficient time to complete my academic work.	79	4.1	0.9	4	5
B2b. I often perform tasks that are too boring.	60	3.4	1.1	4	4
B2c. I have to do things that should be done differently.	68	3.7	0.8	4	4
B2d. I work under incompatible policies and guidelines.	46	3.2	1.1	3	3
B2e. I often receive assignments without the resources to complete them.	63	3.5	1.1	4	4
B2f. I sometimes have to break a rule or policy to carry out an assignment.	34	2.9	0.9	3	3
B2g. I work with groups of people who expect different things from me.	68	3.6	1.0	4	4
B2h. I have incompatible requests from different people.	66	3.6	1.0	4	4
B2i. I often work on unnecessary things.	56	3.4	1.1	4	4
B2j. In general I perform work that does not suit my values.	45	3.1	0.9	3	3

However, Proposition (1)- stating that heads of departments in old universities will report greater levels of role conflict, than those in new universities received no support. Looking at the means in the following Table(7) we see that the levels of both role conflict types are almost equal for new and old universities (3,6 and 3,5; 3,3 and 3,2 respectively).

Table 7 The Degree of Role Conflict between New and Old Universities

<i>Role conflict</i>	<i>University</i>		<i>New Universities</i>			<i>Old Universities</i>		
			<i>Mean</i>	<i>SD</i>	<i>Median</i>	<i>Mean</i>	<i>SD</i>	<i>Median</i>
Factor I Janusian Role Conflict			3.6	0.1	3.6	3.5	0.7	3.6
Factor II Value Role Conflict			3.3	0.8	3.5	3.2	0.7	3.2

Moreover, Proposition (6)- suggesting that heads in applied departments e.g. engineering may experience less role conflict than heads in non-applied e.g. mathematics was not confirmed either. In particular, our findings indicated that there was no difference in the degree of role conflict among heads in these two major departmental categories. The relevant results are presented in the following Table (8).

Table 8 The Degree of Role Conflict between Applied and Non Applied Departments

<i>Role conflict</i>	<i>Department</i>		<i>Applied Department</i>			<i>Non Applied Department</i>		
			<i>Mean</i>	<i>SD</i>	<i>Median</i>	<i>Mean</i>	<i>SD</i>	<i>Median</i>
Factor I Janusian Role Conflict			3.6	0.7	3.6	3.4	0.7	3.6
Factor II Value Role Conflict			3.3	0.6	3.2	3.2	0.8	3.2

Another attempt was made to discover common underlying characteristics between established academic disciplines by dividing the departments according to the hard /soft dimension of the Biglan's model. Within this typology the hard disciplines (44% of the sample) comprise the: natural sciences and mathematics, the engineering, medicine and the like; while the soft disciplines (56% of the sample) include the: humanities and social sciences, education, law etc. Again the results point to similarities rather than differences between departments classified by this dimension (see Table 9). The degree of both types of role conflict was almost the same. With regard to the three sets of antecedents a slight difference was observed only in the "role requirement variable". Namely, "managing the department": soft=11h and hard=16h; "managing students" soft=7h and hard=6h; "managing

staff”: soft=12 and hard=11, “managing personal academic activities”: soft=15h and hard=15.

Table 9 The Degree of Role Conflict between Hard and Soft Departments

<i>Role conflict</i>	<i>Hard Department</i>		<i>Soft Department</i>			
	<i>Mean</i>	<i>SD</i>	<i>Median</i>	<i>Mean</i>	<i>SD</i>	<i>Median</i>
Factor I Janusian Role Conflict	3.5	0.6	3.6	3.6	0.8	3.8
Factor II Value Role Conflict	3.1	0.6	3.2	3.4	0.7	3.5

In summary, the results pointed out that the type of university as well as the type of the department have no effect in the degree of role conflict experienced by heads. However, the type of university was found to have an influence on the various sets of independent variables, included in our theoretical model (see Figure 7). On the contrary, the type of the department had no statistically significant effect on these antecedent variables. Therefore, all the statistical procedures used in data analysis were performed for new and old universities separately, ignoring departmental classification.

6.3 Proposition (2)

“The more the reward system of the university is promoting and valuing the professional behaviour of heads of departments the lower the reported role conflict”.

The reward system was measured by asking respondents to rate the importance that the university places on 12-factors related to their performance (see Appendix questionnaire items A2a-A2i). The reliability coefficient of the scale was: Alpha= 0,80. The following Table (10) reports the percentage of heads who rated “4” or “5” as high importance on the 5-point Likert scale of performance reward criteria.

Table 10 University Reward Criteria

(% of Heads reporting high importance)

<i>Reward Criteria (questionnaire items A2a-A2l)</i>	<i>% of Heads indicating 4 or 5 response</i>
A2c. Stimulating Research and Publication in your Department.	89
A2g. Demonstrating effective leadership within the Department.	84
A2e. Fostering good teaching in your Department.	80
A2h. Fulfilling managerial roles in your Department.	79
A2b. Production by you of high quality research in your field.	71
A2a. Demonstrating a concern for students.	59
A2k. Ability to work autonomously.	50
A2i. Keeping up to date with the latest developments in your field.	43
A2l. Your fund-raising record.	42
A2j. Demonstrating ability to work effectively in teams.	41

Seven of the ten reward variables were deemed important by 50% or more of the department heads, and four out of ten reported as highly important by 79% of the heads. Moreover, Factor Analysis was used in order to identify the underlying dimensions of the reward system variables. Three factors were produced from the data and are shown below.

Table 11 Factor Analysis of Reward System Variables**(Orthogonal, Varimax Rotation)**

<i>Reward System Variables</i> (questionnaire items A2a-A2j)	<i>Factors</i>		
	<i>I</i>	<i>II</i>	<i>III</i>
A2a. Demonstrating a concern for students.	0.78		
A2d. Undertaking quality teaching in your field.	0.80		
A2e. Fostering good teaching in your Department.	0.79		
A2f. Participation in relevant professional organisations.	0.48		
A2i. Keeping up to date with the latest developments in your field.	0.57		
A2b. Production by you of high quality research in your field.		0.85	
A2c. Stimulating research and publication in your department.		0.86	
A2l. Your fund raising record.		0.57	
A2j. The ability to work in teams.			0.71
A2k. The ability to work autonomously.			0.77
A2g. Demonstrating effective departmental leadership.			0.85
A2h. Fulfilling managerial roles in your department.			0.89
Eigenvalue	3.9	2.0	1.4
Pct of var	32.7	16.8	11.7
Cum pct	32.7	49.5	61.2

The factor solution indicates that 61,2% of the total variance is represented by the information given in the above factor matrix. The first Factor (I) accounts for 32,7% of the total variance, the second Factor (II) accounts for 16,8% of the remaining variance and the third Factor (III) accounts for 11,7% of the variance remaining after the first and second factors have been extracted. In order to interpret these factors we shall place greater emphasis on those variables with higher loadings on each separate factor. Thus, we name Factor(I) as “teaching performance”, Factor (II) as “research performance”, and Factor (III) as “leadership performance”.

In order to test our proposition the two types of role conflict were correlated and then regressed on the three independent reward factors identified above. The statistical methods were performed separately for new and old universities. Before beginning to read the results of correlation and regression analysis it is helpful to review the key

terms used in these multivariate statistical procedures in order to interpret our survey findings from both a statistical and a theoretical viewpoint.

Correlation coefficient (r): measures the strength of a linear association between two variables. The values of the coefficient are not expressed in units of the data but from (-1) to (+1).

Partial correlations: When we study the correlation between two variables we need to consider the effects other variables exert on the relationship. Partial correlations can reveal variables that enhance or suppress the relation between two particular variables. Thus, partial correlation coefficients provide a measure of correlation between two variables by removing or adjusting for the linear effects of one or more control variables.

Simple linear regression: In many statistical studies the goal is to establish a relationship expressed via an equation for predicting typical values of one variable given the value of another variable. The simplest equation that summarises the relationship is that of a straight line: $Y=a+b_1X+e$, where:

a : the intercept or constant, is where the line intercepts the vertical axis at $X=0$

b_1 : the slope, is the ratio between the vertical change and the horizontal change along the line.

e : errors or residuals are the lengths of the short vertical lines from each point to the line and estimates for the true errors. SPSS uses the method of least squares to estimate the slope and intercept. This method minimises the sum of the squared residuals (that is the sum of the squares of the vertical line segments).

In the regression equation, Y is the dependent variable, the one we are trying to predict; X is the independent or predictors; and the intercept(a) and slope(b_1) are the regression coefficients.

R : is the correlation coefficient(also called multiple R) and in the bivariate regression model expresses the simple correlation between the dependent and independent variable.

R^2 (coefficient of determination): is the square of r-value and measures the proportion of the variation of the dependent variable that is explained by the independent. The coefficient ranges from 0 to 1 and the higher the value of R^2 the greater the explanatory power of the regression equation and therefore the better the prediction of the criterion variable.

Adjusted R square (R^2_a): the sample estimate of R^2 tends to be an optimistic estimate of the population value. Adjusted R square is designed to compensate for this overestimation by taking into account the number of variables in the model and the sample size. Adjusted R square reflects how the model fits the population.

Standard error of the estimate (SE): is the square root of the residual mean score and measures the spread of the residuals about the fitted line. Its units are these of the dependent variable, so we compare its size with the SD of the dependent and should be less.

Beta or standardised coefficient: for simple regression beta is equivalent to R coefficient.

T -statistic: tests the significance of the slope, which is equivalent to testing the significance of the correlation between the dependent and independent variable.

Sig T: are p-values or probabilities associated with the T-statistic.

Multiple linear regression: is a statistical technique used to analyse the relationship between a simple dependent variable and several independent variables. The multiple regression equation is: $Y = a + b_1X_1 + \dots + b_pX_p + e$

Comparing this multivariate model to the simple regression model we can observe some slight differences in the interpretation of the various coefficients. In particular,

R: is the correlation between the observed and predicted values of the dependent variable.

Each of the regression coefficients $b_1 \dots b_p$ takes into account not only the

relationship between Y and X1 and Y and X2 etc. but also the relationship between X1 and X2.

Betas: if the independent variables are not measured in the same units, the comparison between regression coefficients can not be revealing. Thus, we transform data (SPSS) to standardised and then we produce the beta coefficients, which denote the regression coefficients. Betas are an attempt to make the regression coefficients more comparable.

However, in order to assess the usefulness of each predictor in the model we can not simply compare the betas, since the independent variables can be correlated to each other. The T-statistics provide some clue regarding the relative importance of each variable in the model. As a guide T-values must be well below (-2) or above (+2).

In summary, multiple regression analysis can serve the followings purposes:

- to predict the changes in the dependent in response to changes in the several independent variables or/and
- to examine the strength of the association between the single dependent variable and the two or more independent variables and to assess how well the dependent can be explained by knowing the values of independents, when collinearity among the independent variables is minimal.

The following Table (12) displays the means (M), standard deviations (SD) of Independent reward variables (Factors: I, II, III), along with the correlation and the regression analysis results of proposition-(2), for new and old universities. Dependent variable is the first factor of role conflict, namely the “janusian” role conflict. The same information regarding the second factor of role conflict the “value” role conflict, is presented in Table (13).

Table 12 Correlation and Regression Analysis of Reward System Variables as Predictors of Role Conflict (I): “Janusian” Role Conflict, for New and Old Universities

Dependent Variable: Role Conflict (I)

<i>Reward System</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
Reward System of New University							
- Teaching performance	3.54	0.73	-0.26*	-0.23	0.12	-0.28	0.08*
- Research performance	3.44	0.76	-0.13	-0.13	0.13	-0.16	0.32
- Leadership performance	3.89	0.61	-0.01	-0.03	0.16	-0.03	0.81
Intercept: -0.02							
$R^2 = 0.10$; $R_a^2 = 0.03$							
Reward System of Old University							
- Teaching performance	3.62	0.68	-0.21**	-0.23	0.10	-0.21	0.03**
- Research performance	4.15	0.62	0.07	-0.06	0.14	0.04	0.63
- Leadership performance	3.81	0.63	0.13	0.11	0.10	0.11	0.26
Intercept: -0.02							
$R^2 = 0.06$; $R_a^2 = 0.02$							

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$.

Table 13 Correlation and Regression Analysis of Reward System Variables as Predictors of Role Conflict (II): “Value” Role Conflict, for New and Old Universities

Dependent Variable: Role Conflict (II)

<i>Reward System</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
Reward System of New University					
- Teaching performance	-0.28*	-0.30	0.15	-0.29	0.06*
- Research performance	0.22	0.25	0.16	0.23	0.13
- Leadership performance	-0.21	-0.33	0.18	-0.28	0.07*
Intercept: 0.24 $R^2 = 0.19$; $R_a^2 = 0.10$					
Reward System of Old University					
- Teaching performance	-0.16*	-0.16	0.09	-0.16	0.10
- Research performance	0.14	-0.14	0.12	0.14	0.28
- Leadership performance	0.02	0.01	0.09	0.02	0.83
Intercept: 0.08 $R^2 = 0.04$; $R_a^2 = 0.08$					

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$.

It is important to note here that the collinearity among the independent variables in the multiple regression model has been removed by the previous conducted factor analysis. Thus, we are in a position to identify the extent to which each of the independent variables is related to the dependent variable. This is a very important remark, that we have to bear in mind, in analysing the appropriateness and interpreting the results of the subsequent multiple regression models.

The mean scores of the three reward system factor variables (Table:12) suggest that there are some differences between new and old universities in the importance they place on the reward criteria used for judging the performance of heads of departments. Namely, in new universities “leadership performance” (3,89) is the first factor that is taken in to account for evaluating a head, followed by “teaching

performance" (3,54) as the second factor and "research performance" (3,44) as the third factor.

On the contrary, "research performance" (4,15) is the first factor that matters in the evaluation of a head in old universities, followed by "leadership performance" (3,81) and "teaching performance" (3,62). The correlation between reward factors and "janusian" role conflict was moderate to low for both new (0,26 to 0,01) and old (0,21 to 0,07) universities (Table:12). However, a statistically significant correlation was observed only in the relationship between "teaching performance" and role conflict in both sectors. Similarly, the results of the regression analysis pointed that the "teaching performance" was the only significant negative predictor of Factor (I) of role conflict for both settings (Table:12). That is, when the heads perceive that the university is promoting and valuing their role as a professional teacher, the degree of "janusian" role conflict they experience is reduced.

With regard to the "value" role conflict the results shown in Table (13) suggest that its correlation with the reward factor variables was moderate in new universities and weak in the old ones. However, among the three factors only "teaching performance" was a statistically significant negative predictor of role conflict for both types of university (-0,28, $p < 0,10$; -0,16, $p < 0,10$ respectively). "Teaching performance" and "leadership performance" emerged as weak significant negative predictors of role conflict in the regression model of new universities (SigT:0,06 and 0,07 at $p < 0,10$), while none of the three reward factors were significant in the regression analysis conducted for old universities (Table:13).

6.4 Proposition (3) and (4)

"The greater the degree of perceived job formalisation the greater the role conflict, while the greater the degree of job autonomy the less the reported role conflict".

We have hypothesised that the way the job of a head is structured has a direct effect on the degree of role conflict. Job structuring was indexed by two variables: formalisation and autonomy (see Appendix questionnaire items:A3a-A3f). Factor

analysis was employed in the job structuring scale and two factors were identified. The first Factor (I) named “formalisation” accounted for 40,1% of the total variance and the second Factor (II) named “autonomy” accounted for 19,1% of the remaining variance. Correlation and regression analysis were performed in order to test our proposition. The results are presented in the following two Tables: (14) & (15).

Table 14 Correlation and Regression Analysis of Job Structuring Variables as Predictors of Role Conflict (I): “Janusian”, for New and Old Universities

Dependent Variable: Role Conflict (I)

<i>Job Structuring</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
Job Structuring in New University							
- Formalization	3.71	1.03	-0.43**	-0.44	0.14	-0.46	-0.00***
- Autonomy	2.93	0.90	0.02	0.11	0.13	0.13	0.39
Intercept: 0.29 $R^2 = 0.20$; $R_a^2 = 0.16$							
Job Structuring in Old University							
- Formalization	2.88	1.06	-0.11	-0.12	0.10	-0.11	0.24
- Autonomy	3.04	0.89	-0.07	-0.08	0.10	-0.08	0.40
Intercept: -0.05 $R^2 = 0.01$; $R_a^2 = -0.00$							

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table 15 Correlation and Regression Analysis of Job Structuring Variables as Predictors of Role Conflict (II): “Value”, for New and Old Universities

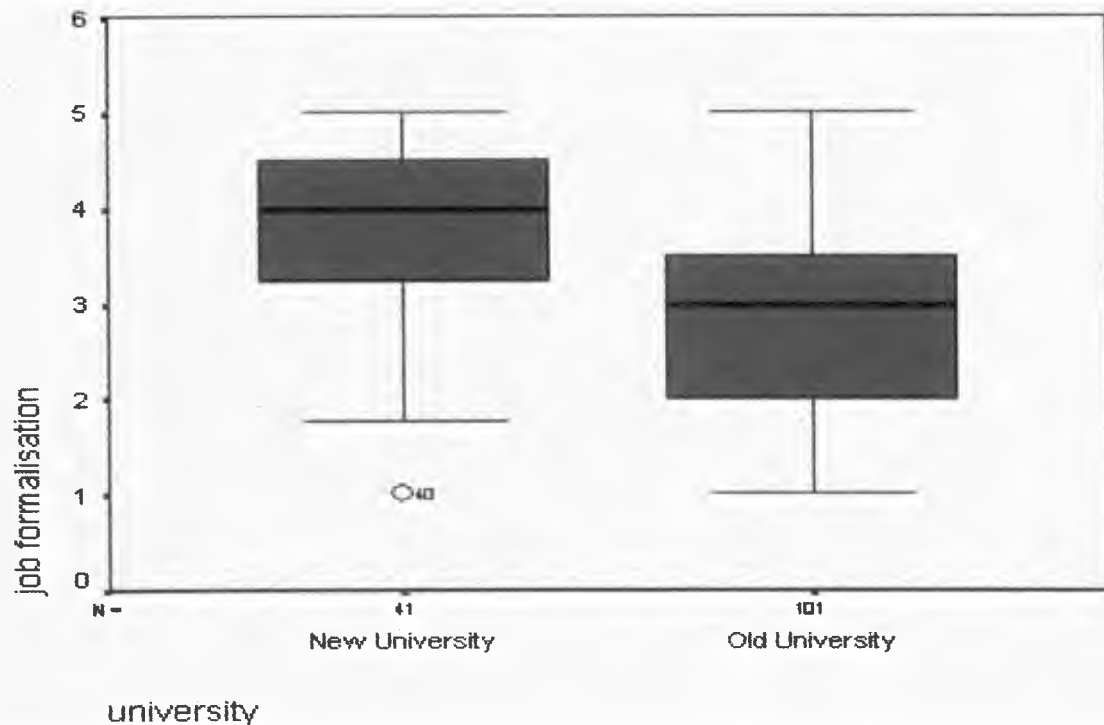
Dependent Variable: Role Conflict (II)

<i>Job Structuring</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
Job Structuring in New University					
- Formalization	-0.39**	-0.45	0.19	-0.36	0.02**
- Autonomy	-0.18	-0.12	0.17	-0.10	0.49
Intercept: 0.26 $R^2 = 0.16$; $R_a^2 = 0.11$					
Job Structuring in Old University					
- Formalization	-0.18*	-0.18	0.09	-0.18	0.06*
- Autonomy	-0.06	-0.07	0.09	-0.07	0.44
Intercept: -0.05 $R^2 = 0.03$; $R_a^2 = 0.01$					

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table(14) contains information about “janusian” role conflict in both university sectors. Table (15) provides information relating to the “value” role conflict variable, in both settings. Looking at the mean scores in Table (14) we see that “formalisation” is high in new universities (3,71) and moderate in old (2,88), while “autonomy” is moderate and almost equal in both sectors (2,93 & 3,04 respectively). The difference in the degree of “formalisation” is much more visible in the box plots, presented in Figure (8) that follows.

Figure 8 The degree of formalisation in new and old university sectors.



The intercorrelation between “janusian” role conflict and “formalisation” was strong in new universities (0,43) and weak in old (0,11). The parameters for “autonomy” dimension were too weak for both sectors. Thus, only “formalisation” in new universities emerged as significant predictor, but in the opposite of the expected direction ($r:-0,43$; $p<0,05$). Namely, the more the degree of “formalisation” the lower the degree of Factor (I) of role conflict.

The results of the regression procedure (Table:14) lend support to the abovementioned intercorrelation findings. “Formalisation” was the only dimension of job characteristics that can influence the degree of “janusian” role conflict in new universities (beta:-0,46; $p<0,01$). In contrast, neither “formalisation” nor “autonomy” can affect the level of “janusian” role conflict in the old university sector.

Looking in Table (15) similar information is obtained for “value” role conflict. “Formalisation” is the only job structuring dimension that affects the “value” role conflict level. In particular, “formalisation” is a stronger and more significant

negative predictor (-0,39, $p < 0,05$) in the context of new universities than in the old (-0,18, $p < 0,10$) ones. With regard to “autonomy” factor the proposition received no support in either university sector.

6.5 Proposition (5)

“The greater the perceived level of participation in the decision making process the lower the reported level of role conflict”.

Participation was measured by a 5-point Likert scale asking the degree of influence the heads have on the academic policy and financial decision making in institutional and departmental level (see Appendix questionnaire items A4a1-A4b3). The reliability coefficient of the scale was: $\text{Alpha} = 0,73$. Factor analysis was performed and the results indicate that there are two underlying dimensions in the university’s participation patterns, which we have labelled as “institutional influence” and “departmental influence”. The first Factor (I) accounts for the 43,2% of the total variance and the second Factor (II) accounts for 19,7% of the rest amount of the variance. The total amount of variance explained by the present factor solution is 62,9%.

Table 16 Correlation and Regression Analysis of Participation Pattern Variables as Predictors of Role Conflict (I): “Janusian”, for New and Old Universities

Dependent Variable: Role Conflict (I)

<i>Participation Patterns</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
Participation Patterns in New University							
- Institutional Influence	2.7	0.61	-0.25	-0.21	0.13	-0.25	0.12
- Departmental Influence	3.8	0.35	0.04	0.04	0.16	0.03	0.80
Intercept: 0.06 $R^2 = 0.06$; $R_a^2 = 0.01$							
Participation Patterns in Old University							
- Institutional Influence	2.8	0.61	-0.08	-0.08	0.11	-0.08	0.42
- Departmental Influence	3.8	0.38	0.10	0.10	0.10	0.10	0.32
Intercept: 0.01 $R^2 = 0.01$; $R_a^2 = -0.00$							

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table 17 Correlation and Regression Analysis of Participation Pattern Variables as Predictors of Role Conflict (II): “Value”, for New and Old Universities

Dependent Variable: Role Conflict (II)

<i>Participation Patterns</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
Participation Patterns in New University					
- Institutional Influence	-0.62***	-0.67	0.13	-0.62	0.00***
- Departmental Influence	-0.02	-0.03	0.16	-0.02	0.82
Intercept: -4.9 $R^2 = 0.39$; $R_a^2 = 0.35$					
Participation Patterns in Old University					
- Institutional Influence	-0.19*	-0.19	0.10	-0.19	0.06*
- Departmental Influence	0.02	0.02	0.09	0.02	0.81
Intercept: -0.006 $R^2 = 0.03$; $R_a^2 = 0.01$					

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Looking at the mean scores (Table: 16) we see that heads of departments in both university sectors see themselves as having much influence on the decision making processes in their department (3,8 in new univ. & 3,8 in old univ.), but little influence on the institution’s decisions (2,7 in new & 2,8 in old). With regard to the effects of participation patterns on the degree of role conflict the results of correlation and regression analysis (Table:16) reveal that there is no relationship between “janusian” role conflict and participation patterns in either university setting.

However, there is a strong and very significant negative correlation (-0,62, $p < 0,01$) between “value” role conflict experienced by heads in new university and the degree of influence they have at institutional level (Table:17). A weaker and less significant correlation was observed for “value” role conflict and institutional influence in old universities (-0,19, $p < 0,10$). Although as mentioned above heads have a lot of influence at departmental level this variable does not seem to have any effect in

reducing the degree of either type of role conflict reported by heads in both sectors.

6.6 Proposition (7)

“The more the department is oriented towards managerial and entrepreneurial goals the more the reported level of role conflict by its head”.

Department orientation was measured by asking respondents to rate the importance the department places in practice on 12-typical goals based on a 5-point response category scale (see Appendix questionnaire items A1a-A1l). The reliability coefficient of the scale was: $\text{Alpha}=0,79$. In the following Table (18) the percentage of heads who rated “4” or “5” as high importance on departmental goals is displayed.

Table 18 The Degree of Importance in Departmental Goals

<i>Department Orientation (questionnaire items A1a-A1l)</i>	<i>% of Heads indicating 4 or 5 response</i>
A1b. Providing Students with balance education.	92
A1f. Encouraging staff professional development.	88
A1l. Maintaining academic freedom	86
A1a. Producing new knowledge through research.	81
A1i. Educating students for a future career.	80
A1j. Secure resources.	79
A1h. Developing an outstanding post-graduate program.	78
A1e. Improving the quality of Department.	72
A1c. Develop Departmental managerial efficiency	71
A1k. Develop a congenial Departmental climate	63
A1g. Maintaining the goals of central University authorities	46
A1d2. Provide a direct service to the community	40
A1d3. Provide a direct service to the state	25
A1d1. Provide a direct service to the University Departments	21

Seven out of fourteen departmental goals were deemed as highly important by 78% of the heads and ten out of fourteen as important by 50% of the heads. Factor analysis was employed in the goal scale in order to analyse the interrelationships among these goals and explain them in terms of their common underlying factors. Four factors produced accounted for 60,9% of the variance in the data. The first Factor (I) - which we have called "teaching orientation"- refers to the production of good teaching, through the continuing professional development of academic staff. This factor emerged as the main departmental goal and accounts for 29,1% of the total variance.

The second Factor (II) -which we have called "research orientation"- refers to the production of quality research and assurance of a high degree of academic freedom. This factor emerged as the second major departmental goal and accounts for 14,5% of the remaining variance. The third Factor (III) -which we have called

“management orientation”- is concerned with the development of the department in a strong, efficient and financial independent (subsidiary to the university) unit, and accounts for 9,3% of the remaining variance.

Finally, the fourth Factor (IV)- which we have called “service orientation”- accounts for 8% of the variance, remaining after the effects of the previous extracted three factors have been removed. Tables (19) & (20) exhibit the means, along with the correlation and regression outcomes of the four department orientation factors in both university sectors.

Table 19 Correlation and Regression Analysis of Department Orientation Variables as Predictors of Role Conflict (I): “Janusian”, for New and Old Universities

Dependent Variable: Role Conflict (I)

<i>Department Orientation</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
Department Orientation in New University							
- Teaching orientation	4.05	0.33	0.19	0.19	0.23	0.14	0.40
- Research orientation	3.62	0.60	-0.03	0.01	0.17	0.01	0.90
- Management orientation	3.89	0.53	-0.23	-0.14	0.15	-0.16	0.35
- Service orientation	3.30	0.70	0.20	0.14	0.16	0.14	0.39
Intercept: 0.07							
$R^2 = 0.09$; $R_a^2 = -0.01$							
Department Orientation in Old University							
- Teaching orientation	3.88	0.60	-0.02	-0.01	0.09	-0.01	0.88
- Research orientation	4.54	0.54	-0.15	-0.21	0.14	-0.14	0.15
- Management orientation	3.89	0.59	0.12	0.16	0.10	0.14	0.13
- Service orientation	3.01	0.81	-0.15	-0.13	0.10	-0.13	0.18
Intercept: 0.05							
$R^2 = 0.06$; $R_a^2 = 0.02$							

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table 20 Correlation and Regression Analysis of Department Orientation Variables as Predictors of Role Conflict (II): “Value”, for New and Old Universities

Dependent Variable: Role Conflict (II)

<i>Department Orientation</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>beta</i>	<i>Sig. T</i>
Department Orientation in New University					
- Teaching orientation	0.01	-0.07	0.28	-0.04	0.79
- Research orientation	-0.05	0.00	0.21	0.00	0.96
- Management orientation	0.26*	0.40	0.18	0.36	0.03**
- Service orientation	-0.21	-0.38	0.20	-0.30	0.07*
Intercept: 0.28 $R^2 = 0.16$; $R_a^2 = 0.06$					
Department Orientation in Old University					
- Teaching orientation	-0.13	-0.10	0.08	-0.12	0.20
- Research orientation	-0.06	-0.02	0.13	-0.01	0.87
- Management orientation	0.23**	0.22	0.09	0.22	0.02**
- Service orientation	-0.01	-0.00	0.09	-0.00	0.95
Intercept: -0.04 $R^2 = 0.07$; $R_a^2 = 0.03$					

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

The means (Table:19) suggest that there is a great difference in the “research orientation” between new and old universities (3,62 & 4,54 respectively) and no difference in the other goal orientation variables. These differences are easily observed in the following box plots (Figure 9, 10, 11, 12).

Figure 9 The "teaching orientation" of academic departments in new and old universities.

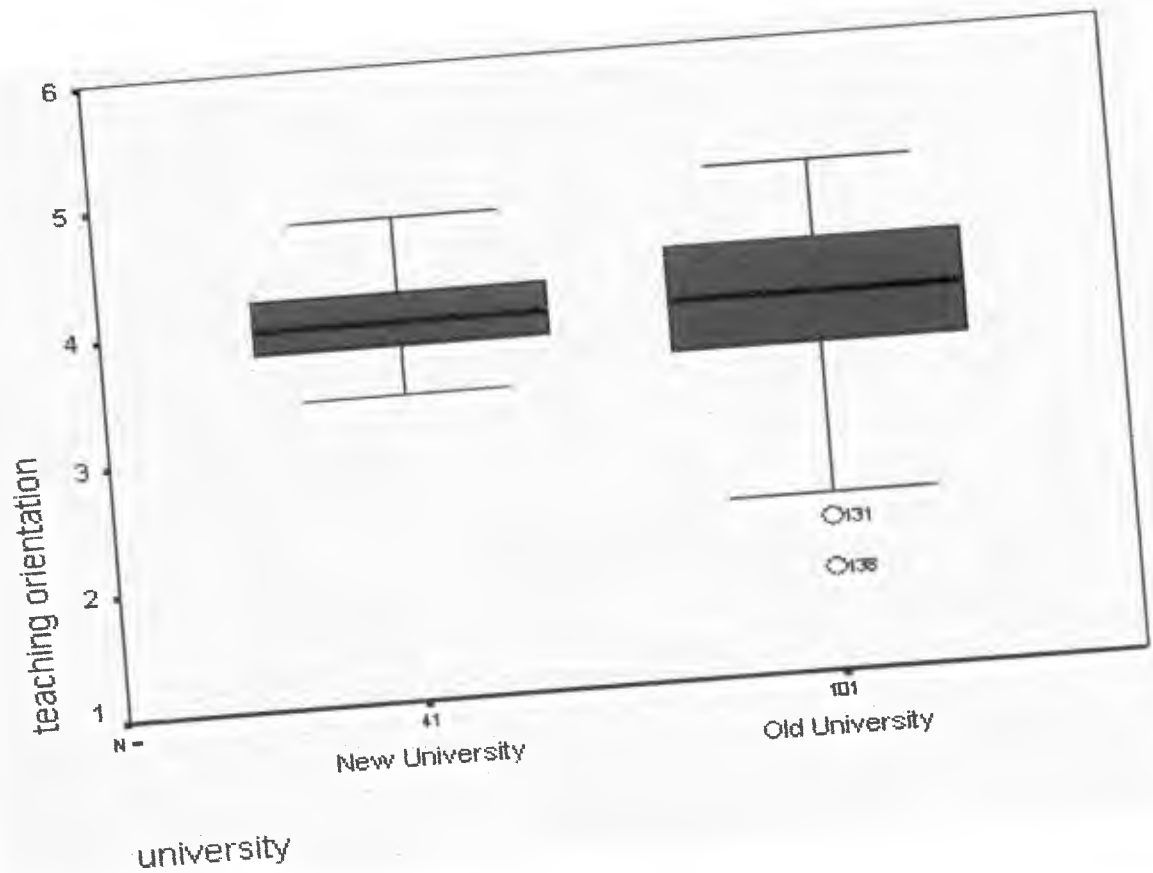


Figure 10 The “research orientation” of academic departments in new and old universities.

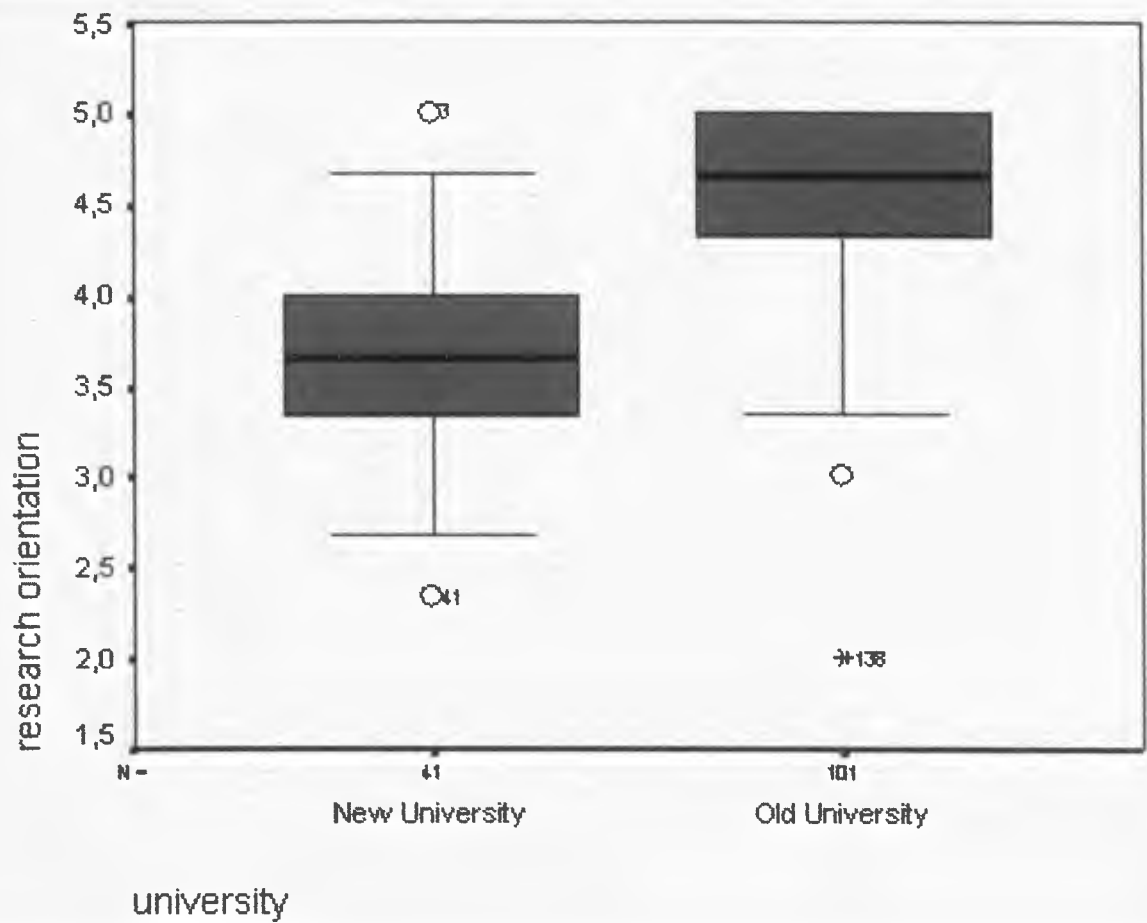


Figure 11 The “management orientation” of academic departments in new and old universities.

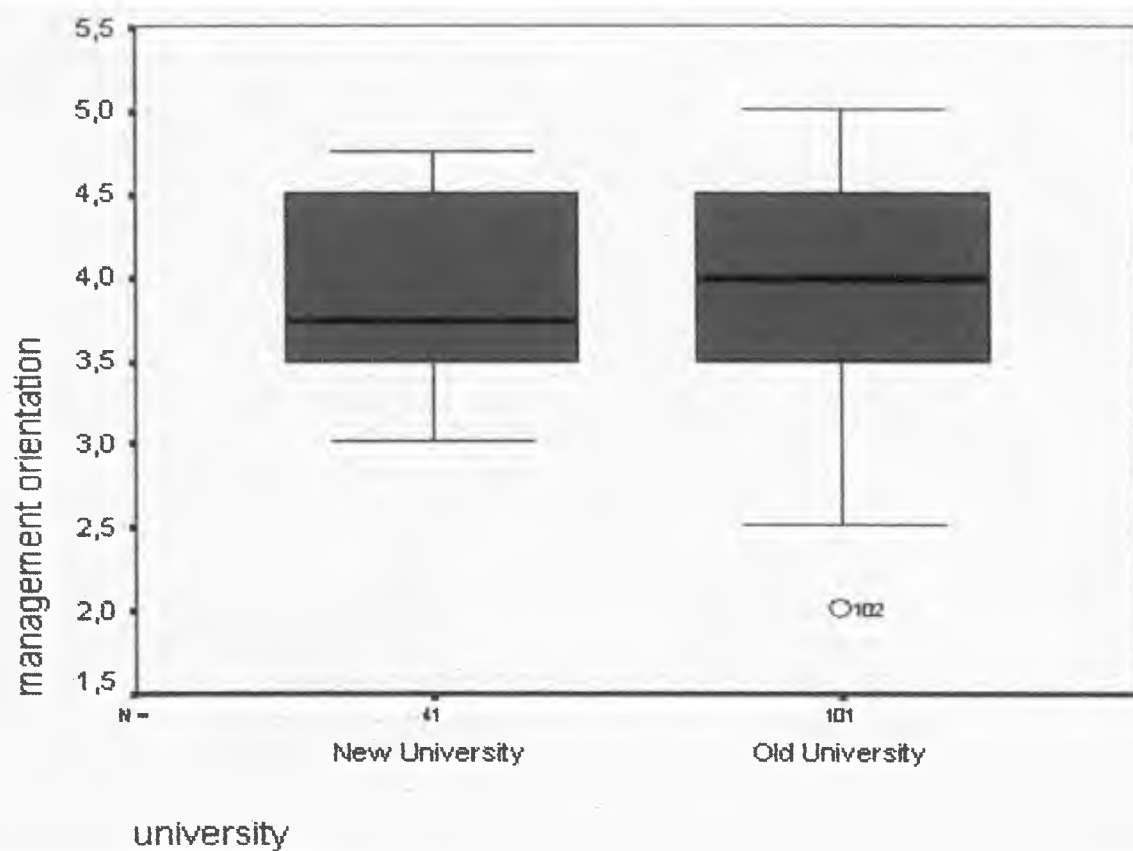
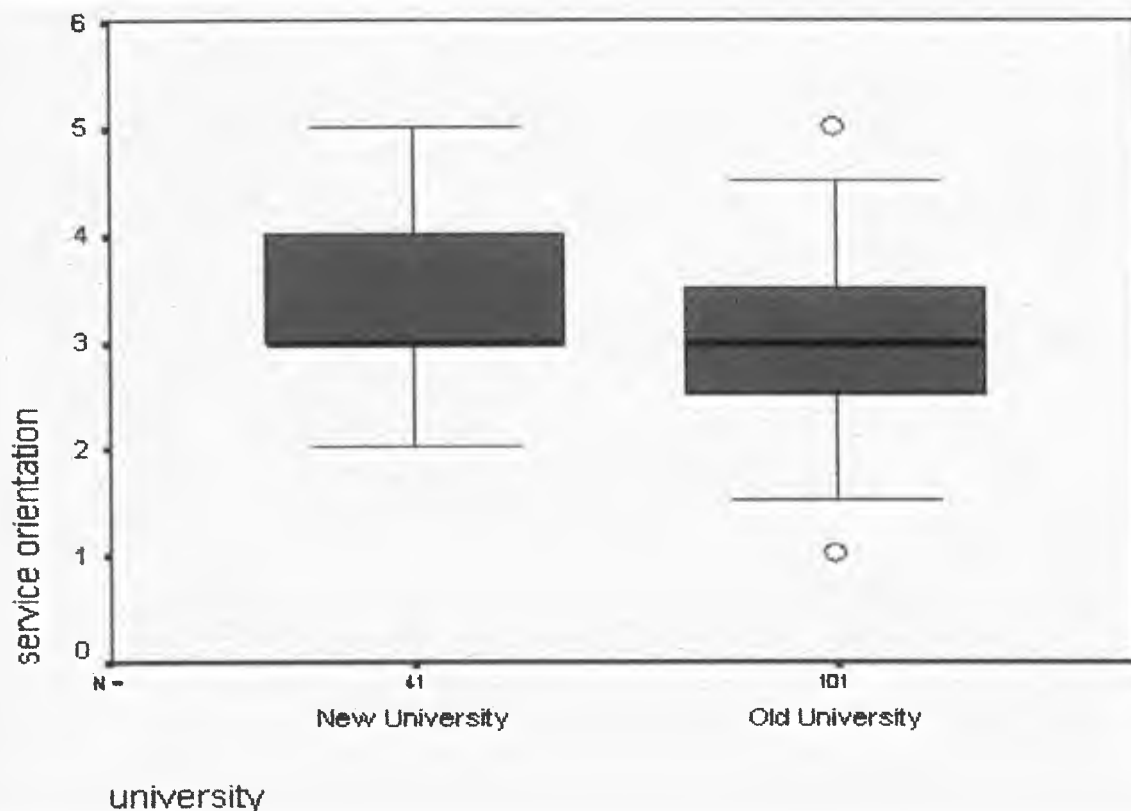


Figure 12 The “service orientation” of academic departments in new and old universities.



No statistically significant correlation was found, however, among any of the main departmental orientation dimensions and “janusian” role conflict in both sectors (Table:19). In addition, consistent to our expectations was the effect exhibited by the third goal factor. Namely, departmental orientation towards managerial efficiency was found to increase the level of “value” role conflict experienced by heads (Table:20). In particular, the “management goal orientation” variable was a moderate but highly significant positive predictor of the degree of “value” role conflict in new (0,26, $p < 0,05$) and old (0,23, $p < 0,05$) universities. Moreover, “service orientation” appears to have a moderate significant correlation with “value” role conflict only in the new university environment. Thus, our 7th proposition received no support for “janusian” role conflict. However, moderate support and in the predicted direction of that originally hypothesised received the 7th proposition for “value” role conflict in

both university sectors.

6.7 Proposition (8)

“The role requirements of headship (time devoted to each cluster of activities) will influence the degree of role conflict”.

Role requirements were measured by asking respondents to estimate the amount of time spent on the 11-categories of responsibilities, identified as the main headship activities in the relevant literature (see Appendix -I ,questionnaire items: B1a-B1k).

Table 21 Role Requirements of Headship Position in New and Old Universities: Hours spent during an average week in term time on each headship activity

<i>Headship Activities</i>	<i>New University</i>			<i>Old University</i>		
	<i>Mean</i>	<i>SD</i>	<i>Median</i>	<i>Mean</i>	<i>SD</i>	<i>Median</i>
B1a. Department Governance	7.28	5.95	5	6.23	4.31	5
B1b. Instruction planning	3.76	4.03	3	3.41	3.64	2
B1c. Managing Staff	7.38	6.63	5	4.51	3.47	44
B1d. Managing Students	2.76	1.75	2	2.63	2.27	2
B1e. External communication	4	2.16	4	2.81	2.54	2
B1f. Managing finance	3.54	2.09	3	2.99	2.45	2
B1g. Managing equipment	6.14	5.69	4	4.03	4.06	3
B1h. Departmental creativity	4.04	2.08	4	2.93	2.23	2
B1i. Personal teaching	5.92	4.20	5	5.74	3.72	6
B1j. Personal research	3.92	3.11	4	8.62	7.26	8
B1k. Personal consulting	1.52	2.45	0	1.80	3.63	0
Hours per Week	50.26			45.7		
Hours per Day	10			9.14		

Table (21) presents the summary measurements of central tendency (mean, standard deviation, median) of each group of headship activities in the new and old universities. The means suggest that there is a minor difference (one hour per day) in the total amount of time devoted to the heads' responsibilities in new and old universities. However, there is a difference between the two sectors, as to the way heads distribute their time across their activities.

In particular, heads in new universities spent more time on leadership and managerial responsibilities than heads in old universities and on the other hand they spend less time on research activities. Thus, the largest amount of time in new universities is devoted to department governance (7,28h) and the least amount of time to consulting (1,52h). While in old universities the largest amount is devoted to research (8,62h) and the least to consulting (1,80h).

Table 22 Factor Analysis of Role Requirement Variables

(Orthogonal, Varimax Rotation)

<i>Role Requirements</i>	<i>Factors</i>			
	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>
B1a. Department Governance			0.64	
B1b. Instruction		0.49		
B1c. Managing Staff			0.71	
B1d. Managing Students		0.72		
B1e. External Communication	0.72			
B1f. Managing Finance	0.73			
B1g. Managing Equipment	0.58			
B1h. Departmental Creativity	0.70			
B1i. Personal Teaching				0.30
B1j. Personal Research				-0.87
B1k. Personal Consultancy				-0.19
Eigenvalue	2.2	1.4	1.1	1.0
Pct of var	20.6	13.3	10.7	9.6
Cum pct	20.6	33.9	44.6	54.2

Factor analysis was conducted in the role requirement scale (Table:22) in order to summarise the interrelationships among the large number of headship activities. Four factors were extracted. The first factor which represents the largest and best combination of the initial activities accounts for 20,6% of the total variance. This Factor (I) is called “managing the department”, since it derives from a set of activities that concern with the effective and efficient running of the department as an organisational unit (e.g. prepare and propose departmental budget; improve department image; liaison with external agencies; foster departmental innovation; manage departmental facilities).

The second Factor (II) accounts for 13,3% of the remaining variance and is called “managing students”. It is shaped by the second best combination of activities which include the recruitment, selection and counselling of students, as well as the scheduling of classes and updating curriculum. The third Factor (III) contains

activities such as recruit and select staff; assign responsibilities; conduct departmental meetings; develop departmental plans and is named “managing staff”. This factor accounts for 10,7% of the variance in the data after the two previous factors were extracted. Finally, the fourth Factor (IV) is determined by the academic activities of the head of department, namely the personal research, teaching and consulting. This last factor accounts for 9,6% of the rest of the total variance explained by the factor solution and is named “managing personal academic activities”

Table 23 Correlation and Regression Analysis of Role Requirement Variables as Predictors of Role Conflict (I): “Janusian”, for New and Old Universities

Dependent Variable: Role Conflict (I)

<i>Role Requirements</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
Role Requirements in New University							
- Managing the Department	16.26	8.13	-0.13	-0.01	0.02	-0.17	0.45
- Managing Students	6.40	4.10	-0.11	-0.02	0.05	-0.12	0.60
- Managing Staff	14.08	9.89	0.14	0.01	0.02	0.13	0.57
- Managing Personal Academic Activities	10.92	5.00	-0.10	-0.00	0.04	-0.03	0.88
Intercept: 0.63 $R^2 = 0.06$; $R_a^2 = -0.12$							
Role Requirements in Old University							
- Managing the Department	12.26	7.67	0.25*	0.01	0.01	0.15	0.13
- Managing Students	6.36	5.11	0.07	-0.00	0.01	-0.02	0.81
- Managing Staff	11.03	6.34	0.36***	0.05	0.01	0.33	0.00***
- Managing Personal Academic activities	15.92	8.70	-0.29***	-0.02	0.01	-0.20	0.04**
Intercept: -0.41 $R^2 = 0.22$; $R_a^2 = 0.18$							

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table 24 Correlation and Regression Analysis of Role Requirement Variables as Predictors of Role Conflict (II): “Value”, for New and Old Universities

Dependent Variable: Role Conflict (II)

<i>Role Requirements</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>beta</i>	<i>Sig. T</i>
Role Requirements in New University					
- Managing the Department	-0.05	1.52	0.02	0.00	0.99
- Managing Students	0.23	0.06	0.06	0.22	0.31
- Managing Staff	-0.35*	-0.03	0.02	-0.33	0.15
- Managing Personal Academic Activities	0.25	0.01	0.05	0.04	0.85
Intercept: 0.18 $R^2 = 0.18$; $R_a^2 = 0.01$					
Role Requirements in Old University					
- Managing the Department	-0.17	-0.02	0.01	-0.19	0.06*
- Managing Students	0.17	0.03	0.02	0.17	0.11
- Managing Staff	0.16	0.02	0.01	0.19	0.08*
- Managing Personal Academic Activities	0.07	0.01	0.01	0.11	0.30
Intercept: -0.45 $R^2 = 0.10$; $R_a^2 = 0.05$					

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table (23) indicates the mean scores of each factor variables in both sectors. We see that “managing the department” is the more demanding role for heads in new university sector (16,26h) and “personal academic role” is the more demanding for heads in old universities (15,92h). “Managing staff” is the second role in terms of hours spent for heads in new universities, while heads in old universities devote less time on this specific role (14,08h & 11,03 respectively). Finally, “managing of students” absorbs almost the same amount of time in both sectors (6,40h & 6,36 respectively).

Moreover, the results of correlation and regression analysis of role requirements

factors and the two types of role conflict are displayed in Tables (23) & (24). On the other hand, in new university setting none of the three clusters of activities came out as predictors of either “janusian” or “value” role conflict. However, although in new universities “managing staff” dimension had a negative moderate correlation with “value” role conflict, this variable failed to explain any variance in the role conflict level, when entered in the regression equation.

On the other hand, in the old universities and with respect to “janusian” role conflict the results of correlational analysis gave support to our 8th proposition. More specifically, “managing staff” and “managing the department” had a significant positive correlation with role conflict (0,36, $p < 0,01$ & 0,25, $p < 0,10$ respectively) and “managing personal academic activities” had a very significant negative correlation (-0,29, $p < 0,01$) (Table:23). However, only two of these factors –“managing staff” & “managing personal academic activities”-were significant predictors in the regression equation model. Thus, we can argue that the greater the involvement of old university heads in “managing academic staff” the greater the “janusian” role conflict, while the greater their devotion to “personal academic activities” the less the degree of their conflict. With respect to “value” role conflict experienced by heads in old universities, “managing the department” and “managing staff” factors emerged as weak and less significant (-0.02, $p < 0,10$ & 0,01, $p < 0,10$) predictors of role conflict level (Table:24).

6.8 Proposition (9)

“The higher the contribution of academic staff members on the department’s decision making process, the lower the reported level of role conflict by its head”.

The influence and/or power of academic staff on decision making processes was measured on a 5-point Likert scale, by asking heads of departments to indicate the degree of support they receive from their academic staff in making decisions on specific departmental issues (see Appendix-I, questionnaire items: A5a-A5e). The reliability coefficient of the questionnaire scale was: Alpha=0,77. The Table (25) below displays a summary of the relevant responses

Table 25 Degree of Academic Staff Contribution to Departmental Governance

(% of heads reporting high support)

<i>Decision Making Area (questionnaire items A5a-A5e)</i>	<i>% of Heads indicating 4 or 5 response</i>
A5a. Departmental Policy.	67.6
A5b. Monetary issues.	20
A5c. Personnel issues.	35
A5d. Disciplinary issues.	19
A5e. Work Organisation.	60

The findings in the above Table (25) show that the academic staff has much influence on decisions about the departmental objectives, structure and general academic policy, as well as in decisions about work organisation issues, such as work methods, assignments etc. Moreover, the academic staff has a moderate involvement in decisions about hiring, promotion, evaluation and other academic personnel issues, and a lower involvement in finance and disciplinary issues. Factor analysis extracted one factor which was labelled “academic staff influence/power” and was responsible for 63% of the total variance in the data.

However, the results of correlation and regression analysis shown in Tables (26) & (27) below failed to support our 9th proposition- predicting that heads who report that their academic staff participates in the department decision making process would experience lower levels of “janusian” and “value” role conflict, in either university sector.

Table 26 Correlation and Regression Analysis of Academic Staff Influence on Departmental Decisions as Predictors of Role Conflict (I): “Janusian”, for New and Old Universities

Dependent Variable: Role Conflict (I)

<i>Academic Staff Influence</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
New University							
- Academic staff influence	3.01	0.65	-0.14	-0.20	0.21	-0.14	0.35
Intercept: 0.68 $R^2 = 0.02$; $R_a^2 = -0.00$							
Old University							
- Academic staff influence	3.26	0.62	-0.11	-0.19	0.16	-0.11	0.25
Intercept: 0.59 $R^2 = 0.01$; $R_a^2 = 0.00$							

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table 27 Correlation and Regression Analysis of Academic Staff Influence on Departmental Decisions as Predictors of Role Conflict (II): “Value”, for New and Old Universities

Dependent Variable: Role Conflict (II)

<i>Academic Staff Influence/Power</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>beta</i>	<i>Sig. T</i>
New University					
- Academic staff influence	-0.10	-0.18	0.27	-0.10	0.50
Intercept: 0.61 $R^2 = 0.01$; $R_a^2 = -0.01$					
Old University					
- Academic staff influence	-0.15	-0.19	0.16	-0.11	0.25
Intercept: 0.59 $R^2 = 0.01$; $R_a^2 = 0.00$					

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

6.9 Proposition (10)

“The degree of commitment to (i) the discipline and/or to (ii) the university will influence the level of role conflict”.

University commitment was measured by a 12-item scale, ranging from strongly disagree (1) to strongly agree (5) (see Appendix questionnaire items, B3a-B3l). The reliability coefficient of the scale was: $\text{Alpha} = 0,88$. In the following Table (28) the percentage of heads reporting high on each of the twelve initial commitment variables is presented.

Table 28 The Percentage of Heads Reporting High on Each Initial University Commitment Variable

<i>University Commitment Variables (questionnaire items B3a-B3l)</i>	<i>% of Heads indicating 4 or 5 response</i>
B3a. Willingness to exert excessive effort.	84
B3b. Willingness to stay even if offered a better career elsewhere.	29
B3c. Willingness to stay even if offered a better salary elsewhere.	19
B3d. Possession of similar values with the University.	50
B3e. Proud about being University's member.	73
B3f. University inspires the way of performance.	29
B3g. Not willing to change University easily.	64
B3h. Gain a lot from being University member.	52
B3i. Agreement with University policies.	53
B3j. Care about University future.	90
B3k. It's the best University.	52
B3l. This University is a good professional choice.	85

We see that although the heads of departments care about the university's future, feel proud about being members of this university and see it as a good professional choice which will not change easily, they would leave this university if they were offered a better career or even a better salary elsewhere.

In order to identify the common underlying dimensions of university commitment of heads we factored the commitment questionnaire scale. Two factors were produced as the best linear combination of variables which account for 58,6% of the total variance. The results of the factor analysis are displayed below in Table (29).

Table 29 Factor Analysis of University Commitment Variables

(Orthogonal, Varimax Rotation)

<i>University Commitments Variables</i> (Questionnaire Items: B3a-B3l)	<i>Factor</i>		
	<i>I</i>	<i>II</i>	
B3a. Willingness to exert excessive effort.		0.83	
B3b. Willingness to stay even if offered a better career elsewhere.	0.72		
B3c. Willingness to stay even if offered a better salary elsewhere.	0.76		
B3d. Possession of similar values with the University.	0.69		
B3e. Proud about being University's member.	0.74		
B3f. University inspires the way of performance.	0.77		
B3g. Not change University easily.	0.80		
B3h. Gain a lot from being University member.	0.67		
B3i. Agreement with University policies.	0.66		
B3j. Care about University future.		0.81	
B3k. It's the best University.	0.79		
B3l. Working for this University is a good choice.	0.59		
	Eigenvalue	5.42	1.60
	Pct of var	45.2	13.4
	Cum pct	45.2	58.6
	Mean score	3.40	4.17

“Commitment to university rewards” is the label we assign to the first Factor (I) that reflects accurately to the greater extent possible what the several variables loading on this factor represent. This factor accounts for 45,2% of total variance. The second Factor (II) is called “affective commitment to the university” and accounts for the remaining 13,4% of variance.

The other role orientation of heads, namely the commitment to the discipline/profession was measured in a similar way to that for the university commitment. We substituted the word university with the word discipline/profession in the university questionnaire items (see Appendix I, questionnaire items B4a-B4l). The reliability coefficient of the scale was: Alpha=0,86.

Table 30 The Percentage of Heads Reporting High Discipline/Professional Commitment

<i>Professional/Discipline Commitment (questionnaire items B4a-B4l)</i>	<i>% of Heads indicating 4 or 5 response</i>
B4a. Willingness to exert excessive effort.	83
B4b. Loyalty to the profession.	84
B4c. Remain member even with lower salary.	66
B4d. Possession of similar values with the profession.	71
B4e. Proud about being member of this profession.	87
B4f. Profession inspires performance.	65
B4g. Not change profession easily.	86
B4h. Gain a lot from being profession's member.	87
B4i. Agreement with profession policies.	78
B4j. Care about profession future.	93
B4k. It is the best profession.	74
B4l. This profession is a good choice.	90

Table (30) presents the percentage of heads reporting high commitment to the discipline. It is observed that more than 65% of heads score high in all discipline/professional commitment variables. Factor analysis was employed in the commitment to the discipline/profession scale and the results are presented below.

Table 31 Factor Analysis of Discipline/Professional Commitment Variables
(Orthogonal, Varimax Rotation)

<i>Professional/Discipline Commitment</i> (questionnaire items B4a-B4l)	<i>Factors</i>		
	<i>I</i>	<i>II</i>	<i>III</i>
B4a. Willingness to exert excessive effort.	0.56		
B4b. Loyalty to the profession.			0.85
B4c. Remain member even with lower salary.	0.55		
B4d. Possession of similar values with the profession.	0.80		
B4e. Proud about being member of this profession.	0.76		
B4f. Profession inspires performance.	0.79		
B4g. Not change profession easily.		0.74	
B4h. Gain a lot from being profession's member.		0.81	
B4i. Agreement with profession standards.		0.49	
B4j. Care about profession future.	0.54		
B4k. It is the best profession.	0.59		
B4l. This profession is a good choice.		0.80	
Eigenvalue	5.11	1.26	1.05
Pct of var	42.6	10.5	8.8
Cum pct	42.6	53.1	61.9
Mean score	4.07	4.32	4.21

Three factors were derived from the application of factor analysis. The first Factor (I) contains a set of variables concerning the affective commitment to the profession/discipline and we named it "professional identification". This factor accounts for 42,6% of the total variance (Table:31). The second Factor (II) represents the benefits from being a member of the specific profession and was labelled "commitment to professional rewards". The amount of the remaining variance in the data explained by this factor was 10,5%. The third Factor (III) reflects the "professional loyalty" and accounts for 8,8% of the rest variance. Correlation and regression analysis was performed to test our proposition and the results are displayed in the following Tables: (32) & (33).

Table 32 Correlation and Regression Analysis of University and Professional Commitment as Predictors of Role Conflict (I): “Janusian”, in New and Old Universities

Dependent Variable: Role Conflict (I)

<i>University and Professional Commitment</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
<u>New University</u>							
University Commitment							
- Commitment to University rewards	3.20	0.74	-0.52***	-0.43	0.11	-0.51	0.00***
- Affective commitment to University	4.24	0.56	0.11	0.18	0.14	0.19	0.19
Professional Commitment							
- Professional identification	3.90	0.65	-0.06	-0.16	0.11	-0.19	0.17
- Commitment to professional rewards	4.23	0.72	0.07	0.02	0.11	0.02	0.84
- Professional loyalty	4.00	1.22	-0.28*	-0.19	0.12	0.22	0.12
Intercept: -0.09 $R^2 = 0.36$; $R_a^2 = 0.27$							
<u>Old University</u>							
University Commitment							
- Commitment to University rewards	3.47	0.68	-0.35***	-0.36	0.10	-0.33	0.00***
- Affective commitment to University	4.13	0.75	0.04	-0.01	0.09	-0.01	0.91
Professional Commitment							
- Professional identification	4.1	0.56	0.15	0.18	0.10	0.17	0.07*
- Commitment to professional rewards	4.34	0.64	-0.21**	-0.18	0.10	-0.16	0.07*
- Professional loyalty	4.29	1.06	0.10	0.12	0.09	0.12	0.19
Intercept: 0.00 $R^2 = 0.19$; $R_a^2 = 0.14$							

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table 33 Correlation and Regression Analysis of University and Professional Commitment as Predictors of Role Conflict (II): “Value”, in New and Old Universities

Dependent Variable: Role Conflict (II)

<i>University and Professional Commitment</i>	<i>R</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>Sig. T</i>
New University					
University Commitment					
- Commitment to University rewards	-0.46***	-0.56	0.14	-0.52	0.00***
- Affective commitment to University	-0.26*	-0.40	0.17	-0.31	0.02**
Professional Commitment					
- Professional identification	-0.08	-0.15	0.14	-0.14	0.29
- Commitment to professional rewards	0.21	0.28	0.14	0.27	0.05*
- Professional loyalty	-0.03	0.20	0.15	0.18	0.19
Intercept: -0.04 $R^2 = 0.38$; $R_a^2 = 0.30$					
Old University					
University Commitment					
- Commitment to University rewards	-0.42***	-0.40	0.09	-0.41	0.00***
- Affective commitment to University	-0.02	-0.03	0.08	-0.03	0.71
Professional Commitment					
- Professional identification	-0.15	-0.13	0.09	-0.13	0.15
- Commitment to professional rewards	-0.08	-0.02	0.09	-0.02	0.77
- Professional loyalty	-0.00	-0.00	0.08	-0.00	0.98
Intercept: 0.04 $R^2 = 0.19$; $R_a^2 = 0.15$					

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Looking at the means of each commitment factor (Table:32) we can conclude that heads of departments in new and old universities are highly committed in all three

factors of professional commitment. There is only a slight difference between the two sectors pointing to a higher degree of professional commitment among heads in old universities (3,90 - 4,23 - 4,00 & 4,10 - 4,34 - 4,29 respectively).

With respect to the two factors of university commitment we see that heads in both sectors score high in "affective to the university commitment" (4,24 & 4,13 respectively), but lower in "commitment to the university rewards" (3,20 & 3,47 respectively). Moreover, the correlation matrix constructed among the five factors of commitments revealed no statistically significant relationship.

In addition, Table (32) presents the findings of regression analysis of "janusian" role conflict with commitment factors, in both sectors. These findings suggest that only "commitment to the university rewards" emerged as a strong negative predictor of "janusian" role conflict in new (-0,52, $p < 0.01$) and old (-0,35, $p < 0.01$) universities. While "professional identification" and "commitment to professional rewards" emerge as moderate and less significant predictors of role conflict only in the context of old universities (0,15 & -0,21 at $p < 0,10$).

With respect to "value" role conflict in new universities (Table: 33), both university commitment factors seem to be significant predictors, while in the old universities only "commitment to the university rewards" was a significant dimension. Additionally, "commitment to professional rewards" in new universities was a less significant and a relatively weak predictor but in the opposite direction of that hypothesised. While in old universities none of the professional commitment factors had emerged as significant predictor of "value" role conflict (Table: 33).

6.10 Proposition (11)

" (i) the educational level and (ii) the number of the years of experience will influence the degree of role conflict".

In order to examine the effects of educational level variable we transformed the original 5-category variable (see Appendix questionnaire item:c3) to a new one,

which included two main categories: graduate & post-graduate. Box plots were produced so that we can test our proposition. The findings are figured below.

Figure 13 The influence of educational level on the degree of RC(I)

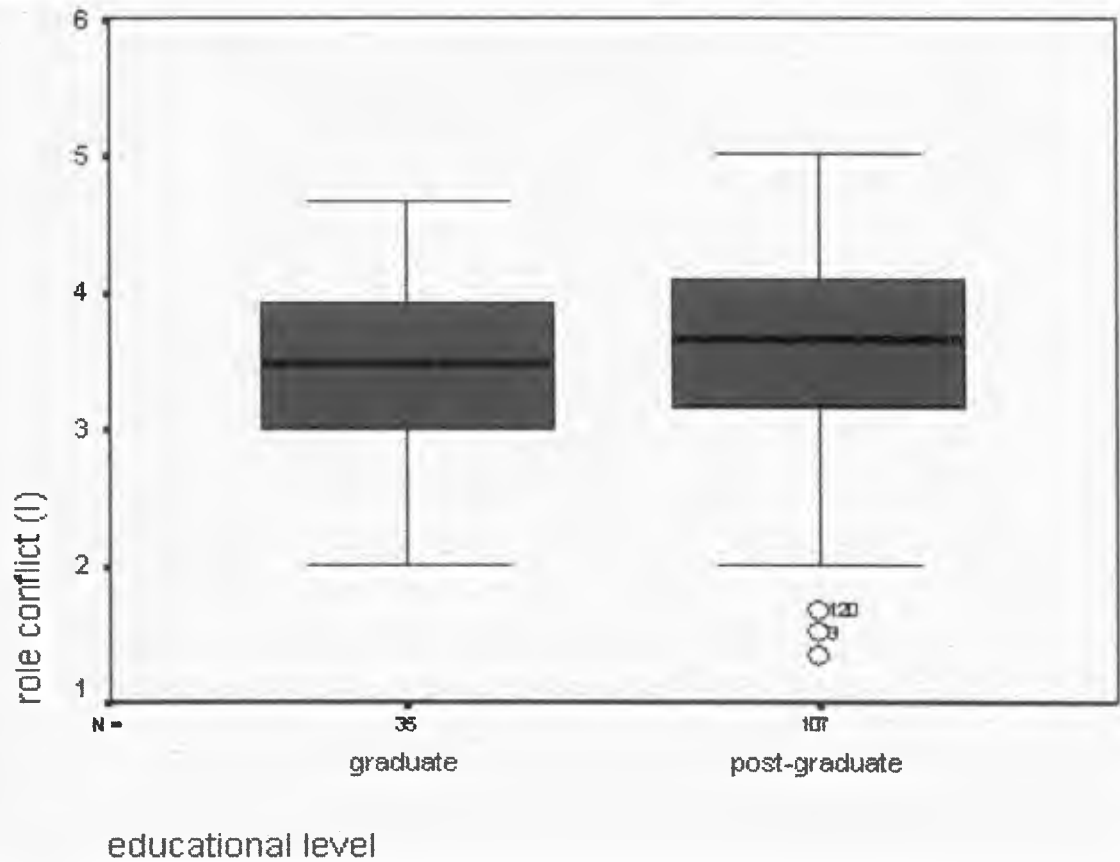
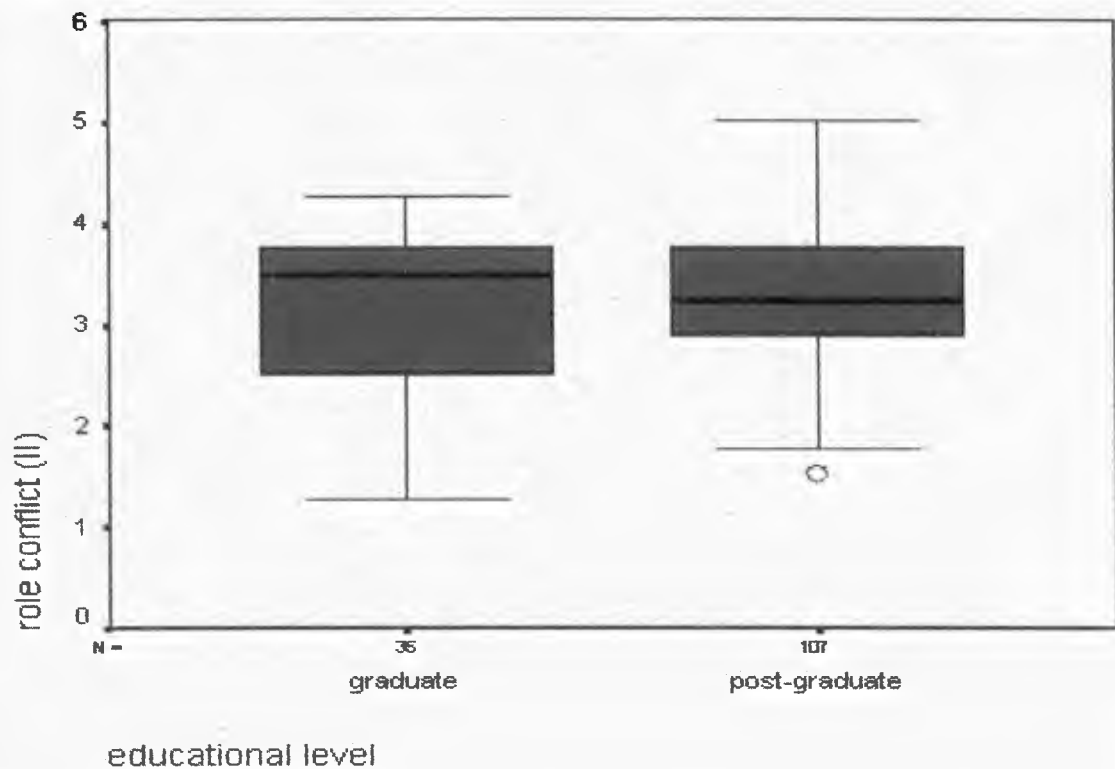


Figure 14 The influence of educational level on the degree of RC(II)



The findings illustrate that there is a slight influence only on the level of “value” role conflict by the educational level variable. Namely, the higher the educational level of heads of departments the lower the “value” role conflict. On the other hand, in order to test the effects of the years of experience on role conflict correlation analysis was employed. The results failed to support our proposition stating that the more the years of experience of heads the lower the reported role conflict by them. These findings are shown in the following correlation matrix (Table:34).

Table 34 Correlation Matrix: Years of Experience by Degree of Role Conflict.

	<i>C6</i>	<i>C7</i>	<i>C8</i>	<i>RC (I)</i>	<i>RC (II)</i>
<i>C6</i>	1.00 (142) P=0.00	0.25 (138) P=0.00	0.28 (133) P=0.00	0.03 (142) P=0.67	0.00 (142) P=0.92
<i>C7</i>	0.25 (138) P=0.00	1.00 (138) P=0.00	0.42 (133) P=0.00	0.05 (138) P=0.48	0.04 (138) P=0.60
<i>C8</i>	0.28 (133) P=0.00	0.42 (133) P=0.00	1.00 (133) P=0.00	0.07 (133) P=0.39	0.04 (133) P=0.63
<i>RC (I)</i>	0.03 (142) P=0.67	0.05 (138) P=0.48	0.07 (133) P=0.39	1.00 (142) P=0.00	0.00 (142) P=0.00
<i>RC (II)</i>	0.00 (142) P=0.92	0.04 (138) P=0.60	0.04 (133) P=0.63	0.00 (142) P=0.00	1.00 (142) P=0.00

It is important to note, here, that for each of the above statistically analysed independent or antecedent variables scatterplots were produced with both types of dependent variable, in order to examine how appropriate a straight line is to summarise their relationship. We did this as a first step before proceeding to any correlation or bivariate regression analysis, since all the above used statistical parameters measure only the linear association between two variables. Thus, by exploring our 22-antecedent variables graphically in scatterplots, we observed that, the shape of plot points exhibits a linear relationship for each pair of independent and dependent variables. Moreover, all the 22-factor score variables extracted from the initial questionnaire scales were analysed according to department category. No differential pattern was discovered among disciplinary categories.

6.11 Integrative model

The next step in our analysis was to compare the explained variance (R^2) for each of the set of antecedent variables with respect to “janusian” and “value” role conflict, in

old and new university sectors. Looking at the results of regression models described in the previous section (Tables: 11 to 33) we see that for all clusters of antecedents R^2 ranged from 0,00 to 0,39. The “commitment to the university rewards” variable explained the greater variance in “janusian” role conflict for new universities ($R^2:0,36$) while the “managing staff” dimension of role requirements was the corresponding variable for old universities ($R^2:0,22$).

Moreover, the dimension that explained the greatest amount of variance in “value” role conflict was the “institutional influence” for new universities ($R^2:0,39$) and the “commitment to university rewards” for the old universities ($R^2:0,19$). These results indicate that the amount of variance explained by each set of antecedents, when taken in isolation was moderate to low. Because each dimension was examined separately, however, the results indicated above may have underestimated the importance of all these independent variables in explaining the variance in the two factors of role conflict, for each university setting.

Therefore, we constructed two integrative models (one for “janusian” role conflict and the other for “value” role conflict) for new and old universities, in order to determine whether additional variance could be explained, when the various antecedents were combined in a single regression equation.

Table 35 Integrative Model for New Universities

Dependent Variable: "Janusian" Role Conflict

<i>Antecedents</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>T</i>	<i>Sig. T</i>
- Teaching orientation	0.19	-1.85	0.00	-0.81	0.00	0.00***
- Formalization	-0.43**	-2.24	0.00	-1.69	0.00	0.00
- Institutional influence	-0.25	0.14	0.00	0.17	0.00	0.00
- Academic staff influence	-0.14	-0.10	0.00	-0.10	0.00	0.00
- Managing the department	0.14	-0.27	0.00	-0.29	0.00	0.00
- Commitment to University rewards	-0.52***	-0.20	0.00	-0.22	0.00	0.00
- Professional identification	-0.06	0.10	0.00	0.11	0.00	0.00
- Research orientation	-0.03	-0.73	0.00	-0.55	0.00	0.00
- Research performance	-0.13	-0.05	0.00	-0.05	0.00	0.00
- Autonomy	0.02	1.18	0.00	1.36	0.00	0.00
- Commitment to professional rewards	0.02	0.48	0.00	0.65	0.00	0.00
- Management orientation	-0.23	-0.33	0.00	-0.34	0.00	0.00
- Managing staff	0.14	-0.15	0.00	-0.23	0.00	0.00
- Professional loyalty	-0.28*	0.02	0.00	0.04	0.00	0.00
- Service orientation	0.20	0.74	0.00	0.70	0.00	0.00
- Managing personal academic activities	-0.10	0.95	0.00	1.04	0.00	0.00
Intercept: 0.06						
$R^2 = 1; R_a^2 = 1$						

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

Table 36 Integrative Model for Old Universities

Dependent Variable: "Janusian" Role Conflict

<i>Antecedents</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>T</i>	<i>Sig. T</i>
- Teaching orientation	-0.02	-0.03	0.11	-0.03	-0.29	0.76
- Teaching performance	-0.21**	0.00	0.15	0.00	0.32	0.97
- Formalization	-0.11	-0.22	0.14	-0.20	-1.56	0.12
- Institutional influence	-0.08	-0.12	0.13	-0.10	-0.93	0.35
- Academic staff influence	-0.11	-0.01	0.13	-0.01	-0.13	0.89
- Managing the department	0.25*	0.20	0.12	0.18	1.58	0.12
- Commitment to University rewards	-0.35***	-0.42	0.13	-0.37	-3.15	0.00***
- Professional identification	0.15	0.07	0.14	0.07	0.53	0.59
- Research orientation	-0.15	0.10	0.19	0.07	0.56	0.57
- Research performance	0.07	0.19	0.17	0.14	1.11	0.27
- Autonomy	-0.07	-0.15	0.12	-0.15	-1.26	0.21
- Departmental influence	0.10	0.13	0.11	0.13	1.15	0.25
- Managing students	0.07	-0.12	0.12	-0.12	-1.00	0.32
- Affective commitment	0.04	-0.06	0.15	-0.05	-0.41	0.67
- Commitment to professional rewards	-0.21**	-0.07	0.12	-0.06	-0.57	0.57
- Managing orientation	0.12	0.14	0.15	0.13	0.96	0.33
- Leadership performance	0.13	0.39	0.14	0.38	2.69	0.00***
- Managing staff	0.36***	0.51	0.14	0.40	3.60	0.00***
- Professional loyalty	0.10	0.16	0.11	0.16	1.45	0.15
- Service orientation	-0.15	-0.20	0.12	-0.19	-1.62	0.11
- Managing personal academic activities	-0.29***	0.18	0.12	0.17	1.40	0.16
Intercept: 0.12						
R ² = 0.56; R _a ² = 0.35						

* P < 0.10 ; ** P < 0.05 ; *** P < 0.01

For "janusian" role conflict, the regression equation for new universities (Table:35) showed that 16 of 21 factor score variables were highly significant when all of these

variables were entered together into one model. $R^2=1$, which means that all the variance of “janusian” role conflict can be explained by the regression model. The relative importance of each antecedent variable is as follows. “Formalisation”, “autonomy”, “managing personal academic activities”, “teaching orientation of the department”, “service orientation” and “commitment to professional rewards” emerged as the strongest predictors. “Management orientation”, “managing the department”, “managing staff”, “commitment to university rewards” and “research orientation” emerged as significant but moderate predictors.

Finally, “institutional influence”, “professional identification”, “academic staff influence/power”, “professional loyalty” and “research performance” emerged as the weakest predictors of the model. The variables: “affective commitment to the university” and “leadership performance” had no effect on the “janusian” role conflict.

The regression equation for “janusian” role conflict in old universities showed that only three of the 21 variables were significant predictors (Table:36). The strongest predictor was “managing staff” (beta:0,40) dimension, followed by “leadership performance” (beta:0,38) and “commitment to the university rewards” (beta:-0,37). The proportion of variance in “janusian” role conflict explained by this integrative regression model is 56% ($R^2:0,56$).

Table 37 Integrative Model for New Universities

Dependent Variable: "Value" Role Conflict

<i>Antecedents</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>T</i>	<i>Sig. T</i>
- Teaching orientation	0.01	0.69	0.00	0.25	0.00	0.00***
- Formalization	-0.39***	0.97	0.00	0.62	0.00	0.00
- Institutional influence	-0.62**	-0.45	0.00	-0.43	0.00	0.00
- Academic staff influence	-0.10	0.06	0.00	0.05	0.00	0.00
- Managing the department	-0.05	-0.02	0.00	-0.01	0.00	0.00
- Commitment to University rewards	-0.46***	-0.27	0.00	-0.24	0.00	0.00
- Professional identification	-0.08	0.11	0.00	0.10	0.00	0.00
- Research orientation	-0.05	0.37	0.00	0.23	0.00	0.00
- Research performance	0.22	0.01	0.00	0.01	0.00	0.00
- Autonomy	0.18	-0.64	0.00	-0.62	0.00	0.00
- Commitment to professional rewards	0.21	0.06	0.00	0.08	0.00	0.00
- Management orientation	-0.26*	0.40	0.00	0.35	0.00	0.00
- Managing staff	-0.35**	0.08	0.00	0.11	0.00	0.00
- Professional loyalty	-0.03	0.23	0.00	0.26	0.00	0.00
- Service orientation	-0.21	-0.41	0.00	-0.33	0.00	0.00
- Leadership performance	-0.21	-0.90	0.00	-0.82	0.00	0.00
- Managing personal academic activities	0.25	-0.34	0.00	-0.23	0.00	0.00
Intercept: 0.11						
R ² = 1; R _a ² = 1						

* P < 0.10 ; ** P < 0.05 ; *** P < 0.01

Table 38 Integrative Model for Old Universities

Dependent Variable: "Value" Role Conflict

<i>Antecedents</i>	<i>r</i>	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>T</i>	<i>Sig. T</i>
- Teaching orientation	-0.13	-0.04	0.11	-0.05	-0.43	0.66
- Teaching performance	-0.16*	-0.13	0.15	-0.12	-0.86	0.39
- Formalization	-0.18*	-0.11	0.14	-0.11	-0.81	0.41
- Institutional influence	-0.19*	-0.09	0.18	-0.09	-0.74	0.46
- Academic staff influence	-0.15	-0.22	0.12	-0.23	-1.75	0.08*
- Managing the department	-0.17	-0.00	0.12	-0.01	-0.07	0.93
- Commitment to University rewards	-0.42***	-0.33	0.13	-0.32	-2.54	0.01**
- Professional identification	-0.15	-0.11	0.13	-0.11	-0.79	0.43
- Research orientation	-0.06	0.19	0.18	0.15	1.05	0.29
- Research performance	-0.13	-0.21	0.17	-0.17	-1.26	0.21
- Autonomy	-0.06	0.02	0.12	0.03	0.22	0.82
- Departmental influence	0.02	0.23	0.11	0.26	2.05	0.04**
- Managing students	0.17	0.17	0.11	0.19	1.43	0.15
- Affective commitment to the University	-0.02	-0.03	0.15	-0.03	-0.24	0.81
- Commitment to professional rewards	-0.08	-0.08	0.12	-0.08	-0.67	0.50
- Management orientation	0.23**	0.32	0.14	0.34	2.16	0.03**
- Leadership performance	0.02	0.23	0.14	0.25	1.64	0.10
- Managing staff	0.16	0.11	0.14	0.10	0.84	0.40
- Professional loyalty	-0.00	0.05	0.11	0.05	0.44	0.66
- Service orientation	-0.01	0.26	0.18	0.28	2.11	0.04**
- Managing personal academic activities	0.07	-0.28	0.18	-0.29	-2.21	0.03**
Intercept: 0.05						
$R^2 = 0.48$; $R_a^2 = 0.23$						

* $P < 0.10$; ** $P < 0.05$; *** $P < 0.01$

With respect to the integrative model of "value" role conflict in new universities the regression analysis showed that 17 of the 21 antecedents variables were significant

(Table:37). The strongest of these predictors were “leadership performance” (beta:-0,82); “formalisation” (beta: 0,62); “autonomy” (beta:-0,61). “Institutional influence” (beta:-0,43); “management orientation” (beta:0,35); “service orientation” (beta:-0,33); “teaching orientation” (beta:0,25); “professional loyalty” (beta:0,26); “commitment to university rewards” (beta:-0,24); “research orientation” (beta:0,23) and “managing personal academic activities” (beta: -0,23) emerged as significant but moderate predictors.

Finally, “managing staff” (beta:0,11); “research orientation” (beta: 0,10); “commitment to professional rewards” (beta:0,08); “academic staff influence/power” (0,05); “research performance” (beta:0,01); “managing the department” (beta: -0,01) were the weakest predictors in the model. All these independent variables account for 100% of the variance in “value” role conflict ($R^2=1$).

The results of the integrative multiple regression model of “value” role conflict, in the old university setting, indicated that only 6 of the 21 antecedent variables emerged as significant predictors (Table: 38). In particular, based on the T-statistic values the estimated relative importance of each predictor is as follows. “Management orientation” (beta: 0,34); “service orientation” (beta: 0,28); “departmental influence” (beta: 0,26); “academic staff influence” (beta:-0,23); “managing personal academic activities” (beta:-0,29); “commitment to university rewards” (beta:-0,32). The percentage of variation in “value” role conflict explained by this regression model is 48% ($R^2:0,48$).

The data analysis revealed that role conflict has two dimensions (the “janusian” and the “value” conflict) and is relative to the institutional type. In the next chapter an attempt is made to evaluate the research objectives in the light of the actual survey results, produced by the above data analysis procedures.

Chapter 7: Discussion

In the present chapter an interpretation of the main findings, that have already been statistically analysed in the previous chapter (6), is provided. Namely, the results of the present survey in relation to the primary research questions and in relation to the past literature are discussed in detail.

7.1 The nature of role conflict

The principal component analysis of our research data identified two distinct factors of role conflict among heads of departments in UK universities (see Table 5: pp202) consisted with the multidimensionality of the construct found in other studies (Miles et al, 1976; Erera, 1991; Gmelch et al, 1989 & 1993; Thorsen, 1996). We have named them “janusian” and “value” role conflict.

The first Factor (I) labelled as “janusian” role conflict consists of six-high loading items (see Table:5) regarding:

- incompatibility of expectations among different groups of people(e.g. the institutional leaders, the dean, the academic staff, the administrators, the parents, the students, the business managers etc.);
- incompatibility of requests from the members of a certain group (e.g. faculty staff);
- incompatibility between the existing institutional rules or procedures and the performance of certain responsibilities;
- incompatibility in policies and guidelines received by the institutional hierarchy as well as by external agencies;
- incompatibility between the bulk of assignments and the availability of resources (e.g. support staff, money, time etc.); and last but not least
- incompatibility between the headship responsibilities and the personal academic activities of the head of department.

The results displayed in Table (6): pp204, illustrate the importance heads give to each of the conflict variables in th original questionnaire scale. First, the majority of

heads (79%) complained that “having insufficient time to complete their core academic work” (quest. Item: B2a) caused them the highest role conflict.

Second, serious conflict relates to heads’ difficulty in dealing with: “incompatible expectations” (68%) (Table 6; pp204: quest. item:B2g) and “incompatible requests” (66%) (Table 6; pp204:quest. item:B2h), in terms of what the various interest groups (e.g. the university leaders, academic staff, external agencies, students etc.) expect the function of the chair to include.

However, among these pressures which stem from the diversity of the role senders and the complexity of the department head position, the need to mediate the demands of the university and concerns of academic staff emerges as the most serious conflict dimension. Heads of departments have to serve as buffers between the individual aspirations of those who do the university’s production work (teaching, research, and service) and the press for efficiency, quality and accountability that comes from the university’s management hierarchy.

This mediating role places heads at the heart of a tension between the managerial and academic cores of university system. Heads are trying to provide the critical link between administrative requirements of the university and the academic staff values of their academic department. They try also to keep current in their discipline. Thus, it can be suggested that the “Janus” or “swivel” (Gmelch et al, 1989) position, which requires a head to perform not only as an institutional leader, but also as a academic staff member, causes the highest degrees of role conflict, comparing to the other multi-facet headship expectations.

A third conflict emerged from organisational constraints in terms of “receiving assignments without the appropriate resources” (63%), “working under incompatible university policies” (46%) and “complying with institutional rules and regulations” (34%) (Table 6; pp204: quest. items: B2e, B2d and B2f respectively).

The “janusian” role conflict identified in our data is consistent with bounding-spanning, conflict-mediating and task-based stress dimensions included in McGrath’s (1976) six-factor framework, as well as with the three similarly-named factors in

Gmelch (1982) and Rasch et al (1986) studies on university management. Moreover, this factor reflects other types of role conflict identified in past literature, such as intersender, inter-role, role-overload [Kahn et al (1964) and Rizzo et al (1970)], but relates to these as a single phenomenon.

As we have already stressed (see chapter 3) all the above mentioned studies on academic conflict/stress have investigated only the administrative core stressors and do not reflect the Janus position or dual roles of department head as both academic staff member and manager. This purpose was achieved by Gmelch et al (1993) study and corroborated by our findings.

As we have indicated above, the most important component in “janusian” factor conflict is the “lack of academic time”. Namely, heads even though they are in a management line position, they remain strongly concerned about preparing manuscripts for publication and securing financial support for their research. These academic staff responsibilities coupled with the performance of the responsibilities as a department head may explain the uniqueness of headship position, first captured by Miles et al (1976) when researching the development of role conflict in professional organisations.

The second analysed dimension of role conflict identified in our data (Factor II) was, what we have called, “value” conflict. This is concerned with conflict between the head’s internal standards or values and the defined role behaviour. “Value” conflict was documented by the importance heads’ in our sample give to certain items of the role conflict questionnaire scale.

In particular, 68% of heads reported that “they have to do things that should be done differently”, 60% of heads complained that “they often work on unnecessary things”, and 45% of heads stated that “they perform work that does not suit their values” (see Table 6; pp204:..quest. items: B2c, B2I and B2j respectively). Heads emerge from the ranks of the academic staff and see themselves generally as academics who occupy the headship position either temporarily (old university sector) or as the way to get promotion on a more permanent basis (new university sector). The potential for a conflict reaction arises when they perceive that the demands of their leadership

role contradict with their academic values. The shift towards market approach in university governance which has occurred in the last few years in higher education sector (see Chapter 1), may be regarded as a significant reason for the appearance of this conflict type in our survey data.

More specifically, the erosion of traditional academic work; the replacement of collegial decision making process by hierarchical institutional process; and the subsequent loss of autonomy (Thorsen, 1996), were facts that have been well documented by our survey data. Thus, we argue that these factors along with debates about the mission of the contemporary university (e.g post-modern versus traditional university) and the appropriate type of university governance- which will make the university not only follow the current revolutionary changes, but steer the ongoing movement- constitute the sources of “value” conflict, identified in our research. “Value” conflict in turn accounts for the variance in the degree of the general role conflict reported by heads of departments.

It can be argued that the “janusian” and “value” role conflict identified in our research represent the tension between the “operational” and “normative” distinction put forward in Becher and Kogan (1994) model of internal university functioning (see Figure 2). According to their view as long as the internal normative and operational modes are in phase with one another, the system as a whole remains in dynamic equilibrium. It may be contended that under the current globalised and competitive university context the operational level has exercised dominance over the normative level. The “janusian” and “value” conflict observed imply that heads of departments’ value preferences tend not to be represented through their actions pointing that internal operations condition internal norms.

Based on the results of the data analysis presented in the previous Chapter (6) it is evident that role conflict has two different forms and is influenced by the institutional context. More specifically, the degree of “janusian” role conflict as well as the degree of “value” role conflict between heads of departments in new and old universities are almost equal (see Table 7: pp205). However, what has been demonstrated is that there are differences in the sources or antecedents of these two conflict types in both university sectors. This data outcome consolidates the findings

of previous research on the subject (Miles et al, 1976; Jackson et al , 1985; Bacharach et al, 1990; Wall et al, 1995) arguing that two individuals may experience the same degree of role conflict in general but the nature and sources of conflict they experience may be quite different. The interpretation of this research outcome is the task of the following section.

7.2 The nature of the antecedents (institutional, interpersonal, personal) and their differences between new and old university sectors

In our model of role conflict (see Table 1: pp129) we have argued that there are three clusters of variables which can influence the level of role conflict perceived by heads of departments. These are: the Institutional, the Interpersonal and the Personal set of explanatory variables. Our findings suggest that, firstly, there are differences in all three sets of antecedent variables between new and old universities, and secondly, each of them has a different impact on the types of role conflict in each sector.

Institutional antecedents

With respect to “type of institution” variable included in our model, the results confirm the evidence from previous studies (Li-Ping Tang & Chamberlain, 1997; Dearing Report, 1997) that the most significant difference between old and new institutions is the old university’s emphasis on research. It is not unreasonable to suggest that this is because, traditionally all “pre-1992” universities see research as a critical, if not the most important, component of their mission, while most of the “1992” universities continue to assert the primacy of teaching.

This institutional mission difference is reflected in their “departmental goal orientation” Namely, in the data analysis chapter (6) the most important goal orientation for an academic department in old universities is the research orientation, namely, the production of high quality research and the assurance of academic freedom. On the other hand, the production of good teaching, through the encouragement of continuing professional development of academic staff, viz the teaching orientation goal is the first priority goal for academic departments in new

universities (see Table 19: pp223)

Interesting enough is the finding that, the second highly and equally important departmental goal for both sectors is the development of the department as a strong economic unit (Table 19; pp223; management orientation=3,89). While, the third position, in the scale of goal importance, is occupied by the research goal in new universities and the teaching goal in old universities respectively. Service to the community, emerges as the forth, but less important, goal for both settings (Table 19: pp223).

The high importance given to the managerial departmental goals may reflect the emergence of “managerialism” in the governance and direction of universities, due to external pressures. This finding gives an emphasis to the theoretical debates on the subject of managerialism in the higher education, already expressed by many well-known commentators (e. g. Pollitt,1990; Trow, 1994; Becher & Kogan, 1994; Williams, 1994; Pratt,1994; Lewis & Altbach, 1996; Henkel et al, 1997).

In particular, we have observed in our data that: the development of an efficient department through the use of appropriate managerial decisions (quest. item: A1c); the implementation of the goals and requirements of the university central authorities (quest. item: A1g); the efforts to secure financial resources and seek new funds outside government (quest. item: A1j); the effectiveness defined in terms of the quality of departmental and individual performance (quest. item: A1e) were highly valued departmental objectives for both university sectors (see chapter 6: pp 221, 222).

This departmental policy orientation gives support to the arguments that value for money, efficiency, accountability, performance indicators, have all become the first priorities in the current higher education environment (Pollitt, 1990; Trow, 1994). It is not surprising that the observed shift towards more managerial and entrepreneurial objectives has been mirrored in the prevailing university reward system.

More specifically, the “reward system of the university” is another institutional variable that we have chosen in analysing the role conflict phenomenon and has

revealed additional differences between new and old universities. With regard to the old universities (Table 12: pp212), heads of departments were evaluated firstly on the basis of their research performance e.g. production of high quality research, stimulation of research and publication in their department and fund-raising ability. Secondly, they were rewarded on the basis of their ability to demonstrate effective leadership and to fulfil managerial roles, along with efficiency in communication skills (see chapter 6: pp 207, 211, 212, 213).

Heads' of departments teaching performance e.g. concern for students, undertaking quality teaching, fostering good teaching in the department, keeping up to date with the latest developments and participation in professional organisations, was the third criterion for the evaluation of a headship position (Table 11 & 12: pp208, 212). However, the greater emphasis given to the manager role of the head, comparing to the teacher role, signals the cultural shift that has occurred in the last years (see chapter 1), which tries to promote managerial values above academic.

This trend is more evident in the new university setting (Table 12: pp212) where our results indicate that the heads of departments are valued firstly for their performance as managers and secondly as academics. Consequently, the novel and radical proposal of Jarratt's Report (1985) that the head of department should be selected on the basis of his/ her managerial capabilities and should be encouraged to delegate some part of the responsibility of academic leadership to others, appears to have been adopted by new university's reward system.

"Job structuring" is another set of institutional variables that we have included in our model in order to understand the various antecedents of role conflict in higher education environment. Formalisation and autonomy were the two basic dimensions of job design that were tested in both sectors. Our results reconfirm the evidence of other studies (Carnegie, 1991; Middlehurst & Elton, 1992; Dearing Report, 1997), that new universities are more bureaucratic and more hierarchically organized institutions than old universities, with high degrees of formalisation and lower degrees of autonomy (Table 14: pp215).

However, the perceived degree of autonomy in old universities in the present

research appeared to be much less than the previous literature suggests (Handy, 1984, Davies et al, 1985; Bensimon et al, 1989). This can be viewed as the negative effect of the recent change in old university sector away from the traditional university values of academic freedom and autonomy, documented also in previous studies (Middlehurst & Elton, 1992; Trow 1994).

Another important finding of our survey is the change that has occurred in the “decision making patterns” in both sectors. The results exhibit that heads of departments have great influence in the decision making process at departmental level, but believe they have too little influence in the decisions concerning the entire institution (Table 16: pp219). The degrees of influences were identical for both sectors. This research outcome gives support to the argument, that the recent pressures on the universities to adopt market approaches will strengthen institutional governance at the expense of departmental power (Pratt, 1994; Becher & Kogan, 1994; Henkel, 1997). The lack of participation in institutional governance, which becomes evident in our data, illustrates that the classical collegial concept of university operation has given way to the corporate enterprise image of governance. However, this system transformation would have been easier for new universities, which have been accustomed to operate in a more business-like structure, than the accomplishment of the same restructuring in old university setting.

The “role requirements of headship position” is another set of variables, explored in our research, which also demonstrates that the current reality in university’s internal functioning is driven by a managerial ideology. In particular, the distribution of time among the various headship activities was found to be in favour of managerial responsibilities, in both university sectors (Table 21: pp230). The average hours spent during a week was 50 and 46 in new and old universities respectively, or almost 10-9 hours per day for a 5 day week. However, heads of departments in new universities spent 37 hours to managerial activities and 13 to personal academic activities, while heads of departments in old universities spent 31 hours to managerial and 15 to their core academic activities of teaching and research.

The new work realities for academic professional heads of departments are seriously challenging their focus on the core activities and lead to an increase in the time

required for administrative activities. Based on our findings consistency exists with the results of two recent studies on the role behaviour of academic staff. In particular, Court (1996) reviewed a series of surveys of the use of time by academic staff 1962-94 in the UK and provided strong evidence that the workload of university staff is both heavy and increasing.

In 1997, a survey was undertaken by the Dearing Committee in the UK, in order to find out -among other higher education issues- how academics used their time at work. Respondents were also asked questions which allow a comparison between the actual amount of time they spent on particular activities and the amount of time they felt that they ought, ideally, to be devoting to these activities. The results show that the largest discrepancies between actual and desired allocation of time related to research and administration/management. Across the board, staff would like to spend half to twice as much time more on research as they currently do, and to cut the amount of administration and/or management by half.

Based on the data of the present research, it can be argued that with the introduction of market forces and the subsequent growth of entrepreneurial expectations, heads are under pressure to widen the range of their tasks and change the balance of their activities towards management and away from research and teaching (Table 21: pp230). Moreover, from our factor-analytic work on the list of headship activities (Table 22 & 23: pp231, 232) four distinct dimensions of role behaviour appeared: Managing the Department, Managing Students, Managing Staff, Managing Personal Academic Activities, which can be paralleled to a typology of 4-different head roles: "Manager Head", "Instructional Head", "Leader Head", "Scholar Head" respectively.

Similarities to the head types provided by our research data were reported also by other studies. More specifically, three predominant head roles have emerged from the research of McLaughlin et al, (1975): an academic, an administrative, and a leadership. Other studies analyzed 27 department head duties and factored 4 roles (Smart & Elton, 1975): a faculty role, a coordinator role, a research role and an instructional role. In a more recent study (Carroll & Gmelch, 1994) four heads types appeared: a Leader Head, a Scholar Head, a Faculty Developer Head and a Manager

Head.

Interpersonal antecedents

Differences between new and old universities were also observed in the interpersonal variables included in our model. "Academic staff influence" in the department's various decisions was taken as a representative variable of the relationship between the focal person (head of department) and the role senders (academic staff). The results suggest that academic staff in both sectors has moderate influence in departmental decisions, with slightly higher degree of influence in the old university context (Table 26: pp236).

It can be argued, therefore, that there is a shift away from the collegial system of departmental governance, towards a more hierarchical structure. The head model has altered from being "first among equals" to a "leader", with great power in department's decision making processes. Our findings corroborate the view expressed especially by Trow (1994), Becher & Kogan (1994), that the effects of government pressures and altered political ideologies have been a considerable loss in collegiality across the higher education system with a resulting loss in the sense of ownership and shared professional responsibility for the operation of the institution, and its basic units.

Personal antecedents

Personal variables were the third set of antecedents included in our model. In particular, the role orientation (discipline and /or university commitment) of head was thought to be an important influential factor of the head's perception of his/her role and was explored in our study. Factor analysis has produced 5-dimensions from role orientation scales: commitment to university rewards and affective commitment to the university (from the University Commitment Scale; Table 29: pp239); professional identification, commitment to professional rewards and professional loyalty (from the Professional Commitment Scale; Table 31: pp241). Heads of departments in both sectors are highly committed to all dimensions of their profession/discipline. However, heads in old universities score a little higher than

their counterparts in the new universities (Table 32: pp242).

Although heads in both sectors are high in affective commitment to the university, they are less committed to the university rewards. Affective commitment to the university is a little higher for heads in new universities while commitment to university rewards is higher for heads in old university sector. However, the correlation between the two clusters of commitment variables has not proved statistically significant. This finding gives support to the independent theoretical position of role orientation variables, which assumes that the two commitments are independent of each other and therefore not inherently conflicting. The alternative competing argument of commitments congruency does not seem to gain empirical support from our research data. Also, we argue that our findings resemble the “mixed identification” type of commitment of the 4-fold typology developed by Miller et al (1971) and Green (1978).

As we have already stressed (see chapter 4), the typology developed by these authors is based on a two-dimensional conception of commitment independence and constituted by the following combinations. Identification with ones’ profession and not with the employing organisation (professional identification); identification only with the organisation (organisational identification); identification with both (mixed); or with neither (indifferent).

In summary, from the analysis of our research data we can conclude that the three clusters of variables: institutional, interpersonal, and personal, identified in the theoretical model (see Table 3: pp197) of the present research, constitute important dimensions in explaining how the headship role is enacted in the current turbulent academic context. It is evident from the above data discussion, that the university type (new / old) is a crucial parameter in differentiating the effects of the three sets of antecedents on the performance of headship responsibilities.

It is interesting, however, that there are no noteworthy differences on the above analysed three clusters of variables, across the various discipline categories in our sample. As we have stressed (see chapter 4) many studies have discerned consistent differences between discipline groups, with respect to a number of important

attitudinal and behavioural dimensions (Becher, 1989; 1994; Stoecker, 1993; Tucker, 1993). Based upon a review of the literature on the structure of academic disciplines, Light (1974) and Becher (1989; 1994) concluded that academic staff in different disciplines have distinctive activity patterns. Cognisant of these differences, they suggested that researchers should study disciplines separately, claiming that a generic academic profession in practical sense, did not exist.

In an attempt to classify disciplines into reasonable groupings for similar consideration and comparison, Biglan (1973) developed a three-dimensional model for use in studies of higher education (see Table 2: pp140). The Biglan model was designed to reveal the various groupings of academic disciplines and has been tested in several studies of academia, with positive results in respect of the demonstration of discipline-based distinctiveness (Smart & Elton, 1975; Stoecker, 1993).

The Biglan classification was used in collecting and coding our data, but since the size of the sample was not so high to include a great number of cases in each of the 8 cells of Biglan's model, we had classified the responses according to the one dimension of this model: applied, non-applied. This distinction concerns the degree to which knowledge is expected to be put to practical use. However, our results identified similarities rather than differences, among departmental categories in all groups of variables tested. We have, then, proceeded and tried to check if a possible categorisation of the departments according to the other distinction soft/hard of Biglan's model would produce any difference in the degree of role conflict (see chapter 6; Table 9: pp206). This distinction refers to the criteria for establishing claims to new knowledge. In particular, it is related to the extent to which findings are open to quantification; the extent of reproducibility of results and their cumulative nature; and the degree to which clear causal connections may be identified (Becher & Kogan, 1994). Again the results pointed to similarities between the two departmental categories.

Possibly the complexity of head of department role supersedes any disciplinary differences between and among heads. Therefore, since the "type of institution" has come up as the only and strongest influential factor on the three sets of antecedents, we have tried to control its effect on them. This has been achieved by testing all of

the research propositions separately for new and old institutions. Through that method we had succeeded in obtaining the pure relationship of the role conflict and its antecedents. The explanatory power of each of the above three sets of antecedents on the degree of role conflict experienced by heads of departments is illustrated next.

7.3 The relationship of role conflict and antecedent variables in both university sectors

As is evident from the preceding Chapter (6) of data description the two forms of role conflict extracted from our research are influenced by quite different sets of factors, which are relative to the institutional type. Since the university context was identified as the variable, that causes additional differences on these clusters, their association to role conflict will be interpreted separately for each sector.

NEW UNIVERSITIES

(i) Janusian role conflict

Based on the Integrative Model developed in the present research (Table 35: pp249) the Factor (I) : “janusian” role conflict, in new universities is explained largely by the “job structuring” variables. Contrary to our expectations and to other research findings (Jackson, 1985; Bamberger, 1990), formalisation of the job has a negative relationship to this type of role conflict and autonomy has a positive one. A possible explanation could be that the conflicting expectations of the complex position of head, can be resolved more easily through a high degree of formalisation and a moderate degree of autonomy. This is because, high levels of formalisation and lower levels of autonomy imply the predominance of rules and regulations, in defining role expectations and the creation of certainty and predictability, through a more hierarchical and bureaucratic job structuring, which in turn seemed to reduce role conflict. The fact that these findings were the opposite of those hypothesised, would suggest that under certain conditions, professional heads would welcome a high level of job structuring in their university. Future research should attempt to unravel the theoretical complexities of this relationship.

The “goal orientation” of the academic department emerged as a crucial factor in influencing the degree of role conflict of heads (Table 35: pp249). We found that less conflict is generated when the department is oriented towards teaching goals. But when the objectives of the department are oriented towards direct service to the community there was an increase in the level of conflict among heads.

The emergence of the societal expectations as the strongest predictor of the role conflict variable among the remaining goal orientations (Table 35: pp249) may reflect the tradition of this sector in serving the locality. However, the positive sign of the correlation between the role conflict and service to the community may reflect the incongruity of expectations between heads of departments and the other interest groups about the objectives of higher education. More specifically, it can be assumed that the interests of the society, as interpreted by the central government and those of the academy do not coincide.

We have already stressed, that in the early 1980s, the higher education institutions were trusted to educate the students of the nation and to deliver knowledge, that would satisfy the needs of employers and society at large. In contrast, during the last years, due to government pressures and altered political ideologies aiming at introducing business-like attitudes in higher education, the ability of higher education institutions to effectively perform their role, has been under question. It is contended that, as higher education provided largely through public money and affects the interests of multiple stake-holders in society, the higher education institutions should be called to public account rigorously and their performance should be evaluated. To this assertion, we should add the conflicts and loss of security deriving from the massive changes in terms of ideas, of values, of what counts as knowledge etc. that the modern post- binary university must accommodate.

The degree of role conflict among heads of departments identified in our data can be seen as the impact of this cultural shift on higher education institutions. The results give support to existing evidence which claims that efforts to increase efficiency in service delivery, as a response to various societal needs, by strengthening market forces and promoting managerial control will limit professional autonomy and increase academic staff's role conflict and stress (Carnegie,1991; Gmelch, 1993;

Altbach, 1996).

The “role requirements of the headship position” were found also to influence the degree of role conflict, but opposite to what we had hypothesised (Table 35: pp249). Viz. all headship roles (Table 35: managing the department and managing staff), except the role as scholar head (Table 35: managing personal academic activities), seemed to reduce the level of role conflict. Our findings suggest that the conflict which derives from the management of staff affairs or the management of departmental debates can be reduced, if the head devotes more time in trying to influence the academic staff’s perceptions on these issues.

The positive association of the time devoted by heads to personal academic activities and the role conflict level, may be due to the recent changes that occurred in the mission of the new universities. Within a short span of time, these teaching-oriented institutions, have radically transformed their character, by trying to develop their research activities and being into direct competition with the traditional (old) universities. Under the current circumstances heads are expected to publish more and on the other hand, to continue to carry heavy teaching loads, a situation that will inevitably lead to role conflict. However, as research becomes more important in new universities their hierarchical management limits the freedom, which is an appropriate condition for the prospering of research. This is also a fact that increases the level of conflict experienced by heads of departments. We can conclude, therefore, that the more the heads of departments are occupied with research activities the more the reported role conflict.

This finding is also supported by the explanatory power of personal variables (commitment to professional rewards; commitment to university rewards) included in the integrative model (Table 35: pp249). The positive association between commitment to professional rewards and role conflict implies that heads who are committed to their discipline, under the current context of new university, they have to spend a lot of their time not only in teaching activities but to research as well, and this will increase their role conflict level.

However, the negative association between commitment to university rewards and

role conflict, suggests that this conflict can be diminished, if the heads feel that their work expectations are realised in the current employment university setting and their intensive efforts towards research, in addition to their effective response to the heavy teaching loads are encouraged and rewarded. Such a feeling leads to the development of positive attitudes towards the university and reduces the negative effects of conflict

(ii) Value role conflict

With regard to the Factor (II): “value” role conflict experienced by heads, in the new universities, different variables emerged as possible predictors (Table 37: pp252). In particular, the prevailing “reward system” was found to exert the strongest influence on the “value” role conflict. When the efforts of heads to demonstrate effective leadership and to fulfil managerial roles are rewarded by the university then the level of “value” role conflict is minimal.

Moreover, “job structuring” variables were found to correlate in the predicted direction with “value” role conflict (Table 37: pp252), and thus to confirm the findings of other studies, showing that for professionals bureaucratic job structuring (high degree of formalisation and low degree of autonomy) comes into direct conflict with the professional ethos (Jackson et al, 1985; Bamberger et al, 1990). The degree of influence that the heads have in “institutional decision making process” was also a very significant factor of explaining the “value” role conflict (Table 37: pp252). In the light of the recent changes in the internal structure of the higher education institutions and the development of a strong institutional leadership, the limited input into policy and operational decisions at university level, that the heads claim to have, results in an increase in their “value” role conflict.

What we have observed is that the increased density and heightened bureaucracy, within current context, profoundly affects the day-to-day lives of academic professional heads. Participation, communication and policy making have all become more complex and difficult, as the internal university governance moves towards a more centralised management system. A system which is characterised by a powerful vice-chancellor and an increasingly influential senior management team. This outcome corroborates the theoretical propositions, developed by Pratt (1994), Becher

& Kogan (1994), Trow (1994), denoting that in response to the external pressures higher education institutions have developed an “executive” model of management, which assumes that objectives can be specified by central institutional leadership and implemented by those at the periphery.

Moreover, “value” role conflict is increased when the “goals of the department” are oriented towards managerial objectives and is reduced when the goals are oriented towards serving the community (Table 37: pp252). For many decades, community service comprised one of the key missions of public sector institutions. It can be argued that the value system of heads of departments working in such an employment setting is cultivated by this tradition.

In particular, heads of departments may feel frustrated under the current pressures, which draw substantially on a managerial image of internal governance. The requirement to submit detailed departmental academic and financial plans, to follow instructions and to work within the frameworks of tight policies and directions, imposed by the central institutional authorities, contribute to an increase of “value” conflict among heads of departments. The new, more competitive environment and the claim for more managerial processes, in the governance of new universities, seem not to facilitate the professional values of heads of departments, leading also to high levels of “value” role conflict.

This view is reinforced by the negative association between “managing personal professional activities” and “value” role conflict, observed in our data (Table 37: pp252). In particular, the more time devoted to core academic activities –especially teaching, the less the “value” role conflict of heads of departments. It is evident from our data that heads of departments view themselves mainly as teachers, who have in parallel assumed managerial responsibilities, in order to promote department’s educational quality and facilitate its movement towards educational goals.

It can be suggested that, in the current environment, which is characterised by increased administrative burdens, generated by requests for information from numerous external agencies, as well as by internal requests, associated with planning marketing and legislative requirements, heads’ academic effectiveness will decrease.

As a result the distraction from their main academic tasks will lead to high levels of “value” conflict, a fact documented by our data. Moreover, consistency exists with the results of other studies which specify that, the most important and yet most enjoyable role of heads of departments is the scholar role (Gmelch et al, 1993; Dearing Report, 1997).

(iii) Summary of findings for new university sector

In summary, with respect to new university sector, we can conclude that the role conflict is a two-dimensional phenomenon, with each of its types influenced by different antecedents. More specifically, the result of our research suggest that heads of departments, who occupy usually a permanent position in the institutional hierarchy, experience high degrees of conflict, because of the dual nature of their role. As proposed they are found to be caught in the middle and stressed by their need to mediate the constrains of the institution and differences among academic staff, in addition to the need to remain current in their discipline.

The performance of the scholar role and especially his/her occupation with research activities (personal and departmental) emerged as the most significant source of conflict. As we have already discussed earlier, in 1992, the polytechnics and the largest Higher Education Colleges were given university status. As a result they acquired both full degree-awarding powers and also formal parity in relation to a new single funding council-the HEFC.

One major consequence of the abolition of the binary line was that these new universities were for the first time permitted to compete for core funding to support basic research. Our findings mirror the impact of recent government reforms towards an entrepreneurial approach to institutional governance. Most of the conflict of heads of departments is due to the pressures -imposed on him/her in order to respond effectively to research and quality assessment procedures. It seems that, heads of departments have not been familiarised with assessment systems, introduced by government directives, aiming at reducing university dependence on state funding and instilling market mechanisms into higher education. Recent debates about the nature of research or types of knowledge production in a “radically unknowable” (Barnett, 1997b) world seem to add in the stressful situation that heads of

departments in post-binary universities have to confront.

In regard to the second type of role conflict: the “value” conflict, our findings suggest that, the experience of such conflict can be attributed to the low degree of institutional influence heads have, in the current university environment. High pressures to comply with institutional rules and regulations, which inevitably result in the loss of his/her autonomy to act according to his/her professional values, constitute additional sources of “value” role conflict.

These features, illustrated by our research data, reconfirmed the evidence that a corporate management structure was adopted by most new universities. As we have already stressed, hierarchy was a strong element in the governance of ex-polytechnics, which have developed a business-like structure in their operations, and thus, their transformation to a corporate enterprise was more acceptable than in the old universities. As a result, the prevailing reward system, favours the possession of leadership and managerial qualities for the academic managers of the institution, a fact that also became evident in our data. However, the development of a central management system, in the current context, has shifted the power from the hands of department heads to the hands of powerful vice-chancellors and administrators.

Consequently, heads of departments who feel that have no more power as leaders in influencing the institution’s decision making processes, will become frustrated and demoralised. Shifting the locus of control from departments to the centre implies a deviation from the professional values of participation and autonomy and signals the establishment of working conditions that contradict with heads’ internal value system. Perception of “value” conflict by heads of departments is, in turn, an inevitable consequence.

OLD UNIVERSITIES

(i) Janusian role conflict

Quite interesting are our survey findings with regard to the first type of role conflict – janusian role conflict, experienced by heads of departments in old university sector. From the multivariate statistical analysis performed, three factors came up as

antecedents of “janusian” role conflict (Table 36: pp250). These are referred to as “managing staff”, “leadership performance” and “commitment to university rewards”. Their impact on role conflict is interpreted below.

The pursuit of the leader role, namely, head of department efforts to manage staff affairs (e.g. recruit and select staff, assign responsibilities, evaluate academic staff performance, encourage the personal and professional development of academic staff, as well as efforts to develop long range departmental plans and goals and to conduct departmental meetings with academic staff), was the strongest explanatory variable in the integrative role conflict model (see Table 36: pp250).

In an era of postmodernity (see chapter 1) characterised by change, uncertainty and supercomplexity efforts to develop long range departmental goals along with the implementation of performance management, appraisal, and rewards for achievement techniques- features of the globalisation and detraditionalisation of the modern world, seemed to be reasons for the experience of the role conflict among heads of departments.

As expected, additional conflict was reported when the heads feel that they were rewarded on the basis on their performance as leaders (Table 36: pp250, leadership performance variable) particularly on their ability to “do more with less”. Traditionally, the old universities were characterised by their commitment to research and teaching excellence. The recent changes in the contemporary academic environment (see Chapter 1) towards institutional competition, accountability and quality assurance processes promote a managerialist ideology, which might put the academic ethos under threat.

Our findings capture this conception suggesting incompatibility between heads’ of departments expectations and university expectations, which leads to high degrees of conflict. The results give support to other studies concerning the development of this type of professional role conflict. These studies point to the importance of the prevailing value system in an organisational setting, in affecting the role orientations and attitudes of employed professionals (Sorensen et al, 1974; Hrebiniak et al, 1972; Aranya et al, 1983). Moreover, the value system was held responsible for any increase in the degree of conflict experienced by those salaried professionals

(Corwin, 1969; Hall, 1968; Jackson et al, 1985).

On the other hand, our research findings revealed that, if heads feel satisfied with the benefits they receive from the university, they will experience less role conflict (Table 36: pp250, commitment to university rewards variable). Heads as most professionals are career oriented. As such they expect that the work they do will not only relate to organisational goals, but will also provide opportunities for their own career progression. The realisation of heads' of departments work expectations will lead to an increase in their commitment to the university and a decrease in their role conflict. The negative association between commitment to the benefits and level of role conflict reported, is consistent with previous research, suggesting that compatibility between professionalism and the organisation may depend on the organisation's willingness to reward professional behaviour (Hall, 1968; Kerr et al, 1977; Raelin, 1986; Grover, 1993).

(ii) Value role conflict

With regard to "value" role conflict in old universities six variables appeared as statistically significant antecedents in the integrative model (Table 38: pp253). These are: "management orientation", "service orientation", "departmental influence", "academic staff influence", "managing personal academic activities" and "commitment to the university rewards". Their effects on the "value" conflict are considered next. In particular, the first two antecedents ("management orientation" and "service orientation") were concerned with the goal priorities of the department. The data have shown an increase in the "value" role conflict of heads when the orientation of the department is towards managerial and market objectives.

As we have already mentioned earlier, recent changes in political, economic, social and technological conditions have affected the situation of universities strongly. They are now facing almost the same problems that business and companies are encountering. A new more competitive environment, less public funding, changes in the role of the state, or the claim for more academic management accountability, and autonomy let universities encounter problems like adaptation, co-ordination, communication, evaluation or effectiveness (Sporn, 1996). Maintaining quality with diminished resources or "do more with less" represents a high priority departmental

goal in the current higher education context, but it is also an area characterised by high levels of conflict.

Our findings consolidate the view that the above trends in the old university setting are not easily accepted by the heads of departments. The effects of this uncomfortable situation are reflected in the positive relationship we found between heads power in influencing department's decision making ("departmental influence") and "value" role conflict (Table 38: pp253). It is not unreasonable to conclude that the more the power the head has in trying to implement managerial policies, which deviate from the academic culture the more the "value" role conflict he/she feels. Additionally, he/she will feel relieved if more and more academic staff participate in the running of the department. This was confirmed by the negative correlation found in "academic staff participation /power" variable included in our model (Table 38: pp253).

The above results suggest that collegial values remain well established in old university context and a possible departure from these, towards a market oriented value system, will be associated with negative work reactions by academic professionals and especially by heads of departments. In contrast, the tensions will be minimised if heads are encouraged and facilitated to pursue their core academic activities, as well as if they feel satisfied with the motives provided by the university, in order to fulfil their complex headship responsibilities. This perception was supported by the negative correlations found in the two last but not least important antecedent variables: "managing personal academic activities" & "commitment to the university rewards", which emerged statistically significant in the data analysis (Table 38: pp253). These results give more evidence to the assertion that, the ability of work organisations to meet the professionals' work expectations is associated not only with organisational commitment, but also with the professionals' affective reactions to the organisation (Mowday et al, 1981; Conley et al, 1989).

(iii) Summary of findings for old university sector

In summary, with respect to the old university sector our results suggest that the experience of "janusian" and "value" role conflict felt by heads of departments, depends on quite different antecedents from those identified in the new university

context. More specifically, the performance of the leader role emerged as the main source of conflict among heads in old universities. The need to mediate the relationship of academic staff to the institution, through the provision of informal academic staff leadership and the development of long-range departmental goals, along with the need to demonstrate effectiveness at recruiting academic staff and evaluating their performance, reported as the most conflicting of a head's role requirements.

The radical changes that have taken place in the environment towards managerial in place of collegial forms of governance; towards market alongside academic criteria; and towards output-based performance criteria instead of the traditional peer evaluation, contributed strongly to the complexity of this particular headship role. Traditionally, heads viewed the activities, which are of immediate benefit to the academic staff and their departments, as more important, than the activities which are of interest to the university as a whole.

Therefore, under the current university context- which tries to promote market values above those of academic, heads efforts to implement market oriented institutional policies and simultaneously, to gain academic staff consensus on these policy issues- that affect the department's future, proved significant sources of conflict. While, one cannot assume a causal relationship between the above antecedents and role conflict, these conflict stressors may be distressing enough to discourage heads from continuing in the headship position. This assertion becomes almost clear from the data displayed in the following Table (39).

Table 39 Headship Cost: What Happened to the Immediate Predecessor after Completing the Period in Office as a Head of Department

<i>Career Patterns after Headship</i>	<i>New University</i>	<i>Old University</i>
	%	%
Return to full time academic work	21	49
Return to part time academic work	-	7
Took sabbatical	-	6
Moved to another management position	24	5
Moved to employment outside Higher Education	7	4
Retired	45	23

The difference in the career patterns between new and old universities observed in Table (39), is due to the difference which exists in the way the headship position is structured in the two settings. Namely, the majority of heads in new university sector is appointed on a permanent basis, while heads in old university sector have a limited period of tenure as head (see Table 4: pp198). With respect to old universities 56% of the heads (predecessors) return to academic staff status either on a full-time (49%) or part-time (7%) basis after serving as heads, and only 5% continue in higher education governance positions (see Table:39).

On the other hand, the emphasis on market mechanisms in higher education and the departure from the traditional university values, identified in the present research is regarded as the most significant factor in explaining “value” role conflict among heads of departments in old universities. We have already stressed that higher education institutions respond to the external pressures by strengthening institutional governance at the expense of departmental autonomy. Increased competition between universities, and between academic departments within them, along with reduced government funding and search for alternative sources of raising money, are the imperatives of the new business-like view of institutional and departmental operation and management.

As observed in our data, the encouragement of competition at all levels- both intra

and inter institutional, the pressure for performance output evaluation, the concentration of power in the centre and the deterioration in communication, between centre and units, have constituted an active discouragement of collegiality, leading to a “value” conflict among academic professional heads. Under such working conditions , it is not unreasonable to conclude, also, that the lack of time in the performance of the “scholar” role, which is regarded as the most important headship role among the heads in old university context, will add considerably to the level of “value” role conflict.

7.4 Concluding comment

In summary, what has become clear, from the above data discussion, is the uniqueness of headship position in the contemporary post-binary university environment. A two-dimensional role conflict, viz the “janusian” and the “value” conflict, is the outcome of the performance of headship responsibilities. However, the sources of these two types of conflict are quite different between new and old university sectors. Therefore, the development of different coping strategies is necessary, in order to help heads of departments in both settings, to face effectively the pressures, conflicts and complexities of the current context. The formulation of specific suggestions constitutes the task of the next chapter.

Chapter 8: Conclusions

This final chapter presents the most important underlying dimensions of role conflict extracted by the present research, suggests possible implications for university management and makes recommendations for future research. More specifically, the focus of the present research was on changes of institutional governance structures in UK higher education, with particular emphasis on the changes and resulting consequences for the head of department role. We have stressed that the governance of higher education institutions has become a major policy issue in several countries. Many traditional forms of institutional governance, as well as the effectiveness of internal institutional decision making processes and procedures have been under severe pressure internationally. As a response, in several countries governance structures have been altered quite substantially, over the last few years.

In the UK, for a long time, both the governance and the management of higher education were settled matters, subject only to incremental change, but from the mid 1980s more far -reaching changes were introduced. We have argued that these changes can be seen as a result of a trend set in motion in the mid- 1980s, that emphasises a more market-oriented approach to the steering of higher education systems. For various reasons, British government has attempted to introduce market-related elements into the higher education system. Going into the details of this development (see chapter 1), we have suggested that, the increased emphasis on managerialism and business-like structures is in line with the basic ideas underlying the trend towards a more market-like approach.

It is clear that the changes in the relationship between government and higher education institutions have led to a strengthening of institutional level governance, at the expense of traditional departmental power. Increased accountability in terms of value-for-money has influenced many of the recent governmental papers and parliamentary debates on higher education.

With the massification of higher education over the last decade and with diminishing resources available to the sector, efficiency questions were high on the political agenda in the UK. While initially the efficiency movement focused on increasing

research productivity and a streamlining of the teaching process, more recently it has entered the realm of higher education management and governance on the assumption that much can be improved (see chapter 1). If only universities and colleges were to be better managed many of the problems that higher education now faces could substantially be reduced or even eliminated. At least, such were the views influencing many of the governmental policy reforms.

As a result, a shift away from the traditional collegial model of institutional governance, towards a more managerial and entrepreneurial concept in higher education operation has occurred and has been well documented in our research data. The results suggest that in both university sectors -old and new- the components of collegium and hierarchy are present, but what differentiates them is the balance between these cultural images. What happened in reality is that higher education institutions have successfully met the pressures and difficulties faced during the last decades. But they have done this through increased managerialism, and through the adoption of an entrepreneurial culture, in their present governance system and structure.

More specifically, universities moved away from the collegial model of governance and became more managerial and market-led, while ex-polytechnics seem to have gone in the same -corporate management-like- direction, by making the most of their existing hierarchical structures. Most higher education institutions had moved to establish strong institutional management structures, in particular to set-up senior academic management teams in support of the vice-chancellor. It was evident from our survey data, that crucial strategic decisions were being concentrated in the central university level, assuming also that the objectives can be specified and controlled through an institutional academic hierarchy. The results revealed that in both university sectors the institutional level has strengthened its power over departments. The model of internal governance in new and old universities resembles that of a corporate enterprise: the institution is seen as a holding company designed to authorise and control the activities of its basic units.

With reference to heads of departments, the present research identified substantial changes in their role requirements, due to the above-mentioned cultural

transformation of university context. Heads of departments reported a decrease in their academic effectiveness, as they are concentrated in the performance of the changed, more demanding and often conflicting managerial roles. The increased administrative burdens generated by requests for information from numerous external agencies, as well as by internal requests associated with planning and forecasting or with marketing, financial or quality control and with legislative requirements, kept them away of the traditional academic activities of teaching, scholarship and research.

The data analysis has shown that with the introduction of market forces in the higher education system and the subsequent growth of entrepreneurial expectations heads of departments and academic staff are under pressure to widen their range of tasks. In today's university environment, it is no longer enough to be a committed teacher and/or researcher. The profound changes in the conditions and the nature of academic work at headship level, along with the recent pressures for stronger institutional management, as well as the encouragement of competition at all levels were found to be the main sources of the development of role conflict among head of departments.

Our research illustrates that many heads of departments do not feel comfortable under the current higher education context-which emphasises market mechanisms in university governance- and they exhibit high degrees of "janusian" and "value" conflict. These two different forms of role conflict are relative to the type of institution. With respect to old universities, heads of departments felt frustrated with their mediating-managerial role. Namely, high stress was reported when they tried to compromise the demands of academic staff and the press for efficiency, quality and accountability, that come from the institution's strengthened management hierarchy.

Debates about the department's goal orientation in the modern era which is characterised by "supercomplexity" where "uncertainty", "unpredictability", "challengability" and "contentstability" are the case "not just with our propositions and our theories about the world but-much more significantly- they are the case in relation to our frameworks for understanding the world and for understanding ourselves" (Barnett, 1997b: pp9), seem to add significantly to heads' of departments

role conflict. Moreover, the results have demonstrated that the specific nature of the departmental restructuring, in response to market forces, led to the erosion of the democratic and participatory ideal in the internal university decision-making processes and to the loss of collegiality among academic staff. These features, exemplified by our research data accounted for the feelings of “value” conflict reported by heads of departments (see chapter 7: pp276 summary findings), in old universities.

With respect to the new university sector the survey evidence suggested that the restricted participation and alienation from institutional leadership and the resulting loss of the heads of departments’ power in influencing the internal university operation, were the main reasons for the development of “value” conflict among heads of departments. While, the orientation of new universities services according to the prevailing market-led image and the pressures towards research competition and increase in scholarly productivity were held responsible for the experience of “janusian” role conflict by the head of departments (see chapter 7: pp272 summary findings).

It has become fairly clear from the present research findings that heads of departments are being confronted with a range of challenges and threats. These, certainly, reflect the prevailing assumptions of what the head’s role should be. Under current circumstances, the changing expectations associated with the headship position destabilise the existing order quite fundamentally. Restructuring in the UK universities in response to government pressures and altered political ideologies, provoked a redistribution of power in the internal university functioning, expressed by a loss of departmental power in favour of the institution.

What really characterises the post-binary higher education environment is the issue of power among the different interest groups: the academy, the state, and the market. The shift of power away of the main actors of higher education system-the academics- was reflected in the nature of the role conflict experienced by heads of departments in our research. The clash of cultures between academic professionalism and managerialism identified by the survey data is regarded as the most important explanatory factor of the level of role conflict perceived by the head of departments.

Within the unitary higher education sector the conflict in ideologies was strongest in the older universities where the traditions of academic freedom, adherence to discipline and autonomy were more powerful.

However, simple dichotomies of collegial versus managerial governance are unhelpful ways of understanding the supercomplexity of the modern university. There is no way back to “a honeyed age of academic harmony and fulfilment” (Ramsden, 1998: pp37). Ways of managing tensions and balances, managing conflicting priorities, such as focus on academic professional values and respond to new demands from employers, companies, governments and students are the new paths to academic effectiveness in a changed and changing environment.

Within the context of such a radical cultural transformation the contribution of head of departments, in ensuring that institutional processes deliver policies and procedures consistent with the health and survival of academic departments, is paramount. This implies that heads of departments must be able to demonstrate effectiveness, in such matter as financial planning and personnel management and also academic leadership and scholarship, not only to defend their department, but also to enable it to flourish.

As it has been suggested by Ramsden (1998) heads of departments have had to shift from being amateur administrators, and become trained professional leaders.

“This change needs to be understood not as some kind of managerialist conspiracy, but as part of a broader requirement to administer larger institutions in a different social and economic climate. Quite simply, mass higher education and knowledge growth have fundamentally altered the nature of university management structures. Smaller universities catering for academic elites were less complicated organisations to administer than large diverse ones” (Ramsden, 1998: pp. 34).

Successful heads will be those who will preserve the best features of the collegial culture in conditions of open market and free competition. Consequently the problem that arises is how heads of departments may be assisted to cope with the challenges and threats that they are facing in the new market-oriented academic reality. In other

words the issue of “how conflict can be turned to advantage?” will be addressed next.

8.1 Implications for university management

In this section, possible implications of the present research and other studies on similar themes, for the practice of head of department role in UK universities in the late 1990s are suggested. More specifically, the present research suggests that the current atmosphere of higher education is one of major change. Changes in the university’s mission and its position in society take place continuously and irreversibly. And with them come necessary changes in the role of the university managers. We have already stressed (see chapter 1) that the most overwhelming change was provoked by the explosive growth of science and the entrance into the knowledge society, wherein knowledge is the real source of the wealth and progress of nations and the main production factor, more than labour or capital were earlier in the 20th century. In that knowledge society the UK universities inevitably have a decisive role to play, not only as independent centres of learning, education and culture based on the great European tradition of humanities, but also as sources of innovations in the future production process and technology, that should promote European growth and competitiveness.

These developments, together with the globalisation of the university environment, the massification, the detraditionalisation and the calls for a redefinition of the nature of the modern university brought revolutionary changes to the scope of the university tasks. For example, it is no longer enough to teach the students what to think but how to think and above all, to think. So, we must change our education content, our course design, our methods and most difficult of all, the attitude of our teachers.

If complexity and uncertainty are the prevailing conditions in the modern age how might the university be organised?

“How do we give direction where no direction can be determined?...a university in a contested world is an organisation that keeps its own character, its purposes and its practices under continual scrutiny. A university cannot maintain the fiction that any of its aspects are secure. The

traditions of the university can only live through renewal, through continuing reflexive conversations. It has to keep itself under review. That much surely is our common espoused theory of ourselves, even if we do not always practice it" (Barnett, 1997b: pp16).

Here the academic leadership and management and certainly the human resource management towards the academic profession stands before a huge task of trying to convince and to guide, organise flexibility in academic careers and curricula and operate with new criteria for academic performance. Academic leaders should reassess university structures so as to have all these changes and new tasks integrated in the institutional setting. The new tasks call for new structures, which take account of the proliferation and elaboration of roles. They should lead to the creation of structures which re-establish collegiality and participation in university modes of governance. This it is expected to lead to a release of synergy, rather than conflict, between academic and managerial values.

In the highly volatile atmosphere that a higher education institution faces a centralised and non-participatory management style is counterproductive and will inhibit adaptability, flexibility and responsiveness to all the challenges previously described. Extensive consultation, participation, communication, and feedback, must be features of university structural system so that a congruence between individual and organisational goals is achieved.

It is suggested that, extensive participation in decision making can be time-consuming, but can ultimately be timesaving by ensuring those decisions taken, or changes implemented, have the commitment of the academic staff as a whole. A flexible institution can turn conflict to advantage by encouraging an approach to the problems encountered in an effort to adapt, which encompasses collaboration and discussion at all levels in the evaluation of possible solutions, and in the forward planning necessary to anticipate future problems. Conflict can be positive.

The reorganisation that has taken place in higher education institutions could offer opportunities of advancement to people at the lower end of the structure. Any change can utilise academic staff potential in terms of problem solving and risk-taking and

direct it towards university goals. In this respect, conflict and change themselves are to be perceived in more positive terms, as offering new opportunities and prospects for academic professional development.

It is also recommended that long term planning is necessary for change to be effective. However, the viability of objectives depends on the internal capabilities of the people involved. Staff motivation and a sense of involvement in the long term planning and development of the institution are essential ingredients to the effective implementation of rapid and often unpredictable change. Therefore, the empowerment of collegial values and enhancement of participation (which presupposes communication) in determining objectives, planning strategies and most importantly initiating action, constitute the appropriate structural solutions to the problem of conflicts that higher education institutions are confronted with in the contemporary complex environment.

However, changes in the institutional structures- although a main prerequisite- are not enough to make the university capable of achieving the necessary adaptability, flexibility and responsiveness to the current trends and challenges it faces. As an educational institution becomes increasingly subject to the influences and demands of the external environment, the people within it will see themselves as vulnerable to, and possibly even threatened by, the unpredictability, which ensues. When change occurs, a staff member's role in the organisation is affected and conflict arises as a result. His/her perception of his/her role together with his/her ideal of how he /she should act and the expectations of others about his/her performance can all become subject to instability and uncertainty.

We thus have a situation where predictability and security must be balanced against environmental interaction and flexibility. Managing such a balance is one of the most difficult tasks that the academic leaders and especially heads of departments must undertake and fulfil successfully. Heads of departments need to demonstrate high quality leadership in order to clarify the direction of change and to make the members of the organisation willing, even enthusiastic contributors in the change process.

Our research data suggest that academic staff are alienated from departmental leadership (moderate influence on department's decision making processes: Table 26: pp236) which can be regarded as a threat in the future of higher education. It is the task of leadership to re-establish a trust relationship between the academic staff and the department and the institution as well, by encouraging open and free communication, and appreciating consultation and staff participation in problem solving and risk-taking, so that the potential of academic human resources can be fully utilised.

Universities contain huge professional resources that can be drawn on to assist the institution to develop and to enhance its self-understanding. Academic staff is characterised by: high levels of intrinsic motivation and love of academic challenge; the fact that they are self-starting, self-regulating, independent professionals; their willingness to discuss and debate issues openly; their lifelong learning skills and commitment to constant enlargement of their knowledge, and their talent for imaginative thinking (Ramsden, 1998). It is a prerequisite for the successful reconstruction of the university to utilise all these benefits that its academic staff could offer.

“Action-centred” leadership (Adair, 1988) must be employed by heads of departments in each university. Heads should analyse the conditions necessary to ensure not only that the task is achieved, but that individual colleagues can meet their objectives and those of their colleague group productively and with personal satisfaction. In particular, heads of departments ultimate aim should be the co-operation of all the members of their department in a real community, around a project, the project where the university and department stand for: quality in education and research. The main task at the departmental level seems to be after all these years, the motivation and stimulation of academic staff in favour of the purpose, project profile and programme of their university and department. Whereas the main task at institutional level should be the thinking, listening, planning, speaking, persuading, and holding the whole community of academic staff and students- with its many new tasks and new decentralised ways of organising and its centres of responsibility- together, as well as inspiring to them the true spirit of the founders, and leading them into the new knowledge society.

All this means that heads of departments

“ have to be proactive in promoting the capacity of the university to cope with and to generate supercomplexity. They should, therefore, have a deep understanding of the activities they are managing, but they should also understand that the categories through which those activities are understood are all challengeable. Their first task, therefore, is to help promote that collective understanding of the uncertainties that mark out the modern university. Generating a collective clarity about uncertainty: this is the challenge for today’s academic manager” (Barnett, 1997b: pp18).

In ensuring collective action the greatest care is needed to manage academic professionals effectively. The way in which an academic head handles the fundamental dilemma of the need for leadership and management in a professional culture that does not really think it needs leadership and management it is likely to be critical to his/her success (Ramsden, 1998).

Clark (1998) has studied five universities in five different European settings in order to explain how they went about changing their character (from the 1980s to the mid1990s) to become more enterprising as well as to identify common pathways of transformation. He suggested that:

“Autonomous universities become active institutions when they decide they must explore and experiment with changes in how they are composed and how they react to internal and external demands. They sense that in fast-moving times the prudent course of actions is to be out in front, shaping the impact of demand made upon them, steering instead of drifting. It is then that they need new organisational elements that together characterise the entrepreneurial university” (Clark, 1998: pp5).

However, the question that arises is how the above suggestions can be achieved in practice. How participation can be enhanced and how staff contribution to university’s policies and objectives can be ensured in academic reality. It is proposed that “organisational need analysis” (Mumford, 1986) as a continuing process must be adopted by each individual institution, if ambiguity and negative conflict are to be avoided, and change be positively accepted/incorporated. A need analysis, properly done, can have a profound impact on university and its performance, since it assesses

training and non-training problems and areas of influence.

Specific managerial techniques used in the business world can be borrowed, in order to pursue organisational need analysis. Namely, the “strategic management/leadership” approach, which has become fashionable in the last few years in private sector, can be utilised. “Strategic leadership /management” is defined as a self-discovering process that recognises the environmental pressures the threats and opportunities in the environment and responds to it within the limits of the available resources (Thompson & Strickland, 1992).

Based on such an approach, a 4-stage scheme is proposed as a useful guide in trying to analyse institutional needs and developing the university’s capacity to change. The proposed direction-finding approach and the stages included are presented below:

- scanning of the environment (identification of opportunities and threats in the external environment; clarification of internal strengths and weaknesses)
- development of the mission statement (put forward the vision and long-term goals of the institution)
- formulation of action plans (translation of the goals to specific objectives and specification of actions to be followed)
- evaluation (assessment of the actions in terms of inputs, processes and outputs; specification of the relationship between action plans’ outcomes and the relevant objectives; identification of implementation difficulties; review and revision of goals; restructuring and reengineering).

What this model implies is that the university needs to clarify its policies and procedures. The mission statement should facilitate a consistent and coherent way of acting. Broadly communicated and discussed through a bottom-up process, it should have an inspiring and motivating effect. Here lies the need of good quality leadership in departmental, as well as in institutional level. For example, discussions about the ideals, purposes, and functions of the modern university, or debates about new conceptualisations of university’s mission, such as the “post-modern university” (Smith & Webster, 1997, Filmer, 1997), along with debates on other prominent topics of contemporary thinking on university’s role in the present era should

constitute the subject of the stage (II) of the proposed model.

It is expected, therefore, that each individual university and department within it will become a forum of continuous thinking through a shared intellectual process and constructive dialogue developed by its articulate and highly intelligent people. Multiple perspectives will be put forward so that universities become sites of competing ideas, even about the university itself.

“University transformation is not accidental or incidental. It does not happen because several innovative programmes are established here and there within a university” (Clark, 1998: pp4).

Rather, transformation occurs when a number of individuals come together in university basic units and across a university over a long period in order to collectively organise initiatives that will assist university to rebuilt the adequate conditions for facing the challenges of the modern age. In such a forum, heads will encounter each other, faculty staff and academic leaders at the apex of the hierarchy, as well as discuss their problems, learning from one another’s experience and relieving feelings of frustration and conflict.

It is argued that the outcomes of the realisation of the model’s steps are nothing more than the identification of university and departmental needs in terms of policy, operational and structural needs and/or training and developmental needs. All in all, the above recommended strategic leadership process results in the formulation of specific action plans concerning the Institutional, Departmental, Role and Individual levels, supplemented by particular training plans (if necessary), which correspond to the diagnosed needs of each of these levels of university organisation analysis.

It is clear that significant innovation in the character of a university means that some core tasks and some deep structures are altered to the point where the long-term course of the organisation is changed. Such transforming work must be done locally, in the university itself and might extend over years. The sustained work calls for collective action leading to new practices and beliefs, steps that are entrepreneurial in character, but not neglecting academic traditions.

What is suggested is that heads of departments should employ the above scheme of

strategic evaluation in order to turn their departments -and through them their universities- into flexible and strategically thinking units, quick to respond to the opportunities and threats of a rapidly changing environment. It is expected that through that integrated process heads of departments can ensure that their personal goals along with their academic staff's goals are not in opposition but in concurrence with university goals and thus role conflict is avoided. As a result, collegiality is enhanced, departmental autonomy empowered, commitment to the university reinforced and the traditional academic culture is re-established.

Thus, the department (and in turn the university) will resemble a "learning organisation" (Peddler et al, 1988, Hayes et al, 1988; Jones & Hendry, 1994). Namely, an organisation which concentrates on change and facilitates the learning of all of its members by utilising their "tacit" potential- both hidden or revealed, and continuously transforms itself (Nelson & Winder, 1982; Peddler et al, 1988).

To conclude, our research data suggested that a university can not be run like a business enterprise with a chief executive in command, seeking to maximise simple quantitative variables. Consulting processes are essential and while leadership is of great importance, such a leadership must be consensual. Notwithstanding this, the modern university is usually a large complex organisation. As such, it needs to be managed and learn to operate in a competitive global economy. But in university context management means self-management. The only effective decisions are those shaped and owned by the scholarly community. The alternative is mismanagement.

8.2 Future Research

We have proposed in the preceding section, that handling conflict in the current university environment can be achieved through the implementation of a 4-steps strategic leadership approach. It is anticipated that under such process university members will come together to resolve problems, re-establish communications and renew collegiality so that in the end mutual trust and respect will be fostered and restored.

However, one limitation of our study is that the findings are based on the perceptions of the heads of departments alone and thus, future research is needed in order to capture the views of other main actors of the university system. Comparing the attitudes of heads with the attitudes of those they lead and those they report to, along with those they teach is an appropriate next step in better understanding the complex nature of the department head's position. The proposed three interest groups can be viewed as representatives of the collegial, bureaucratic and market forces in departmental level.

Moreover, the use of longitudinal multivariate designs and the incorporation of additional theoretical antecedents is recommended for future research on departmental role conflict, in order to clarify and extend our understanding of this complex and challenging position. Under such procedure the second limitation of the present study, deriving from the application of the one-shot correlational design, will be overcome.

Finally, from the evidence of the present and other research is increasingly clear, that heads role types, such as leader, manager, instructor and scholar do exist, further research based on heads' unique personal, positional, and attitudinal characteristics seems appropriate. These studies must be conducted to validate more generalisations and help in the development of the department heads' roles and responsibilities.

For example, gender, age and role preference are some personal characteristics of heads, which might be fruitful directions for future research on departmental role conflict. The potential utility of investigating discipline-based variation in role behaviour patterns of department heads is recognised by the present research. In our findings we were not able to discover any differences between departmental categories, but we suspect that the observed difference among universities (new, old) supersedes any disciplinary differences. Future research on discipline-base variations in academic conflict is strongly recommended.

In summary, the present research presents an attempt at providing some insights into the inner world of academic department heads. It should be regarded as a first step in this direction, to be followed by other research projects, that will examine the

challenges and conflicts in university governance, and increase our knowledge of how to manage market driven, competitive and entrepreneurial universities, in ways that protect the integrity of scholarship and the interests of all their students.

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