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**MOTIVES AND PERFORMANCE: WHY
ACADEMICS RESEARCH**

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ABSTRACT

The Australian higher education system has changed considerably since the late 1980s as a result of government policy. One consequence for academics has been much greater emphasis on research activity as the major indicator of performance. Engagement in research was a completely new requirement for many academics from the colleges of advanced education. However, it is also the case that many university academics had not been involved in research activity.

Analysis of interview data, from sixteen academics working in a large university, reveals that differences in orientations to particular work activities are strongly related to their previous experiences and to their reference groups. It also reveals that, for more than half of those interviewed, orientations remained stable once formed. Those who went straight from study into a position in a university or college of advanced education developed work orientations as a result of this experience, and they have remained stable. Those who came to academia from other occupations are more likely to have dynamic work orientations that change according to circumstances.

MOTIVES AND PERFORMANCE: WHY ACADEMICS RESEARCH

1. INTRODUCTION

1.1 Academics in a merged tertiary system

In the late 1980s and the early 1990s, a major change took place in the Australian higher education sector. Until that time, Australia had a binary system of tertiary education. The two components were the universities and the colleges of advanced education. A movement of mergers between the colleges and universities began following the government-initiated Dawkins Report of 1987 (O'Brien, 1992). Consequently, the distinction between the two sectors disappeared. Up until this time, Government funding for each sector was based on different criteria, with colleges being funded to teach and universities being funded to teach and research (Davies, 1989). The performance of academics in the two sectors was judged on different criteria. University academics were expected to research and teach, whereas academics from the colleges were expected to teach only.

College academics found they were now part of the university sector. This meant that research performance was now expected of them. The evidence suggests that few college academics were involved in research before the mergers (DEET, 1992; Harris, 1990; Moses, 1990; Ramsden and Moses, 1992). In the merged institutions they discovered that most of the rewards, such as promotion and esteem, were attached to research (Aitkin, 1991). They were still expected to teach, but prospects for advancement were dependent on research activity.

However, a simple distinction between college and university academics does not capture adequately the variation in research activity. A study by Ramsden (1994), for example, shows clearly that many academics in the former university sector engaged in no research at all. Nor is it true that no former college academics engaged in research. Again, Ramsden's (1994) research suggests that a small number of college academics were involved in research. However, most of the former college academics had never been involved in research, but neither had a considerable number of pre-merger university academics. Ramsden and Moses (1992), in a five-year study of Australian academics, found that half the output in pre-1987 universities was produced by only 14% of the staff. They concluded that two out of every ten university academics had not published anything at all in that five year period.

The merger meant the bringing together of academics from different backgrounds. With this came the need to clearly define the rules by which academic performance was to be judged.

1.2 Academic performance

Academics are expected to be involved in four types of activity: teaching, research, administration and community service. While this is widely stated, it is also recognised that the reward system for academics working in Australian universities today is linked primarily to research (Moses, 1986; Over, 1993). As Aitkin states: "within the higher education system only one element of life and work is organised to attract esteem - and this is research" (1991:245).

1.3 Measuring research performance

Measuring research performance is complex and varies between disciplines and between universities. While the literature indicates that there is no one way in which an academic's research performance can be judged, all attempts to do this use published works as a basis. Ramsden (1994) asserts that research work is only acknowledged in the academic world when it takes on the form of a physical, published paper or its equivalent. He states:

Consider the time and effort that leading universities expend in publicizing the quantity of their members' books and articles; the growing use of numbers of publications as an indicator of a department's performance; the chief topics of conversation on any tenure, appointments and

promotions committee. In the culture of the university, it seems, academic distinction and publications go together (1994:207).

The mergers brought together the two sectors and led to a need to clarify performance expectations and rules for promotion. After the mergers, the universities updated their documentation, such as criteria for promotion (e.g., Monash University Handbook, 1996). This led to a reinforcing of the expectation that university academics would be involved in research. However, post merger figures indicate that it is still only a small percentage of academics producing published works. DEET (1993) showed that half the published work was produced by about 10% of the staff; little different from the pre-merger statistics.

1.4 Differences in research performance

While the merger brought together two different types of institutions with differing attitudes to research, it is also apparent that there always were considerable differences in research productivity within universities between the different disciplines. Ramsden and Moses (1992) found that Engineering, the Natural Sciences and Health Sciences produced more than the Social Sciences, Arts and Commerce/Law areas. This trend to sciences producing more research than humanities has been found in studies overseas (eg Fox, 1983;) as well as within Australia (Anwyl & Bowden, 1983; Wood, 1990; Moses, 1990; Ramsden & Moses, 1992; DEET, 1992). Moses (1990) argues that, while it is true that Humanities' academics do generally publish less than Science academics, their publications are usually longer and that such quantitative performance indicators, which measure one discipline against another, need to be used very carefully as these are based on conventions that apply to the Physical and Applied Sciences and would be biased against Humanities. An Australian universities' survey of research productivity (National Board of Employment, Education and Training, 1994) found that book publication and book chapters were more popular in creative arts' areas, humanities and social sciences, whereas journal articles were preferred in the sciences. This study supports Moses' (1990) view that, although Humanities and Social Science researchers may not appear as prolific as those in the Sciences, their writings are of a different nature and should not be judged by the same standards.

1.5 Individual differences in research performance

As well as differences between disciplines, there are a number of individual differences which have been identified as impacting of research performance. These include gender, age and qualifications.

Female academics make up less than a third of all academics and are clustered in the lower ranks of assistant lecturer and lecturer (DEET, 1993). As promotion is linked to research performance, this suggests that female academics are not as involved in research and publication as males. Another reason, however, for women being less involved in research overall than men, may be because of the disciplines where women are more likely to be found. Females are clustered in such disciplines as Health (Nursing), Education, Social Sciences and Humanities, all of which are overall not great producers of publications. Females are under represented in the more prolific areas such as Engineering, Medicine, Science, Maths and Computing (DEET, 1993). This is consistent with the finding of two Australian studies by Over (1981) and Cass, Dawkins, Temple, Will & Winkler (1983) which found that men published more than women in all faculties, except medicine and veterinary science. American and British findings (Cole, 1979; Helmreich, Spence, Bean, Lucker & Matthew, 1980) suggest that the same applies in those countries.

Another group, which is often reported in the Australian literature as lesser performers in research, are older academics (Little & Hollis, 1990). However, studies in other countries have seldom found this to be so (Pelz & Andrews, 1976; Bayer & Dutton, 1977). Bayer & Dutton (1977:23) concluded that "age is a poor predictor of research-professional activity". Over's (1987) Australian study came to a similar conclusion.

The level of qualification that an academic has is believed to be a likely predictor of research performance, and the high percentage of science academics, the most productive discipline, having PhDs suggest that this is so. However, Over's (1993) study of Australian academics over a ten year period showed that the gaining

of this qualification does not necessarily mean research output occurs. Like age, academic qualifications are an indication of who might be a researcher, but still do not explain why this is not always so.

1.6 Structural influences on research output

Other influences that are exerted on academics, which will impact on their research activities, include structural or situational factors (Blackburn, Bieber, Lawrence & Trautvetter, 1991; Fox, 1983, 1992; Ramsden, 1994). While these include type of institution and discipline as already discussed, other structural facts such as the size of the academic unit, and how active it was, were considered important. Academics working with active researchers are far more likely to be publishers than those who do not (Ramsden & Moses, 1992; Ramsden, 1994; Harris & Kaine, 1994). Ramsden and Moses (1992) believe such academics are likely to be four times more productive than those who belong to a unit of less active researchers. Ramsden (1994) also identifies management style of the unit as a factor in research productivity. He concluded that academics working in cooperatively managed units are more likely to publish than those who are not.

1.7 Personal influences on research output

Three Australian studies looked at various personal characteristics in an attempt to determine what made a successful researcher. Wood (1990) looked at characteristics such as ability, energy, creativity, motivation, ambition and self-discipline. Her results were inconclusive, finding that research activity is highly variable and influenced by a variety of factors. Over (1993) found academics with a successful research performance were more likely to be aggressive and rigorous, to be more committed to research and prepared to work longer hours at it. Added to this, they were more likely to have a network of colleagues in research both in Australia and internationally. Harris and Kaine (1994) found that research performance is a function of individual motivation. They concluded that successful publishers had strong motives to undertake research, believing that rewards would follow.

1.8 Orientations to research and teaching

Knowledge of these factors, however, does not tell why an individual academic is involved in research activity, or not. However, both Fox (1983) and Ramsden (1994) conclude that structural and personal factors alone do not determine research activity. The personal, social and organisational context is influential, but most particularly as a context in which an individual makes choices about their activities. What is more relevant for academics, as they have a large degree of autonomy in their role, is their orientation towards a particular activity. Individuals will make decisions about how much effort they are willing to invest in their work, and in which types of activity they will engage, based on their orientation. The academic role involves four basic activities; research, teaching, administration and community service. Much of the literature which looks at academic productivity, identifies orientation towards a particular activity as a major determinant of research activity, or lack of it (Fox, 1983, 1992; Over, 1993; Harris & Kaine, 1994; Ramsden & Moses, 1992).

Ramsden and Moses (1992) further define academics as having an orientation towards research or an orientation towards teaching. In comparing academics from the two sectors, they identify that those in the CAEs had higher levels of commitment to teaching and lower rates of involvement in research than academics from traditional universities.

Harris and Kaine (1994), in a study of academics working in Australian economics departments, were more decisive in their conclusions. They found that higher performers in research had a strong orientation to research, a high degree of interaction with researchers in their field outside their own department, and a work environment they felt was conducive to research. Non-producers of research felt that their motivation was low, they had little interaction with academics in other universities, especially overseas, and they felt constrained by their teaching commitments.

These results repeat a theme identified in another Australian study by Hort and Oxley (1992) where they suggest that academics have an orientation towards either teaching or research and that this orientation developed in part because of the type of reference group used by an individual academic.

Reference groups are defined as "...groups to which an individual relates himself or aspires to relate himself to a part psychologically" (Sherif, 1963:10). They can be groups in which individuals hold official membership, or others groups to which they aspire to belong or groups which they reject and definitely do not wish to belong to (Lindesmith, Strauss & Denzin, 1975). Gouldner (1957) recognised the importance of reference groups to professional workers, and that they could have two likely reference groups in their workplace. These he labelled cosmopolitan and local. A cosmopolitan reference group is the wider world beyond the workplace; for example, the experts in a particular field internationally. Local reference groups are the immediate groups around an individual and to which they belong, such as work groups. Hort and Oxley (1992) found that those academics who have a cosmopolitan reference group, that is, they interact with colleagues in their field outside their own department, are likely to have an orientation towards research. Those academics with a local reference group, that is, they interact with colleagues in their own department and have little contact with academics beyond this, are likely to be oriented towards teaching.

None of the literature, however, explains why academics develop a certain orientation and whether, once established, this orientation is static or liable to change. As orientations seem to lead to research performance, this study sought to find this information.

2. METHODS

In order to discover how orientations develop in academics and why academics choose to be involved in research or not, in-depth interviews were conducted with 16 academics from a large, metropolitan university which had been formed by a merger between a traditional university and a college of advanced education. Eight interviewed were from the former university and eight from the former college. The academics were from two different faculties, Arts and Commerce, and different backgrounds, with eight being identified as active researchers, as evidenced by publication, and eight as having no involvement in research and no publications.

Two major issues were addressed in the interviews. Firstly, what happens to an individual academic to cause them to have a particular orientation and to be involved in research, or not. Once these orientations are formed, do they remain stable, or are they dynamic and likely to change with different circumstances over an individual's career.

3. RESULTS

3.1 Personal biographies

From the interviews, sixteen short personal biographies were prepared giving details of the careers of the sixteen academics. They were then classified into different areas according to some clear status and demographic differences.

3.2 Path taken to become an academic

The first difference was the path taken to become an academic. Only three of those interviewed followed a traditional path, defined as school to university through to PhD, then an academic position in a university, while two others followed that path through to a position in a college of advanced education. Only two expressed any leanings towards an academic career at secondary school. The remaining eleven had come to an academic position by various means after other work experiences. Only five of these actually went straight from school to tertiary education, mostly teacher training. The group followed many varied paths that led finally to their positions today. They worked in different occupations such as primary and

secondary teaching, accountancy, the police force, the paramedical field, before studying, gaining short term contracts and then becoming permanent academics.

Of the eleven who followed a non-traditional route to an academic position, only four had gone on to become active researchers, as measured by their publications output. Those who had not all gave similar reasons for the lack of a research record; that they were fully occupied with teaching and administrative duties and also that their departments had not traditionally contained any active researchers.

3.3 Qualifications

Eight had PhDs as their highest academic qualification and all eight of these had research records, though one had stopped being an active researcher, and another had very few publications. Of the others, six had a Masters degree; all of these were either MBAs or other coursework masters qualifications, rather than research masters. The remaining two were working on coursework masters. Only one of these was an active researcher.

3.4 Former university or former CAE academics

All eight who were part of a university before the merger were, or had been, involved in research. Of the eight who had belonged to a CAE at the time of the merger, only one was involved in research.

3.5 Faculties - Arts and Commerce

All Arts faculty academics had begun with an academic qualification which involved research. On the other hand, only one of the Commerce Faculty academics had such a qualification. The Commerce faculty members had come to academia by various other paths. The Arts Faculty researcher seemed to be much more driven by the need to produce a quantity of research. Their output was measured by a points system which seemed to dominate their working lives and all were able to state whether they were satisfactory on the points scale or not. Four were meeting the points requirements; four were not.

The Commerce faculty had no formal approach to measuring output. It varied from department to department.

Arts academics seemed to accept that any research and publication was worthwhile; while commerce academics seemed to believe that all research had to be of the highest standard, and those who produced in quantity could not possibly do this.

3.6 Gender differences

All the men had come to an academic life either straight from school or very soon afterwards. It was the women who had the diverse careers before becoming academics with only one following the traditional path. Seven of the eight women did not become academics until well into their thirties; two in their forties. Other careers, motherhood, and the need to study had diverted them from the traditional path.

Another way in which males and females differed was in their optimism for the future. Age is also a factor here, with younger men (under 40) seeming invariably optimistic and older men being far less optimistic for their future opportunities. The women were the opposite; the younger women were pessimistic and the older women optimistic for their future opportunities.

3.7 Age differences

The major difference between older and younger academics was the self assurance age seemed to bring to most academics. Despite the uncertainty in the older men about what would come next, they all were convinced that the choice was theirs. Both older men and women were basically satisfied with their role. Those who were under forty were far more uncertain about their future, though all were ambitious and making plans.

4. DISCUSSION

4.1 Research activity and orientations

The sixteen interviews presented a wealth of information about academics, but this needed to be translated into a relevant analysis of the relationship between orientation and research activity among academics.

The analysis is divided into two parts. The first part scrutinises the reasons that each academic had for becoming an academic, while the second examines their motives for continuing in that role.

4.2 Motives for becoming an academic

For most academics interviewed, circumstances provided them with opportunities, or more often, constrained them, leaving them with only a few choices when it came to the initial choice of a career path. For example, in the case of four of those interviewed, the only opportunity to study at tertiary level was by taking a scholarship which led to a teaching career. Once qualified, they found opportunities presented to move into tertiary teaching because of a shortage of qualified people. Three further interviewees gained qualifications in other areas, but found the colleges of advanced education eager to use their expertise. For some, their introduction to an academic career, was simply a result of being in the right place at the right time.

For eleven out of the sixteen interviewed, there was no conscious decision to become an academic. Opportunities presented and they took them. They were not driven by any desire to be an academic. They became one because their life experiences had led them to the opportunity.

Of the remaining five, two made the choice to become a lecturer when they realised that the path they had taken left them with few other choices. Because they had the qualifications, because they happened to be in a particular place at a particular time, their opportunities enabled them to become an academic.

The other major source of influence was reference groups. From the evidence gathered during the interviews, it appears that reference groups change over the life cycle of an individual. Primarily in the early stages, family, friends and teachers are the strongest reference groups, and these influence choice of a career while at secondary school. Once the sixteen had completed school, however, this was replaced by that of friends, peers, or university teachers. Most aspired to become part of the group of tertiary educated people generally, while only three aspired to become academics in particular.

4.3 Motives for remaining an academic

Most of those interviewed had come to an academic position because their past experiences and their reference groups had directed them to it. While many expressed doubts about why they had remained an academic, none expressed any real desire to do anything else. They felt they had little choice but to remain an academic, but also their reference groups were now based around their occupation.

Those who were not researchers expressed unhappiness in their positions. All recognised the requirement to research, but all felt uncertain about how they would become part of the world of a researcher. All felt their department lacked "a research culture" and hence they were unable to be a researcher themselves. Those who were involved in research were far more positive and were confident that opportunities would present because they already felt successful in their role.

The academics interviewed clearly expressed that either local or cosmopolitan reference groups were important to them. In doing so, they discriminated, most distinctly, between those who considered research more important and those who considered teaching more important. Reference groups were seen as very important by all academics. Those interviewed who classed themselves as researchers, and wished to further their research career, viewed academics in their field, beyond their own department, as important to them. They admired the elite in their field and sought to belong to a cosmopolitan reference group. Those who did not research all had local reference groups. They identified very closely with the colleagues with whom they were in daily contact and also their students. Overall, those who were obviously successful

researchers clearly had cosmopolitan reference groups and sought to be part of that group themselves. This motivated them to research and publish. Those who were obviously not involved in research at all, had local reference groups. They were motivated to satisfy the immediate needs of their work place; basically teaching.

All expressed a desire to stay in their job, but the researchers were more directed and optimistic for the future. Those who did not research were uncertain and pessimistic about their future and saw little opportunity to become researchers because of their teaching loads and the lack of "research culture".

5. CONCLUSION

The merger of universities and college in the early 1990s has meant that expectations of performance have changed for many working previously in both types of institution. They are now part of a university where the major rewards for individuals in terms of promotion and status are firmly attached to research performance.

What the research indicated was that orientations towards a particular work activity, and reference groups, are formed as a basis of an individual's early work experiences. Once formed, these orientations and reference groups remain stable for those who went into a position in a university or college. Therefore, those whose career path took them from undergraduate studies to a PhD, then to a position in a university became researchers are likely to remain so and to be influenced by a cosmopolitan reference group. Those whose career path took them into a college of advanced education, where teaching was paramount and research unlikely, still considered teaching as the main part of their job, and were influenced by a local reference group. Those who did not follow that direct path were more likely to be able to change their orientations as opportunities presented. This group were a minority of those interviewed. For most, orientations once formed remained stable, as did reference groups.

The mixture of staff now in universities, from varied backgrounds, offers a challenge to university managers. One implication of this study is that there are some academics who will never be able to meet the requirements to research and produce publications. While a simplistic response may be to move this group on into other areas, by retirement or redundancy, this response ignores some fundamental questions about what is the ideal academic. At present, the research oriented academic is most rewarded, but does this ensure that all the needs of a university are met? Further work on the nature of academic work, and what a university requires of its academic workforce, is indicated.

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