Changing career orientations in higher education: Can HE be a breeding ground for entrepreneurial careers?

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ABSTRACT
This article reports on a study of the career orientations of the academic staff complement of a tertiary education institution that underwent an intensive organisational transformation process. Career orientation profiles were obtained from a sample of academic staff at the beginning of the organisational change process and five years later the study was replicated. One primary transformational objective of the organisation was the requirement of staff to engage in entrepreneurial projects to generate a variety of alternative income streams. The focus of this article falls on the assessment of the impact of the changing organisational demands and situational motivational factors with regard to the prevalence of entrepreneurial orientations amongst academic staff. Results indicate a change in orientation profiles linked to entrepreneurial behaviour, but the evidence regarding the direct impact of environmental factors on such profile changes was inconclusive. Implications for higher education institutions are discussed.

INTRODUCTION: THE CONTEMPORARY CAREER ENVIRONMENT IN HIGHER EDUCATION

With the refinement and implementation of the final plan for the restructuring of South African higher education, much has been written about the implications and challenges set by the transformational context of the new envisaged higher education landscape (Brunyee 2001; Kulati 2000; Pretorius 2001; Gultig 2000). However, with extensive restructuring and rationalisation looming, shrinking subsidies and mergers in process, little attention has been given to the impact and possible implications of these events on the unfolding of careers of academic staff in future tertiary education structures. Very few entrants into the current world of work and the South African higher education sector will probably have any illusions about long term job security, lifetime employment with one organisation, a clearly defined path of progressing through the ranks of the organisation and stability of required skills and competencies in their chosen occupation.

With regard to career development, a new career paradigm is emerging within the context of global realities. The burgeoning information technology, growth of the contingent workforce, outsourcing of non-core activities and restructuring of organisations is leading to huge staff reductions (Arnold 1997; Bridges 1995; Templer & Cawsey 1999; Zunker 1998). In South Africa well known national realities are workforce changes, skills shortages, employment equity drives, high unemployment levels, pending mergers of higher education institutions, declining number of enrolments, low graduation rates, high drop out levels and rampant HIV infection rates. In discussing the changing context for higher education in South Africa, the Council for Higher Education’s New Academic Policy discussion document emphasises that higher education “is asked to prepare people for a work environment characterised inter alia by self employment and contract work, which in turn demand greater flexibility, adaptability and risk taking on the part of workers” (2001:32). Globally there has been increasing pressure on higher education to contribute directly to national economic regeneration and growth (Harvey 2000; Teichler 2000). In the knowledge economy tertiary institutions are increasingly required to become active in linking their intellectual capital to entrepreneurial and business ventures such as science parks, business

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incubator units, spin off companies, applied research and consultancy (Court 2000).

For the individual these trends translate essentially into a new career environment that is characterised by new psychological contracts, employability concerns regarding available job opportunities, employer in dependent career identities, needs for continued currency of skills, loss of job security and promotional opportunities, alternative working arrangements, multiple roles and prospects of so called protean and portfolio type careers (Arthur 1994; Hall & Mirvis 1995; Roodt 1997; Templer & Cawsey 1999).

Employability is replacing employment as the source of security. Individuals need to enhance, broaden and update their skills continually in order to remain valuable to their employer or to remain marketable for new jobs with their current employer or with new organisations in the event of restructuring.

Any work that is pursued over an extended period of time, whether paid or unpaid, whether performed as a core employee or as part of a growing contingent workforce (contract, temporary or casual) can constitute a career. The increasing use of project team and cross functional team approaches together with more tasks being contracted to contingent workers has given rise to the notion of portfolio careers in which individuals develop a portfolio of skills that they sell to a range of clients (Templer & Cawsey 1999).

Given the above nature of the new career environment, it is self evident why it is increasingly being proposed that self employment options and a conscious adoption of an entrepreneurial view of one’s career are becoming an essential part of contemporary career behaviour (Arthur 1994; Bridges 1995; Stewart & Knowles 1999).

ENTREPRENEURIAL CAREER CHOICE: THE CASE FOR ENVIRONMENTAL INFLUENCES

Contemporary entrepreneurship studies recognise the interdisciplinary nature of entrepreneurship. For example, Kuratko and Hodgetts (2001:33-43) list a number of approaches, such as those of Bygrave (1989), Ronstadt (1984) and Gartner (1985), as explaining entrepreneurship theory through the inter relation of concepts and factors from the individual and environmental/organisational perspectives.

Furthermore, the joint function of individual factors such as values, attitudes and behavioural orientations, and organisational factors such as structure and reward systems are well established in models of the intrapreneurship process (eg Brazeal 1993) and entrepreneurial motivation (eg Naffziger, Hornsby & Kuratko 1994).

Indeed, Kuratko and Hodgetts (2001:74) argue that the interactive nature of the process of entrepreneuring cannot be overstated and that intrapreneurship relies on the successful interaction of several organisational and individual factors. Conversely it can also be argued that unsuccessful interaction of such factors may lead to decisions to pursue entrepreneurial intentions outside the corporate environment. This notion is acknowledged in Brazeal’s model (1993) as the behavioural intention of “propensity to leave”.

The importance of the interaction of the individual with organisational characteristics is twofold. Firstly, for the individual the unfolding of his/her career in a less than optimal organisational career context will probably mean either accepting realities such as limited promotional opportunities due to fewer hierarchical levels, increasing competition for fewer jobs, technological changes requiring frequent reskilling and equating success more to inner fulfilment, attainment of marketable skills and amount of learning achieved or, alternatively, choosing the career option of self employment.

Secondly, for the organisation the importance lies in the need for obtaining and retaining the best talent in a climate of absence of employment security as well as the need for corporate entrepreneuring due to factors such as increasing numbers of competitors and their level of sophistication, loss of the brightest talent, downsizing and employees’ sense of distrust in traditional methods of institutional management (Kuratko & Hodgetts 1998:55-56).

The impact of the interaction of individual factors (ie career orientations) with environmental factors in an organisation forms the central research question in this case study. Can the exposure of environmental factors change the general profile of individual entrepreneurship orientations over time?

ENTREPRENEURSHIP AND SCHEIN’S CAREER ANCHOR THEORY IN THE EMERGING NEW CAREER PARADIGM

Whilst traditional career development theory and research have largely overlooked entrepreneurship as a career option, the work of Boyd & Vozikis (1994), Dyer (1994) and Katz (1994) has attempted to create a framework for a career development perspective towards entrepreneurship. Dyer (1994) suggests that a comprehensive conceptual framework for the study of entrepreneurial careers should include a theoretical focus on career choice, career socialisation, career orientation and career progression.

Katz (1994) singles out Schein’s career theory as the only one of the major career theories that provides an explicit linkage to entrepreneurship and self employment. In the individual’s vocational decision process
to enter an occupation as either a salaried person or a self employed one (termed by Katz (1992), as the employment status choice), the values or career anchors of autonomy/independence and entrepreneurial creativity are those that are directly linked to self employment.

Although Schein conceptualised his career theory from research originating from the mid 1970s when assumptions of external stability, linear career progression in large hierarchical organisations and life long models of career unfolding could still be maintained, the theory has continued to attract attention from researchers in various fields of inquiry (Katz 1994; Stewart & Knowles 2000; Van Vuuren & Fourie 2000; Yamnall 1998).

Briefly, Schein’s (1978) career anchor theory asserts that individuals begin their working lives with certain ambitions, hopes, illusions and fears. Early work experiences provide them with insight into initial interests, motives, skills and values. As experience is accumulated through on the job self discovery, these motives, values and talents gradually coalesce into a total career self concept. This self concept is described as a “career anchor” that guides and constrains an individual’s entire career.

A particularly useful distinction in the theory is the concept of external and internal careers (Schein 1978,1993). The external career refers to the formal stages and roles that are defined by organisational policies and societal concepts of what an individual can expect in the occupational structure. The study of elements of the external career typically focuses on how individuals are managed by the employing organisation, what is rewarded and valued and what is perceived as determinants of career success in a given institution. By contrast, the internal career refers to the subjective sense or self concept of where one is going in one’s working life. The career anchor essentially holds individuals’ internal career together even as people experience dramatic changes and environmental impacts with regard to their external career.

The self concept consists of three distinct components: (1) self perceived talents and abilities based on actual successes in various work settings, (2) self perceived motives and needs based on self tests and feedback from others, and (3) self perceived attitudes and values, which together constitute a career anchor.

Whilst Schein (1978) originally identified five distinct anchors, subsequent research (De Long 1982) has expanded the categories to the following eight orientations:

- Technical/functional competence
- General managerial competence
- Autonomy/independence
- Security/stability
- Entrepreneurial creativity
- Service/dedication to a cause
- Pure challenge
- Lifestyle.

Revisiting his career anchor theory in the light of the new turbulent career environment, Schein (1993; 1996) predicted an increased prevalence in the service, lifestyle and entrepreneurial creativity anchors. With regard to the latter, Schein observes that not only will opportunities increase due to the need for new products and services deriving from information technology, bio technology and new technologies yet unknown to us, but due to increasing mobility it will be increasingly feasible for entrepreneurs to “go to whatever part of the world is most hospitable to their ideas”.

As mentioned above, there is growing support for the idea of entrepreneurship becoming an essential part of career behaviour in the career paradigm of the new millennium where prospects of careers involving periods of organisational employment, self employment and unemployment are increasingly likely (Arthur 1994; Bridges 1995; Henderson & Robertson 1999).

Some recent research in the field of entrepreneurship appears to bear out the conceptual predictions on emerging career anchor patterns proposed by Schein. From his research on employment status choice, Kolvereid (1996) found that security is the single most important reason for people’s employment status preference in favour of organisational employment, followed by work load. The work load category includes reasons such as family/leisure concerns, less stress and lower complexity, thus indicating some commonality with the lifestyle anchor in Schein’s career anchor model. Autonomy/independence was the most important factor identified for those who expressed a preference for self employment.

Similar results were obtained by Stewart and Knowles (2000) who utilised the career anchor model to interpret their research results on what reasons attract undergraduates to apply for organisational recruit ment schemes. The results highlighted the influence of the security/stability anchor in the attractiveness of an “organisation defined career”, as well as an implied desire by SME recruiters for individuals to possess a dominant autonomy/independence career anchor.

Such results that are clearly consistent with the theoretical expectations of Schein’s model appear to provide additional empirical support to the continued relevance of the psychological constructs of career anchors in the field of entrepreneurship research.
**METHODOLOGY**

**Sample and procedure**

In 1994 a career orientation profile of a sample of 104 academic staff members of Technikon SA was obtained by means of the Career Orientations Inventory (Schein 1993). The sample consisted of 54 male and 50 female respondents.

In 1999 the study was replicated amongst the academic staff complement of the institution and career orientation data for a sample of 112 lecturing staff members was obtained. The samples were drawn from the same population of academic staff members.

During the period spanning the two studies, the institution embarked on a comprehensive transformational exercise which included the following elements: a totally new academic management structure, a comprehensive decentralisation process, redefinition of academic roles and job titles, expansion from a predominantly undergraduate teaching focus to comprehensive post graduate programmes and research foci, implementation of human resource policies and procedures based on principles of typical commercial enterprises, establishment of a number of bureaus and institutes largely functioning as the commercial arm of the academic divisions, performance targets of alternative income generation and an essentially continuous cycle of academic activities due to the introduction of three student registration cycles within a given calendar year. Together with external situational factors such as the reconfiguration of the South African higher education sector, adverse economic climate, competition with international and private providers, and transformational and employment equity imperatives, many of the listed elements of change can be equated to influencing factors or “precipitating events” for entrepreneurial behaviour reported in the intrapreneurship literature (eg Kuratko & Hodgetts 2001:69-76).

It was hypothesised that situational factors and changes in the work environment introduced by management from 1994 onwards, together with the inclusion of entrepreneurial behaviours in the required work outputs of lecturing staff, would manifest themselves in a changing career orientation profile of the academic corps.

For the career orientation profile data for the two samples measured at time 1 (1994) and time 2 (1999) the proportions of the populations were compared by means of the chi square test of independence. This statistic is appropriate to assess the probability that observed differences in the proportions are attributable to chance (Zikmund 2000:480).

**Instrument**

A biographical questionnaire together with Schein’s Career Orientation Inventory (COI) was administered to the samples.

This instrument measures the following eight categories of career orientations: technical functional competence, managerial competence, autonomy/independence, security/stability, entrepreneurial creativity, service/dedication to a cause, pure challenge and lifestyle.

In the South African context assessment of validity of the COI for managers was conducted by Slabbert (1987) and the acceptability of psychometric properties of the instrument has been reported on by Kaplan (1990) and Erwee (1991).

**RESULTS**

Table 1 shows the percentages of anchor category prevalence for the two samples for the first and second highest rankings.

For purposes of comparing the two populations for the entrepreneurial creativity and autonomy/independence anchors, ie conducting a chi square test of independence of population proportions, the frequency data was summarised in a 2x2 contingency table for each anchor (tables 2, 3 and 4). The observed and expected frequencies for each were calculated, as shown in tables 5, 6 and 7.

<table>
<thead>
<tr>
<th>Career anchor</th>
<th>Time 1</th>
<th></th>
<th>Time 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of N Rank 1</td>
<td>% of N Rank 2</td>
<td>% of N Rank 1</td>
<td>% of N Rank 2</td>
</tr>
<tr>
<td>Autonomy/independence</td>
<td>11.5</td>
<td>11.5</td>
<td>14.3</td>
<td>12.5</td>
</tr>
<tr>
<td>Security/stability</td>
<td>32.7</td>
<td>19.2</td>
<td>8.0</td>
<td>11.6</td>
</tr>
<tr>
<td>Entrepreneurial creativity</td>
<td>4.8</td>
<td>2.9</td>
<td>7.1</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Table 1

Percentages of first and second highest ranks per anchor for time 1 and time 2.
Table 2  
Contingency table for entrepreneurship/non entrepreneurship

<table>
<thead>
<tr>
<th></th>
<th>Time 1</th>
<th>Time 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship</td>
<td>8</td>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>Non entrepreneurship</td>
<td>96</td>
<td>97</td>
<td>193</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>104</strong></td>
<td><strong>112</strong></td>
<td><strong>216</strong></td>
</tr>
</tbody>
</table>

Table 3  
Contingency table for autonomy/non autonomy

<table>
<thead>
<tr>
<th></th>
<th>Time 1</th>
<th>Time 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>24</td>
<td>30</td>
<td>54</td>
</tr>
<tr>
<td>Non autonomy</td>
<td>80</td>
<td>82</td>
<td>162</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>104</strong></td>
<td><strong>112</strong></td>
<td><strong>216</strong></td>
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</table>

Table 4  
Contingency table for security/non security

<table>
<thead>
<tr>
<th></th>
<th>Time 1</th>
<th>Time 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>54</td>
<td>22</td>
<td>54</td>
</tr>
<tr>
<td>Non security</td>
<td>50</td>
<td>90</td>
<td>162</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>104</strong></td>
<td><strong>112</strong></td>
<td><strong>216</strong></td>
</tr>
</tbody>
</table>

Table 5  
Observed and expected frequencies for entrepreneurship

<table>
<thead>
<tr>
<th></th>
<th>fo</th>
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<tbody>
<tr>
<td>Entrepreneurship</td>
<td>8</td>
<td>11.08</td>
<td>15</td>
<td>11.93</td>
</tr>
<tr>
<td>Non entrepreneurship</td>
<td>96</td>
<td>92.92</td>
<td>97</td>
<td>100.07</td>
</tr>
</tbody>
</table>

Table 6  
Observed and expected frequencies for autonomy

<table>
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<th>fo</th>
<th>fe</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>24</td>
<td>26</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>Non autonomy</td>
<td>80</td>
<td>78</td>
<td>82</td>
<td>84</td>
</tr>
</tbody>
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Table 7  
Observed and expected frequencies for security

<table>
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<th>fe</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>54</td>
<td>36.60</td>
<td>22</td>
<td>39.41</td>
</tr>
<tr>
<td>Non security</td>
<td>50</td>
<td>67.40</td>
<td>90</td>
<td>72.59</td>
</tr>
</tbody>
</table>
the respective values of 1.842, 0.396 and 24.62 were obtained.

The degrees of freedom are calculated as 1 and for the alpha values of 1.842 and 0.396 the areas in the right tail of the chi square distribution are approximately 17% and 22% respectively. This means that the probability of the observed increase in entrepreneurial career orientations from time 1 to time 2 being attributable to chance is only about 17% and for autonomy/independence about 22%. For the security data the alpha value of 24.62 indicates significant independence at the p < 0.01 level.

**DISCUSSION AND CONCLUSIONS**

The profiles of prevalence of the various anchors in the two samples can firstly be contrasted to the originally reported incidences from Schein’s studies (old career paradigm), and secondly to anchor profiles obtained in studies focusing on educationalists.

Schein (1985) reported an incidence of 7.7% and 11.1% respectively for entrepreneurial creativity and autonomy anchors across the groups covered by 14 studies comprising 348 individuals. For the security anchor a 10% prevalence was typically found.

In comparison, the incidence for the 1994 data of this study shows a similar prevalence of autonomy orientations (11.5%), lower incidence of entrepreneurial creativity (4.8%) and a very much higher incidence of security/stability orientations (32.7%).

The corresponding incidences for the 1999 data are 14.3%, 7.1% and 8% respectively, which approximate the incidence data of Schein more closely. Such comparisons must take heed of the cautionary note Katz (1994) sounded regarding the representivity of Schein’s samples which consisted essentially of MIT graduates, managers and professionals drawn from both salaried and self employed sectors. Projected incidence rates for entrepreneurship anchors in populations of large scale studies would typically be half of those in Schein’s samples where all respondents had degrees or post graduate qualifications. The qualification profile would correspond to the samples of the current study, but since no self employed respondents were included, one might intuitively expect a lower entrepreneurship incidence than in the Schein data.

Whilst the security/stability profile and to some extent the autonomy and entrepreneurial creativity profile could typify the 1994 respondent group firmly in terms of the organisationally defined career paradigm, the subsequent profile shift in the 1999 respondent group seems to point towards a growing manifestation of a “new career paradigm” awareness.

Looking at career orientation profiles for occupational groups, career anchor studies typically find a broad distribution of anchors in every occupation even though one might expect some bias towards a given anchor in some occupations. In this regard Schein (1998) reports that even in samples of management students, middle managers and senior executives, where a predominant bias towards the managerial competence anchor might be expected, the prevalence of such an anchor rarely exceeds 50%. Studies on educationalists as a separate occupation group are limited and patterns of anchor dominance appear to cluster around security, service, autonomy and technical/functional competence (De Long 1984; Slabbert 1987; Erwee 1991; Schenk 1998). Again, with the exception of the security/stability orientation, the dispersion is at face value still largely representative of dominant patterns for the occupation group linked to the organisation career paradigm.

The results of the test of independence of population proportions for the autonomy and entrepreneurial creativity do not provide conclusive evidence of a direct impact of environmental factors on the changing prevalence of orientation profiles linked to entrepreneurial behaviour.

The statistical significance of the changes in the security/stability orientations does, however, provide stronger evidence of the impact of environmental factors on the individual career orientation profiles. The results are furthermore in line with the expected theoretical predictions of Schein’s career anchor model and supportive of the previously mentioned research results of Kolvereid (1996) and Stewart and Knowles (2000). A tentative conclusion can be made that Schein’s theoretical model of career anchors appears to be conceptually robust enough to remain relevant for career development research within the emerging new career paradigm.

This study was not designed to measure the contribution of particular environmental factors on changes in entrepreneurial orientations and thus the findings cannot be indicative of the required “mix” of organisational and policy changes that will automatically provide a breeding ground for entrepreneurial behaviour.

Given the fact that historically the South African higher education industry has been perceived as a high employment security employment sector and that the entering of the global economy demands of this sector to do more with less, the pressures to become more entrepreneurial in the generation of alternative income streams are likely to increase. It will thus be critical to ensure that the talent recruited into higher education should have the competencies and...
inclination to engage in business and entrepreneurial activities in addition to the traditional triad of academic workload, i.e. teaching, research and administration. The significant reduction in the prevalence of security orientations in particular might hint at the intrapreneurship related environmental changes which are causing sufficient dissonance towards career choices for more stability congruent environments.

From a viewpoint of the implications for practice, it can be argued that the consideration and exploration of personal career anchors of new organisation entrants could assist organisations with valuable information on selection of staff for exposure to learning interventions that are focused on fostering entrepreneurial behaviour in the organisation.

The importance of efforts to align organisation structures and rewards with an individual’s attitudes, values and behavioural orientations has often been propagated as a strategy for organisations to promote innovation among their employees (Kuratko & Hodge 2001). The identification of career anchor profiles can thus be an invaluable tool in structuring such programmes and implementing supportive policies and procedures.

Court (2000) argues that in order to enable academic staff to play a full entrepreneurial role in a knowledge based economy, the following issues need to be addressed:

- The nature of academic work
- The views of academic staff on economic activities
- Criteria on how academics use their time
- Career structures of academic staff
- The way their work is recognised and rewarded.

If tertiary institutions are to become a breeding ground for entrepreneurial behaviour in a knowledge based economy, enabling environments need to be created that take cognisance of individual orientations and competencies aligned to economic activity. Such fertile environments will need to link reward and recognition structures to desired entrepreneurial behaviours and may require specific incentives, sharing in economic gains from successful ventures and consultancies, access to developmental opportunities and release from other duties.

REFERENCES


