

DEFINING AND MEASURING CAREER RESILIENCE

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ABSTRACT

Various authors have argued that career resilience should be cultivated by individuals pursuing modern day careers as a critical career competency. No study has been reported thus far in the career management literature which offers a comprehensive measuring instrument for the construct. The focal point of this study was therefore the development of an instrument to operationalise the career resilience construct. Based on a review of the literature, the "Career Resilience Questionnaire" (CRQ) consisting of 60 items was developed and administered to respondents (N=352) in white-collar employment settings. A second-order factor analysis yielded four factors which seemed to be relatively independent. The factors were named "belief in oneself", "disregard for traditional sources of career success", "self-reliance" and "receptivity to change". The implications of the findings are discussed.

OPSOMMING

Verskeie outeurs het reeds daarop gewys dat loopbaangehardheid as 'n kritiese bevoegdheid ontwikkel behoort te word in die hedendaagse loopbaan konteks. In geen studie in die loopbaanbestuur literatuur tot dusver is 'n omvattende instrument vir die meting van die konstruk gerapporteer nie. Die fokus van hierdie studie was dus die ontwikkeling van 'n instrument om die konstruk loopbaangehardheid te operasionaliseer. Na 'n oorsig van die literatuur is die "Career Resilience Questionnaire" (CRQ) bestaande uit 60 items, gekonstrueer en afgeneem op 'n steekproef (N=352) in witboordjie-werksomgewings. 'n Tweedeordefaktorontleding het vier faktore opgelewer wat skynbaar relatief onafhanklike faktore is. Hierdie faktore is "geloof in self", "onderbektoneering van tradisionele bronne van loopbaansukses", "selfgenoegsaamheid" en "ontvanklikheid vir verandering". Die implikasies van die bevindinge word bespreek.

Career resilience remains a relatively novel concept although popular and frequent in its appearance in recent business-related literature. In contrast references to the concept in scientific research reports are far more limited, potentially because the theoretical foundation of career resilience and its relationships to other concepts remain unclear.

Career resilience gained prominence against the backdrop of the dramatic changes in the world of work in the post-industrial era. These shifts in the world of work prompted a further response, namely a redefinition of the traditional career paradigm, as reported both internationally and locally (Arthur, 1994; Bridges, 1995; Mirvis & Hall, 1994; Meyer, 1996). Table 1 depicts some of the profound changes in the work context at large and echoed by South African organisations, and in particular those that may be depicted as so-called white collar environments.

As a response to the revolution in the world of work, the central themes of the emerging new career paradigm seem to be independence from, rather than dependence on, traditional organisational career principles (Birchall & Lyons, 1995; Defillippi & Arthur, 1994; Mirvis & Hall, 1994; Stephens, 1994; Waterman, Waterman & Collard, 1994). Table 2 illustrates several shifts in emphasis between the traditional organisational career paradigm and what may be termed the new emerging career paradigm.

The new career paradigm does not imply that modern careers will evolve without constraints. Some of the emotional stressors and barriers that individuals could encounter include: fewer stable attachments in the workplace, less explicit career paths, acute uncertainty about future working arrangements, challenges to individuals' sense of security and identity, multiple roles, high stress levels and balancing work and non-work interests (Birchall & Lyons, 1995; Bridges, 1995; Defillippi & Arthur, 1994; Walker, 1992). Many of the factors that have supported and reinforced feelings of psychological success under the traditional paradigm, namely *job security*, *increasing levels of income*, the *status* derived from one's *position*, *level in the organisational hierarchy* and *employer*, could also become less accessible.

Various authors have proposed that psychological success in the

new career paradigm be facilitated by cultivating certain career competencies (Arthur, 1994; Bridges, 1995; Mirvis & Hall, 1994). The need for individuals to acquire new career competencies, not just job skills, in turbulent organisational environments, has been previously recognised. Hall (1986) termed these career competencies *metaskills*, functioning as skills in acquiring new skills. At the time, *tolerance of ambiguity* and *uncertainty*, as well as *identity change* and *adaptability*, were considered to be the most important.

More recently *know-why* (beliefs), *know-how* (knowledge and skills) and *know-whom* (networks, contacts, relationships) have been added to the list of essential career competencies (Defillippi & Arthur, 1994). *Extended occupational learning* (Cascio, 1995; Defillippi & Arthur, 1994; Hammer & Champy, 1994; Kiechel, 1993; Waterman et al., 1994) and an *entrepreneurial view* of career opportunities (Defillippi & Arthur, 1994; Moss-Kanter, 1989) have also found support as approaches for attaining career independence.

A further contribution by Bridges (1995) suggests that individuals pursuing modern day careers, are to develop the characteristics of employability and vendormindedness, as well as the personal disposition of resilience, to ensure that future employment security be considered an intra-individual issue.

DEFINING CAREER RESILIENCE

The notion of *career resilience* has specifically received extensive support as a principal concern in facilitating the transition to the new career paradigm (Birchall & Lyons, 1995; Bridges, 1995; Mirvis & Hall, 1994; Waterman et al., 1994).

The concept career resilience is characterised by a proliferation of definitions. London (1983) contributed the first operational definition of career resilience as part of his multi-dimensional theory of career motivation. The dimensions relevant to career motivation were clustered into three domains, namely *career identity*, *career insight* and *career resilience*. London (1983) conceptualised the domain of career resilience "as an individual's resistance to career disruptions in a less than optimal environment".

At the time of London's (1983) theorisation on career resilience,

TABLE 1
CHANGES IN THE WORLD OF WORK

| EVIDENCE | AUTHORS |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Jobs | |
| <ul style="list-style-type: none"> Continued loss of traditional jobs through downsizing, layoffs, re-engineering, new technology, new architecture | Bridges (1995), Cascio (1995), Mirvis (1993) |
| <ul style="list-style-type: none"> Patterns of new job creation reflect small entities adding to and large entities subtracting from pool of career opportunities | Birchall & Lyons (1995), Bridges (1995), Cascio (1994), Kotter (1995) |
| <ul style="list-style-type: none"> Trend towards a <i>just-in-time workforce</i>, such as contingent or temporary workers, consultants, subcontractors and interim managers | Bridges (1995), Handy (1988), Kotter (1995), Pfeffer (1994), Sharpe (1996), Walker (1992) |
| <ul style="list-style-type: none"> Technology opens up new work practices and work takes place independent of a physical location such as the office i.e. flex time, job sharing, telecommuting, work-at-home options, and virtual offices | Birchall & Lyons (1995), Bridges (1995), Cascio (1995) |
| Workplace design and structure | |
| <ul style="list-style-type: none"> Organisational structures are flatter, leaner and less hierarchical | Cascio (1995), Moss-Kanter (1989), Kiechel (1993), Kotter (1995), Lawler (1994), Meyer (1996) |
| <ul style="list-style-type: none"> Demise of corporate head offices and the emergence of small empowered relatively autonomous business units | Bridges (1995), Meyer (1996) |
| <ul style="list-style-type: none"> Static jobs are being unbundled and there is a shift towards organising work around the skills or competencies of individuals | ASTD (1994), Cascio (1995), Hammer & Champy (1994), Lawler (1994), Meyer (1996) |
| <ul style="list-style-type: none"> Highly-interdependent tasks are re-organised with the basic work unit being a team | Cascio (1995), Hammer & Champy (1994), Yeatts & Hyten (1998) |
| <ul style="list-style-type: none"> Activities outside organisations' core business are being outsourced to outside consultants, temporary workers, or contingency workers | Birchall & Lyons (1995), Bridges (1995), Cascio (1995), Defillippi & Arthur (1994), Handy (1988), Mirvis & Hall (1994), Meyer (1996) |
| People | |
| <ul style="list-style-type: none"> Need for cross-trained multi-specialists who have an in-depth knowledge about a number of different aspects | Bridges (1995), Cascio (1995), Hammer & Champy (1994), Peters (1992) |
| <ul style="list-style-type: none"> Changing workforce demographics and diversity i.e. more women, multi-ethnic and multi-cultural workers, older workers, workers with disabilities and contingent workers | Cascio (1995), Mirvis (1993) Pfeffer (1994) |
| <ul style="list-style-type: none"> Power shift to knowledge workers whose total added-value is in the intelligence they provide, rather than in physical labour | Birchall & Lyons (1995), Bridges (1995), Handy (1988) |
| <ul style="list-style-type: none"> Need for continuous learning to ensure portability of skills | Cascio (1995), Defillippi & Arthur (1994), Kiechel (1993) Meyer (1996) |

the concept of resilience, as a trait individuals may possess, emerged as a topic in the field of psychology. At the time the research was concerned with understanding why some people, such as inner-city children, who exist in an adverse milieu, grow and develop despite their adverse environment (Gordon & Coscarelli, 1996). An initial definition based on the research, conceptualised resilience simply as resistance to stress (Garmezy, Masten & Tellegen, 1984). In refining the definition, Rutter (1985) alluded to the multifaceted nature of resilience, namely that it was affected not only by internal personal characteristics, but also external forces. One of the most comprehensive definitions of resilience in recent times describes resilience as "the ability to thrive, mature, and increase competence in the face of adverse circumstances" (Gordon, 1995).

The definitions of *career resilience* (London, 1983; 1993) and *resilience* (Gordon, 1995) are similar in terms of a number of central themes. Firstly, both definitions recognise the concept as a complex phenomenon that comes into existence because of a combination of individual characteristics and environmental factors. Secondly, both definitions recognise the contextual setting of adverse circumstances and chronic or infrequent barriers (Gordon, 1995; London, 1993). The commonalities are therefore distinct and for the purpose of this study career resilience is viewed as resilience, as it is applied and exhibited in the work environment.

The behavioural component of career resilience encompasses the ability to: (1) adapt to changing circumstances, (2) welcome

TABLE 2
COMPARISON BETWEEN THE TRADITIONAL AND
NEW CAREER PARADIGMS

| Career Aspect | Traditional paradigm | New paradigm | Authors |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Job security | <ul style="list-style-type: none"> • Job security is largely guaranteed (company policy) • Security lies in positions, organisations and in being employed | <ul style="list-style-type: none"> • No job security and no promise of lifetime employment • Security lies in the person and in being employable | Bridges (1995), Kiechel (1992), Moss-Kanter (1989), Kotter (1995), Meyer (1996), Mirvis & Hall (1994) |
| Career advancement | <ul style="list-style-type: none"> • Advancement measured in positions and levels attained | <ul style="list-style-type: none"> • Career renewal takes place in tasks and skills mastered | Hall (1986), Walker (1992) |
| Career development responsibility | <ul style="list-style-type: none"> • Reliance on organisations | <ul style="list-style-type: none"> • Self-reliance or self-managed | Bridges (1995), Feldman (1988), Lawler (1994) |
| Movement between employers | <ul style="list-style-type: none"> • Entire career could be sustained by one employer over an individual's life span | <ul style="list-style-type: none"> • More inter-organisational movements beyond single employers • Intra-organisation mobility which features frequent job rotation, developmental assignments and transitions | Bridges (1995), Davis & Davidson (1991), Defillippi & Arthur (1994), Feldman (1988), Moss-Kanter (1989) |
| Career development | <ul style="list-style-type: none"> • Continuous upward or linear mobility through promotions and job changes • Emphasis on stability, hierarchy, clearly defined positions for career progression | <ul style="list-style-type: none"> • Limited <i>linear</i> progression and more <i>cyclical</i> and <i>lateral</i> movement • Increasingly discontinuous and unstable work lives | Birchall & Lyons (1995), Bridges (1995), Cascio (1995), Defillippi & Arthur (1994), Lawler (1994) |
| Career identity | <ul style="list-style-type: none"> • Fully internalise company values, goals and link identities to organisation • Employment-context-based - "I am an IBM engineer" | <ul style="list-style-type: none"> • Identity develops around a person's skills & competencies • Employer-independent - "I am a software engineer" | Bridges (1995), Defillippi & Arthur (1994), Lawler (1994), Meyer (1996) |
| Validation | <ul style="list-style-type: none"> • Career success is measured by high salary and occupational status (externally defined) | <ul style="list-style-type: none"> • Marketability is drawn from outside the present employer through portable skills and reputation (internally defined) | Feldman (1988), Meyer (1996), Moss-Kanter (1989) |
| Psychological contract | <ul style="list-style-type: none"> • Contract between person and organisation is <i>relational</i>: exchange of both monetary and non-monetary benefits (mutual loyalty, support, career rewards) | <ul style="list-style-type: none"> • Contract is shifting from <i>relational</i> to <i>transactional</i> where the employer contracts for application of specific skills and compensates skill holder for satisfactory performance. | Birchall & Lyons (1995), Bridges (1995), Hiltrop (1995), Meyer (1996), Sims (1994) |

job and organisational changes, (3) embrace working with new and different people, (4) exhibit self-confidence, and (5) exhibit willingness to take risks (London, 1993). Career resilience

implies a low fear of failure, a low need for security and a high tolerance for uncertainty and ambiguity (Bridges, 1995; London & Mone, 1987). However, an individual does not need to possess all of these characteristics to be considered resilient.

The opposite condition of career resilience seems to be career vulnerability. The latter is described as the extent of psychological fragility, for example, becoming upset and finding it difficult to function when confronted with less than optimal career conditions (London, 1983). Further clarification can be attained by linking career resilience to other personality characteristics such as the concepts of hardiness (Kobasa, Maddi & Kahn, 1982), self-efficacy (Bandura, 1977), achieve-

ment motivation (McClelland, 1965), career maturity (Crites, 1978) and the theory of work adjustment (Dawis & Lofquist, 1984).

Although strong arguments have been forthcoming in favour of career resilience as a personality construct in adverse career conditions (Gordon & Cascarelli, 1996), delineating the concept, as well as measurement thereof, remain problematic. Previous attempts by London (1983, 1993) and Noe, Noe and Bachhuber (1990) at measuring career resilience, contributed seven and 13 items that could be utilised in questionnaires, respectively. These authors conceded, however, that the testing of the construct validity of the initial two instruments was a future research priority. They also encourage further research to determine empirical linkages with other related constructs. In view of the literature study on career resilience and the recommendations by London (1983, 1993) and Noe, et al., (1990) it was decided to construct an instrument to measure career resilience.

METHOD

Sample

Participants were drawn from two different institutions, both operating in the service industry. Gauteng-based employees of firstly, the marketing division of a motor manufacturer and secondly, employees of a short-term insurance institution, participated. Both employment settings were predominantly white-collar and participants operated in diverse functional areas such as secretarial, clerical, marketing, accounting and managerial.

The respondent's ages ranged from 23 to 67 years and it can be seen from Table 3 that the majority of respondents were in the 31-40 year age group. The sample indicated a marginal leaning towards male respondents (N=197), with female respondents accounting for 44% of the sample (N=155). More than half of the respondents were Afrikaans speaking (55%) with English speaking respondents totalling 40%, and the remaining 5% indicating African and other home languages. The educational level of the sample varied from grade 12 (matric) to post-graduate qualifications, with the majority of respondents reporting a grade 12 or equivalent qualification.

Of the 420 individuals approached with questionnaires, 364 responded, thus a response rate of 87%. Twelve of the questionnaires were spoilt, leaving 352 for statistical analysis.

TABLE 3
BIOGRAPHICAL INFORMATION OF RESPONDENTS
(N = 352)

| 1. GENDER | FREQUENCY | PERCENTAGE |
|---------------------------|-----------|------------|
| Male | 197 | 56 |
| Female | 155 | 44 |
| TOTAL | 352 | 100 |
| 2. HOME LANGUAGE | | |
| English | 140 | 39,8 |
| Afrikaans | 194 | 55,1 |
| African | 13 | 3,7 |
| Other | 5 | 1,4 |
| TOTAL | 352 | 100 |
| 3. AGE CATEGORY | | |
| 21 - 30 | 98 | 27,8 |
| 31 - 40 | 120 | 34,0 |
| 41 - 50 | 90 | 25,5 |
| 51 - 60 | 37 | 10,5 |
| 61 - 70 | 7 | 1,9 |
| TOTAL | 352 | 100 |
| 4. QUALIFICATIONS | | |
| Grade 11 and below | 20 | 5,7 |
| Grade 12 or equivalent | 112 | 31,8 |
| Technicon diploma | 40 | 11,4 |
| College diploma | 35 | 9,9 |
| University degree | 59 | 16,8 |
| Post graduate | 74 | 21,0 |
| Other | 12 | 3,4 |
| TOTAL | 352 | 100 |
| 5. WORK EXPERIENCE | | |
| 1 - 10 | 122 | 34,7 |
| 11 - 20 | 110 | 31,3 |
| 21 - 30 | 78 | 22,2 |
| 31 - 40 | 31 | 8,8 |
| 41 - 50 | 11 | 3,1 |
| TOTAL | 352 | 100 |
| 6. MARITAL STATUS | | |
| Single | 50 | 14,2 |
| Married | 258 | 73,3 |
| Divorced | 40 | 11,4 |
| Widowed | 4 | 1,1 |
| TOTAL | 352 | 100 |

Contact persons at the respective organisational locations distributed and received the completed questionnaires via the internal office mail. The questionnaires were accompanied by a cover letter explaining the purpose of the study and emphasising anonymous participation. The completed questionnaires were returned in sealed reply envelopes.

Measuring instrument

For the purpose of this study items were developed to operationalise the career resilience domain as a personal disposition. Items reflect a career resilient disposition if the respondent exhibits a high degree of flexibility, adaptability, and competence despite adverse career situations. A draft questionnaire was completed by experts and individuals typifying the target population. Comments on the degree of complexity, ambiguity and repetition of items were considered in the construction of the final version.

The Career Resilience Questionnaire (CRQ) measures individual responses to a variety of work and career situations typifying the traditional and emerging career contexts. The instrument consists of 60 items of which 23 are reversed scored. The item response scale are in the form of a seven point scale ranging from one (not at all) to seven (to a great extent). Biographical questions related to the participant's career history were also included in the questionnaire.

RESULTS

The factor analyses were executed by using a procedure described by Schepers (1992). The 60 items of the CRQ were intercorrelated. Owing to limited space the intercorrelation matrix (60 x 60) will not be reproduced here. A Principle Component Analysis (PCA) was used to calculate the eigenvalues of factors obtained from this intercorrelation matrix. The 20 postulated factors (according to Kaiser's (1961) criterion of eigenvalues larger than one) were rotated to a simple structure using the varimax rotation. Subscores were calculated for each of the 20 first-order factors and intercorrelated. The results from the intercorrelation matrix are presented in Table 4.

The subscores of the first-order factor analysis were intercorrelated and were then subjected to a second-order factor analysis. In this instance, six second-order factors were postulated as a result of a PCA and rotated to a simple structure by using a Direct Oblimin rotation. All factor analyses were executed by using the BMDP4M sub-routine. An interactive item analysis programme (NP50-programme) was used for the purpose of item analyses.

Of the six second-order factors extracted, the first four factors were considered properly defined with respectively 14, seven, nine and 15 items loading on factors I - IV. The remaining fifth and sixth second-order factors, with seven and six items respectively, were discarded.

Separate item-analyses for items loading on the four second-order factors were performed and the results for Factor I are presented in Table 5.

An inspection of Table 5 indicates that all items possess acceptable reliability indexes ranging from 0,326 to 0,974 and the standard deviations of individual items vary between 0,726 and 1,855. During the iterative process one item from this factor was rejected and Factor I yielded a Cronbach Alpha of 0,730. Based on an inspection of the content of these items, this factor is called "*Belief in oneself*". It shows a career identity vested in the person not the employer, a strong orientation towards taking independent action and a high level of independence from others' approval in one's career.

The results of the item analysis for Factor II are presented in Table 6.

TABLE 4
FACTOR MATRIX OF THE SECOND-ORDER FACTORS OF THE CAREER
RESILIENCE QUESTIONNAIRE (CRQ)
(DIRECT OBLIMIN ROTATION)

| VARIABLES | FACTOR I | FACTOR II | FACTOR III | FACTOR IV |
|----------------------------|--------------|--------------|--------------|--------------|
| Factor 1 | 0,877 | -0,001 | 0,080 | -0,011 |
| Factor 2 | -0,385 | 0,186 | 0,132 | -0,304 |
| Factor 3 | 0,107 | -0,026 | 0,348 | 0,284 |
| Factor 4 | -0,052 | 0,553 | -0,077 | -0,191 |
| Factor 5 | 0,032 | -0,049 | 0,384 | 0,476 |
| Factor 6 | 0,209 | 0,086 | 0,117 | 0,028 |
| Factor 7 | 0,076 | 0,049 | 0,630 | -0,168 |
| Factor 8 | -0,113 | 0,012 | -0,114 | -0,056 |
| Factor 9 | 0,044 | 0,115 | 0,015 | -0,403 |
| Factor 10 | 0,279 | 0,172 | 0,209 | 0,295 |
| Factor 11 | 0,025 | 0,025 | 0,230 | 0,124 |
| Factor 12 | 0,263 | -0,037 | 0,015 | -0,176 |
| Factor 13 | 0,117 | 0,072 | 0,044 | 0,180 |
| Factor 14 | -0,034 | 0,856 | -0,044 | -0,035 |
| Factor 15 | 0,098 | 0,010 | 0,092 | 0,036 |
| Factor 16 | 0,000 | -0,015 | 0,259 | 0,011 |
| Factor 17 | -0,126 | 0,035 | 0,272 | -0,058 |
| Factor 18 | 0,054 | 0,202 | 0,060 | 0,112 |
| Factor 19 | 0,023 | 0,046 | 0,012 | -0,049 |
| Factor 20 | -0,165 | 0,028 | 0,123 | -0,321 |
| Number of items per factor | 14 | 7 | 9 | 15 |

Closer inspection of Table 6 reveals that all the items have acceptable reliability indexes ranging from 0,483 to 1,232. Standard deviations ranged from 1,416 to 1,795. All seven items were retained after the item-analysis and this factor yielded a Cronbach Alpha of 0,684. Factor II is labelled "Disregard for traditional sources of career success", since items on this factor reflect a high level of independence from traditional symbols such as job titles, promotion and loyalty based on prolonged employment in one organisation.

The results of the item analysis for Factor III are shown in Table 7.

A review of Table 7 shows that most items have acceptable reliability indexes ranging from 0,395 to 1,201 and standard

deviations ranging from 1,320 to 1,959. The nine items yielded a Cronbach Alpha of 0,617. Factor II is called "Self-reliance". Items on this factor reflect an orientation towards protecting oneself from employer dependency and a high degree of networking to gain access to new career opportunities.

The results from the item analysis for Factor IV are shown in Table 8.

An analysis of Table 8 reveals that all items have acceptable reliability indexes ranging from 0,479 to 0,847 and standard deviations ranging from 1,213 to 1,995. Items loading on Factor IV yielded a Cronbach Alpha of 0,717. This factor is named "Receptivity to change", since the items contained therein reflect a receptive attitude and confidence to engage in

TABLE 5
ITEM STATISTICS IN RESPECT OF FACTOR I OF THE CAREER RESILIENCE QUESTIONNAIRE (CRQ)

| ITEM | DESCRIPTION OF ITEM | STANDARD DEVIATION OF ITEM g | CORRELATION OF ITEM g WITH TOTAL SCORE | RELIABILITY INDEX OF ITEM g |
|------|---------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------------|-----------------------------|
| | | S_g | r_{gx} | $r_{gx}S_g$ |
| Q1 | Handling of work problems | 0,736 | 0,433 | 0,326 |
| Q2 | Feelings of anxiousness about the consequences of possible failure when considering a change in job | 1,709 | 0,464 | 0,793 |
| Q3 | View oneself as a professional and/or technical expert | 1,221 | 0,498 | 0,608 |
| Q13 | To rely on peers for their approval of the way in which one performs in one's job | 1,632 | 0,429 | 0,700 |
| Q17 | Dependence on clarity of job responsibilities to deliver one's best work | 1,855 | 0,525 | 0,974 |
| Q18 | Introduced a new method, product or procedure in one's current job | 1,447 | 0,510 | 0,738 |
| Q27 | Experience discomfort when unexpected job opportunities/offers come along | 1,545 | 0,525 | 0,811 |
| Q29* | Feel that company changes demand continuous change in one's skills and knowledge | 1,449 | 0,069 | 0,100 |
| Q37 | To rely on approval from one's superior before one takes independent action | 1,476 | 0,660 | 0,974 |
| Q38 | To keep up with developments in one's area of work e.g. reading journals, attending exhibitions & conferences | 1,537 | 0,467 | 0,718 |
| Q39 | Waiting for career direction from your superiors | 1,450 | 0,456 | 0,661 |
| Q47 | Fear of not living up to the expectations that others might have of one's career progression | 1,666 | 0,503 | 0,838 |
| Q53 | To keep up one's work performance in uncertain unstructured situations e.g. project based assignments | 1,637 | 0,432 | 0,707 |
| Q55 | To describe one's career in terms of the actual work that one does e.g. "I am a software engineer" | 1,507 | 0,270 | 0,407 |
| Q57 | Capable of taking independent action and work without assistance from colleagues | 0,974 | 0,542 | 0,528 |

* = Rejected item

Cronbach Alpha equals 0,730 for the 14 items

TABLE 6
ITEM STATISTICS IN RESPECT OF FACTOR II OF THE CAREER RESILIENCE QUESTIONNAIRE (CRQ)

| ITEM | DESCRIPTION OF ITEM | STANDARD DEVIATION OF ITEM g | CORRELATION OF ITEM g WITH TOTAL SCORE | RELIABILITY INDEX OF ITEM g |
|------|-------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------|-----------------------------------|
| | | S_g | r_{gx} | $r_{g \cdot S_g}$ |
| Q14 | To feel that career success is reflected by job titles indicating higher levels of authority | 1,719 | 0,679 | 1,167 |
| Q36 | Promotion is more valuable than to get an expansion of job responsibilities | 1,518 | 0,581 | 0,882 |
| Q42 | Fear that corporate restructuring and downsizing may negatively influence one's career development | 1,795 | 0,628 | 1,127 |
| Q44 | Becoming upset when experiencing barriers to achieving one's career goals e.g. no promotional opportunities | 1,477 | 0,583 | 0,861 |
| Q45 | Feel that career success is reflected by job titles indicating higher levels of status | 1,674 | 0,736 | 1,232 |
| Q51 | Regard it important for an employer to try to keep people in his service for as long as possible | 1,520 | 0,527 | 0,801 |
| Q58 | Consider changing one's career goals in response to changes in one's company strategy and structure | 1,416 | 0,341 | 0,483 |

Cronbach Alpha equals 0,684 for the seven items

TABLE 7
ITEM STATISTICS IN RESPECT OF FACTOR III OF THE CAREER RESILIENCE QUESTIONNAIRE (CRQ)

| ITEM | DESCRIPTION OF ITEM | STANDARD DEVIATION OF ITEM g | CORRELATION OF ITEM g WITH TOTAL SCORE | RELIABILITY INDEX OF ITEM g |
|------|---------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------|-----------------------------------|
| | | S_g | r_{gx} | $r_{g \cdot S_g}$ |
| Q5 | Consider taking a job with high rewards but little security | 1,776 | 0,541 | 0,961 |
| Q12 | Making use of contacts like key customers/suppliers to gain access to new job opportunities | 1,825 | 0,567 | 1,035 |
| Q23 | Protecting oneself against dependence on one's present employer | 1,560 | 0,373 | 0,582 |
| Q33 | Consider keeping a secure job even though salary opportunities may be better elsewhere | 1,605 | 0,526 | 0,844 |
| Q34 | Consideration of a variety of alternatives should company circumstances put a halt to one's career | 1,560 | 0,516 | 0,805 |
| Q43 | Continuous improvement of one's job skills by engaging in development opportunities offered by one's employer | 1,330 | 0,297 | 0,395 |
| Q49 | Importance to establish a set of career goals in the planning of one's future working life | 1,320 | 0,435 | 0,574 |
| Q52 | Making use of family, friends, colleagues and influential people to pursue new job opportunities | 1,839 | 0,541 | 0,995 |
| Q54 | Taken definite steps in the past year to further one's career e.g. applied for vacant positions etc. | 1,959 | 0,613 | 1,201 |

Cronbach Alpha equals 0,617 for the nine items

frequent changes in work context, content and relationships to further one's career.

Finally, the factor correlations for rotated second-order factors is presented in Table 9. It is evident from Table 9 that the Factors I-IV have low intercorrelational values indicating the relative independence of the different factors.

DISCUSSION

With respect to Factor I, *Belief in oneself*, low scores represented an external locus of control in respect of career development, a

concern for the approval of peers and superiors and low risk-taking behaviour. A high score in *Belief in oneself*, on the other hand, reflected an internal locus of control towards managing the self and career, as well as an occupational identity based on the type of work engaged in and not the employer's merits.

With respect to Factor II, *Disregard for traditional sources of career success*, a low score was interpreted as an overriding concern with the traditional success ethic of linear career progression as reflected by job titles, indicating higher levels of authority and status. A low score could furthermore, be indicative of the regard for the relational psychological contract, which is characterised by loyalty from the employee

TABLE 8
ITEM STATISTICS IN RESPECT OF FACTOR IV OF THE CAREER RESILIENCE QUESTIONNAIRE (CRQ)

| ITEM | DESCRIPTION OF ITEM | STANDARD DEVIATION OF ITEM g | CORRELATION OF ITEM g WITH TOTAL SCORE | RELIABILITY INDEX OF ITEM g |
|------|-----------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------|-----------------------------------|
| | | S_g | r_{gx} | $r_{g \cdot S_g}$ |
| Q4* | To base one's sense of self-worth on the job position one holds | 1,399 | 0,138 | 0,193 |
| Q7 | Feeling comfortable with changes in one's physical work location every four months | 1,676 | 0,414 | 0,694 |
| Q9 | Strongly consider withdrawing from a difficult job situation in the face of possible failure | 1,474 | 0,325 | 0,479 |
| Q10 | Willingness to change employers frequently in order to advance one's career | 1,638 | 0,461 | 0,755 |
| Q16 | Regard frequent stressful changes in one's working environment as worthwhile investments in one's career growth | 1,443 | 0,411 | 0,593 |
| Q19 | Preference not to work with new and different work teams every six months | 1,613 | 0,403 | 0,650 |
| Q20 | Comfort to work in a multi-disciplinary team of different authority levels for an unspecified period of time | 1,525 | 0,495 | 0,755 |
| Q24 | Feelings of frustration on reporting to a new superior every three months | 1,995 | 0,396 | 0,790 |
| Q26 | Regard frequent changes in work assignments as worthwhile opportunities for career growth | 1,247 | 0,453 | 0,565 |
| Q28 | Looking forward to working with new and different people | 1,327 | 0,535 | 0,710 |
| Q30 | Feeling comfortable having to learn new technology every six months | 1,476 | 0,574 | 0,847 |
| Q31 | Feeling confident to openly express one's ideas in any work setting even if they are unpopular | 1,346 | 0,518 | 0,697 |
| Q35 | To seek competitive work situations | 1,422 | 0,519 | 0,738 |
| Q40 | Acceptance of frequent changes which result in new tasks and responsibilities | 1,213 | 0,526 | 0,638 |
| Q41 | Feeling comfortable letting others know when they have made mistakes | 1,292 | 0,442 | 0,571 |
| Q59 | To request a raise from one's boss if one think one deserves it | 1,823 | 0,395 | 0,720 |

* = Rejected item

Cronbach Alpha equals 0,717 for the 16 items

TABLE 9
INTERCORRELATION MATRIX FOR FOUR SECOND-ORDER FACTORS
(N = 352)

| | FACTOR I | FACTOR II | FACTOR III | FACTOR IV |
|------------|----------|-----------|------------|-----------|
| FACTOR I | 1,000 | | | |
| FACTOR II | -0,032 | 1,000 | | |
| FACTOR III | 0,164 | 0,210 | 1,000 | |
| FACTOR IV | 0,335 | -0,188 | 0,142 | 1,000 |

and a promise of lifetime employment from the employer. In contrast, a high score on Factor II, *Disregard for traditional sources of career success*, could reflect an individual's regard for his own definition of success. The internally defined success ethic could allow for career progression to be cyclical or lateral at times, but only if the individual can capitalise on opportunities for continued skill development and increase his/her employability.

Factor III, *Self-reliance*, referred to the extent to which a careerist is independent of traditional career principles, such as the security traditionally provided by large organisations and ignorance of the potential of networking contacts to further one's career. With respect to scale IV, *Receptivity to change*, a low score was indicative of resistance to frequent changes in task content, working relationships and the introduction of new technology. A high score reflected a positive attitude towards frequent changes and a belief in oneself that one will cope in ambiguous and unstable conditions.

There are certain limitations to generalising and interpreting the findings of the study. In the first instance, the construct of career resilience is a complex phenomenon and research and inquiry into the nature thereof are not conclusive. London (1983) in his initial exploration of career resilience conceded that the dimensions are neither independent nor necessarily exhaustive of all possible important constructs. Secondly the reliability and validity of the Career Resilience Questionnaire (CRQ) as a measuring instrument, have not been substantiated conclusively.

The present study offers some implications which might be of value to individuals, employers, career scholars and counsellors. Gordon and Coscarelli (1996) claim that knowing and acting upon the parameters of resilience can foster a better working environment for all involved. More specifically, fostering career resilience could enhance an individual's employability inside and outside his/her present employer's context. This is a main concern for individuals pursuing careers in less than optimal career conditions and the new career paradigm.

Employers, on the other hand, stand to benefit from a career resilient workforce who accepts responsibility for their own career management, stand ready to reinvent themselves to keep pace with change, and who are dedicated to continuous learning (Waterman *et al.*, 1994). As a result, employers could gain a strategic competitive advantage from encouraging career resilience. Career scholars and counsellors could find

the career resilience programmes and career management centres as operationalised by various high technology American organisations, aimed at switching from career dependence to career resilience, to be of interest (Waterman *et al.*, 1994).

A host of new research possibilities present themselves for further investigation. Researching the extent to which career resilience is a function of personality or age as opposed to an outlook or career competency that can be developed, would be useful. An investigation of how individual careerists and their employing organisations could foster adaptability to the new career paradigm, would also be of significance. Since individuals will have to become more self-reliant in managing their own careers, the main emphasis should be on how individuals could pursue meaningful careers in the new career paradigm.

Cultivating career resilience seems to be critical to career survival as conditions become more discouraging for organisational or bounded careers in white-collared contexts. Firstly, as a reactive stance to a negative environment and secondly, as a proactive stance to avoiding career barriers. It stands to reason then, that career resilience could become a much sought-after competency for careerists in the new career paradigm.

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