EXPLORING THE SOCIO-DEMOGRAPHIC DIFFERENCES ON PSYCHOLOGICAL CAREER META-CAPACITIES AND RETENTION-RELATED DISPOSITIONS

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Abstract

The aim of this study was to better understand socio-demographic differences of individuals in terms of their psychological career meta-capacities (measured by the Psychological Career Resources Inventory) and their retention related dispositions construct variables ((measured by the Utrecht Work Engagement Scale and Organisation-Related Commitment Scale). A quantitative survey was conducted involving a non-probability purposive sample of predominantly black females employed at managerial and staff levels (N=318) in the field of industrial and organisational psychology. An independent-samples t-test indicated significant differences between the various socio-demographic groups in regard to the measured variables. The findings contribute new knowledge that may be used to inform human resource career development practices concerned with the retention of particularly female employees in South African service industry.

Keywords: Socio-demographic Differences, Human Resource, Career Development

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1 Introduction

Organisations are increasingly recognising the value of attracting and retaining staff from all demographic groups in order to improve workforce performance and competitiveness (Torrington, Hall, Taylor and Atkinson, 2009). The loss of valuable knowledge and experience because of staff turnover increases the importance of staff retention for organisational sustainability and competitiveness (Burke and Ng, 2006). The retention of staff from all sociodemographic groups and their organisational commitment appear to be important to employees owing to the potential financial returns from the employees (Döckel, Bason and Coetzee, 2006; Swart, 2009).

Engaged and loyal employees tend to generate high profitability for the organisation and improved profitability. The focus should thus be on developing committed employees to carry job task consistent with organisational goals (Storm and Roodt, 2002). Organisation that need to retain its employees should try to establish favourable organisational conditions and career development practices that will address the differing career needs of diverse workforce (Coetzee and Schreuder, 2008).

The retention of employees seems to be influenced by psychological attributes that include individuals' ability to adapt to and deal proactively with the changing and uncertain nature of their careers

in the contemporary world of work (Ferreira, 2010; 2012; Savickas, 2011; Savickas, Nota, Rossier, Dauwalder, Duarte and Guichard, 2009). In an increasingly unstable and unpredictable world of work, people are becoming more dependent on their psychological and social capacities (human capital), and less dependent on organisational career arrangements because of the more frequent experiences of career transitions, and the demands for adaptability and greater individual agency in career decisions (Arthur, Khapova and Wilderrom 2005; Baruch, 2004; Rossier, Zecca, Stauffer, Maggiori and Dauwalder, 2012; Savickas, 2011; Savickas and Porfeli, 2012).

In the retention context, organisations thus need to take into consideration the changing priorities of employees and what attracts employees to their jobs, careers, work, occupations and the organisation itself. The work engagement and commitment of employees are regarded as significant retention-related dispositions that organisations, managers and human resource professionals should take cognisance of in the design of retention strategies (Ferreira, 2012, Mallol, Holtom and Lee, 2007).

Research into the socio-demographic differences with regards to psychological career meta-capacities (psychological career resources) and retention related disposition variables (work engagement and organisational commitment foci) will make a significant in the retention of employees within the

dynamic changing organisational environment. There seems to be paucity of research about how people from diverse demographic backgrounds in the South African workplace differ in terms of their psychological meta-capacities and their retention-related dispositions.

More Africans and women are entering the South African workplace and this study is expected to contribute important knowledge that will inform career development practices directed at retaining important staff.

2 Literature review

2.1 Psychological career meta-capacities

Career meta-capacities are regarded as the set of psychological career resources that people use to proactively plan and manage their career development, influence their socio-occupational environments and self-regulate their behaviour in order to obtain career success in the contemporary work setting (Coetzee 2008; Converse, Pathak, DePaul-Haddock, Gotlib and Merbedone 2012; Hall and Chandler, 2005; Savickas and Porfeli, 2012).

According to Coetzee (2008), people's career meta-capacities comprise their career preferences, career values, career drivers, career enablers and career harmonisers. Kniveton (2004) posits that individuals' career motives, values and psychological resources have an impact on their career decision making and their psychological attachment to an occupation. A well-developed psychological career resources profile enables individuals to proactively manage their career development (Coetzee, 2008; Ebberwein, Krieskok, Ulven and Prosser, 2004; Van der Heijde and Van der Heijden, 2006) and has been shown to increase their affective commitment to the organisation (Ferreira, 2010).

Career preferences and values guide the decisions individuals make in terms of their long-term career choices (Coetzee, 2008). The meaningfulness of a career to the individual is influenced by what he or she prefers and values (Kim, 2005). Coetzee (2008) regards people's career drivers as the inner forces that determine what an individual wants or needs from his or her employment. Career drivers consist of people's career purpose, career directedness and career-venturing attitudes. These attitudes energise people and motivate them to experiment with new or alternative careers and employment possibilities that are based on their views of the possible selves they could become or the possible working roles they could experience (Coetzee, 2008).

A career enabler is a set of skills (practical, creative or self/other skills) that allows an individual to perform tasks relating to his or her career development well and helps him or her to achieve the desired and expected career outcomes. Career harmonisers comprise people's self-esteem,

behavioural adaptability, emotional literacy and social connectivity. These psychological career metacapacities act as promoters of flexibility and resiliency, and as controls by keeping the career drivers in balance so that people do not go overboard (or burn themselves out) in the process of pursuing and reinventing their careers (Coetzee, 2008).

People who possess a wide range of psychological career resources have been shown to be adaptable to changing career circumstances (Converse et al., 2012; Fugate, Kinicki and Ashforth, 2004; Griffin and Hesketh, 2005; McArdle, Waters, Briscoe and Wall, 2007; Savickas and Porfeli, 2012), and they are also likely to be more engaged in their work and committed to their job, work, career, occupation or the organisation.

2.2 Retention-related dispositions

In the context of this study, the constructs of work engagement and organisational commitment foci are regarded as a composite set of retention-related dispositions. These dispositions act as mediating constructs between employees' work and personal lives, influencing their cognitive (non-affective) and affective reasons for staying or leaving an organisation or job, and hence their retention (Tanova and Holtom, 2008).

2.2.1 Work engagement

Work engagement has been extensively researched in the different psychological sub-field (Geldenhuys, Laba and Venter, 2014). According to Lockwood (2007), work engagement is acknowledged as the business initiative associated with organisational success. Work engagement refers to a positive fulfilling state of mind characterised by vigour, dedication and absorption (Schaufeli, Bakker and Salanova, 2006).

Vigour (a physical component) is characterised by high levels of energy and mental resilience, and being sufficiently willing to invest effort in one's work, despite any obstacles (Schaufeli et al., 2006). Higher levels of vigour suggests an individual's readiness to devote effort within their work by not becoming easily fatigued and developing the tendency to remain resolute in the face of task difficulty or failure (Chughtai and Buckley, 2008).

Dedication is characterised by experiencing a sense of importance in one's work, feeling passionate and proud of the job and being inspired and challenged by work (Schaufeli et al., 2006; Storm and Rothmann, 2003). Dedication indicates individuals' psychological involvement in their work and typifies an individual's strong sense of identification with their work ((Chughtai and Buckley, 2008).

Absorption (cognitive component) refers to being completely and happily absorbed in one's work, unable to detach oneself from it and not noticing how

quickly time flies (Schaufeli et al., 2006; Storm and Rothmann, 2003). This component of work engagement refers to the full concentration, satisfaction and engrossment that individual receive from performing their job-related.

Work engagement relates to employees' psychological experiences of their work. Research has shown that disengagement from work may result in employee turnover, absenteeism and poor performance (Coetzer and Rothmann, 2007), while work engagement may result in job satisfaction, organisational commitment and lower turnover intention (Schaufeli and Bakker, 2004).

2.2.2 Organisational commitment foci

Roodt (1997) suggested six foci relating to organisational commitment, namely work, job, career, occupation, organisation and union. *Work foci* refer to the loyalty of employees towards work itself. People who are strongly loyal to their work make sure that it is their responsibility to ensure that they add value to their employing organisation (Meyer and Allen 1997). *Career foci* refer to the identification and involvement of a person in his or her occupation (Mueller, Wallace and Prince 1992).

Job foci involve a person's dedication to a moderately temporary set of objective task requirements (Colarelli and Bishop, 1990). This implies that the individual will be dedicated to tasks that come with the roles of the job. Occupational foci are seen as the commitment to an identifiable and specific line of work that an individual engages in order to earn a living at a given point in time (Lee, Carswell and Allen, 2000). An individual with organisational foci as his or her focus is willing to remain with the organisation by putting more effort into the attainment of the organisational goals. The individual's loyalty will be based on his or her acceptance of values and goals as his or her own (Roodt, 1997).

Organisational commitment has been shown to be positively related to person-organisation fit (Valentine, Godkin and Lucero, 2002). This implies that should conflict arise between the personal characteristics of employees such as those indicated by their psychological career resources, work engagement and the attributes of their organisations, job dissatisfaction, low organisational commitment, job stress and turnover could most probably be experienced (Peterson, 2003).

Based on the literature review, we propose the following research hypothesis:

H₁: There is a significant differences in sociodemographic variables of the participants' psychological career meta-capacities construct and retention-related dispositions construct variables.

3 Methodology

3.1 Participants

A non-probability purposive sample of employed adults (N = 318) at managerial and staff levels in the field of industrial and organisational psychology participated in the study. Overall, the majority of the participants were blacks (76%) and females (76%) in the early adulthood life stage and establishment phase of their careers (84% = 26-40 years). The participants occupied staff level (57%) and managerial level (43%) positions in the South African services industry.

3.2 Measuring instruments

Participants completed the Psychological Career Resources Inventory (PCRI) (Coetzee 2008), Utrecht Work Engagement Scale (UWES) (Schaufeli and Bakker, 2003) and Organisation-related Commitment Scale (OCS) (Roodt, 1997). The PCRI (Coetzee, 2008) is a self-rated multi-factorial measure containing 64 items and five subscales (career preferences, career values, career enablers, career drivers and career harmonisers). The inventory measures 15 constructs in total. career preferences (stability/expertise, managerial, variety/creativity and independence/autonomy); career values (growth/development and authority/influence); career drivers (career purpose, career directedness and career venturing); career enablers (practical/creative skills, and self/other skills) and career harmonisers (selfesteem, behavioural adaptability, emotional literacy and social connectivity).

A six-point Likert-type scale was used for subject responses to each of the 64 items. An exploratory factor analysis (Coetzee, 2007) and confirmatory factor analysis (Coetzee, 2010) provided evidence of construct validity as indicated by the fifteen-factor model, which supports the underlying dimensions of the psychological career resources construct described by Coetzee (2008). Acceptable Cronbach's Alpha coefficients were obtained for the present study which ranged from .67 to .85.

The UWES is a self-report questionnaire which includes 21 items. It is divided into three subscales (vigour, dedication and absorption). A six-point Likert-type scale was used for subject responses to each of 21 items. Coetzer and Rothmann (2007) confirmed the internal consistency reliability and construct validity of the UWES for the South African context. High Cronbach's Alpha coefficients were obtained for the present study which ranged from .89 to .92.

The OCS is a self-report questionnaire which includes 38 items, measuring the participants' commitment to work foci, job foci, occupational foci, career foci and organisational foci. A five-point Likert-type scale was used for subject responses to each of the 38 items. Acceptable construct validity and

internal consistency reliabilities of \geq .90 were reported by Roodt (1997), Storm and Roodt (2002) and Pretorius and Roodt (2004). Acceptable Cronbach's Alpha coefficients were obtained for the present study which ranged from .65 to .93.

3.3 Research procedure

Permission for the research was obtained from the institution's research ethics committee. The purpose of the study was communicated to all participants in the questionnaire booklet. Participation was voluntary and the respondents gave their permission for the results to be used for research purposes only. The anonymity and confidentiality of all the participants was ensured.

Data were collected by mailing questionnaires to a purposive sample of employed adults enrolled for honours level distance learning studies in the field of industrial and organisational psychology in a particular year of study. The postal facilities of the higher education institution were used. Additional data were collected during the annual discussion classes. The researcher made sure that no participant completed a questionnaire twice by checking that the student numbers on the questionnaires returned by mail were not duplicated in the questionnaires completed during the discussion classes.

3.4 Statistical analysis

The data analysis procedures chosen for this research were based on the exploratory nature of the research design. Descriptive (means, standard deviations and reliability analyses), and inferential analysis T-test were performed to achieve the objective of the study.

4 Results

4.1 Descriptive statistics

The means, standard deviations and the internalconsistency reliability coefficients for the variables of interest are shown in Table 1.

Scale dimension	M (SD)	α	
PCRI (psychological career resources)			
Career preference			
Stability/expertise	5.30 (.64)	.67	
Managerial	4.48 (1.16)	.85	
Variety/creativity	5.05 (.85)	.83	
Independence/autonomy	4.74 (.91)	.70	
Career values			
Growth/development	5.49 (.66)	.71	
Authority/influence	4.97 (.4.97)	.76	
Career enablers			
Practical/creative skills	4.63 (.91)	.76	
Self/other skills	4.93 (.79)	.78	
Career drivers			
Career purpose	5.34 (.72)	.78	
Career directedness	4.68 (.86)	.72	
Career venturing	4.76 (.94)	.68	
Career harmonisers			
Self-esteem	5.09 (.81)	.77	
Behavioural adaptability	4.92 (.79)	.83	
Emotional literacy	4.52 (.96)	.76	
Social connectivity	5.04 (.76)	.77	
UWES			
Vigour	4.28 (1.19)	.89	
Dedication	4.11 (1.61)	.92	
Absorption	3.97 (1.34)	.90	
OCS			
Work foci	3.75 (.58)	.04	
Job foci	3.68 (.50)	.67	
Occupational foci	3.78 (.60)	.65	
Career foci	3.81 (.58)	.82	
Organisational foci	3.18 (.74)	.93	

In terms of PCRI, Table 1 indicates stability/expertise career preference (M = 5.30; SD =

.64) as the most-preferred career preference followed by variety/creativity (M = 5.05; SD = .85). The

managerial career preference obtained the lowest mean score (M = 4.48; SD = 1.16) which reflects it as the least-preferred career preference. Growth development was indicated as a dominant career value (M = 5.49; SD = .66) followed by authority/influence (M = 4.97; SD = .86). Career purpose (M = 5.34; SD = .72) was indicated as the most important career driver. Self-esteem (M = 5.09; SD = .81) was indicated as the most dominant career harmoniser followed by social connectivity (M = 5.04; SD = .76).

In terms of UWES, Table 1 indicates that the total sample scored the highest on the vigour (M = 4.28; SD = 1.19) and lowest on absorption (M = 3.97; SD = 1.34) variables. The participants' dedication to their work was also relatively high (M = 4.11; SD = 1.61).

In terms of OCS, Table 1 shows that the total sample scored highest on the OCQ career foci (M = 3.81; SD = .58) and lowest on organisational foci (M = 3.81) and lowest on organisational foci (M = 3.81).

3.18; SD = .74). The reliability coefficients for the PCRI range from .67 (moderate) to .85 (high). UWES range from .89 to 92 (high) and those of the OCS range from .65 (moderate) to .93 (high). Work foci was excluded from the statistical analyses because of the low Cronbach Alpha coefficient obtained for this sub-dimension.

4.2 Tests for mean differences

The results of the Kolmogorov–Smirnov test in table 2 below indicate that a normal distribution could be assumed for all the variables. The independent samples t-test was therefore conducted on the sociodemographic variables (gender and job level) that acted as significant moderators for the relationship between the retention-related disposition and psychological career meta-capacities constructs.

Table 2. One-sample Kolmogorov-Smirnov Test

		Psychological career meta-capacities construct scale	Retention-related dispositions construct scale
N		318	318
Normal parameters ^{a,b}	Mean	138.264	106.940
	Std. deviation	16.819	23.854
	Absolute	.071	.069
Most extreme differences	Positive	.050	.052
	Negative	071	069
Kolmogorov-Smirnov Z	-	1.264	1.237
Asymp. Sig. (2-tailed)		.082	.094

Notes: a. Test distribution is normal; b. Calculated from data

4.3 Reporting of differences in mean scores for gender groups and levels scores: psychological career metacapacities and retention-related dispositions

Levene's test of equality of variances was conducted to test for homogeneity across the gender and job level groups. In order to establish whether the sample of participants differed significantly regarding the significant moderating socio demographic variables (gender and job level) in terms of their scores on the psychological career meta-capacities (PCRI) and retention-related dispositions constructs (UWES and OCQ), t-tests were performed. The results for the equality of variances showed that homogeneity of sample mean scores could be assumed at $p \geq .05$. Levene's test for equality establishes the null hypothesis that variances are equal. A p-value lower than .05 usually indicates that there is a good chance that the variance are not equal.

The t-results and mean scores presented in table 3 indicate that males and females did not differ significantly regarding their mean scores on the psychological career meta-capacities construct

variables. Male participants (M = 112.77; SD = 23.57) obtained significantly higher mean scores on the retention-related dispositions construct variables than their female (M = 105.20; SD = 23.71) counterparts. Table 4 indicates that male participants obtained significantly higher mean scores on the retention-related disposition constructs of vigour (M = 36.29; SD = 9.83), absorption (M = 34.23; SD = 10.73) and career foci (M = 23.0; SD = 3.77).

In terms of job level, the results indicate that participants do not differ significantly regarding their total mean scores for the career meta-capacities variables. Participants at managerial level obtained significantly higher mean scores (M = 113.65; SD = 21.52) on the retention-related dispositions variables (work engagement and organisational commitment foci) than participants employed at staff level.

As indicated in table 5, participants in manager/supervisor positions obtained significantly higher mean scores on the retention-related disposition constructs of vigour (M = 36.70; SD = 8.74), absorption (M = 34.24; SD = 9.85) and career foci (M = 23.14; SD = 3.41) than the staff level participants.

Table 3. Independent T-Test Differences in Gender and Job Level Scores on the Psychological Career Meta-Capacities Construct and Retention-Related Dispositions Construct Variables

Constructs	Group	N	Mean	SD	Levene's equality of F	Test for variances Sig.	t-test	df	Sig. (2- tailed)
Psychological career meta-competencies	Female	245	137.66	116.92	.31	.58	-1.18	316	.24
	Male	73	140.30	16.42					
Retention-related	Female	245	105.20	23.71	.07	.80	2.4	318	.02***
dispositions	Male	73	112.77	23.57					
Psychological career meta-capacities	Manager/supervisor	139	138.27	18.13	.98	.32	.07	314	.95
1	Staff	177	138.15	15.8					
Retention-related dispositions	Manager/supervisor	139	113.65	21.52	1.49	.22	4.59	314	.00***
	Staff	177	101.63	24.28					

Note: *** $p \le .001 ** p \le .050 * p \le .10$

Table 4. Mean Scores: Retention-Related Dispositions Construct Variables (Gender)

Scale dimension	Females		Males	
Retention-related dispositions	Mean	SD	Mean	SD
Work engagement	84.88	26.68	92.07	27.58
Vigour	33.63	9.35	36.29	9.83
Absorption	31.02	10.66	34.23	10.73
Organisational commitment foci	129.87	22.15	134.36	22.24
Career foci	22.49	3.78	23.0	3.77

 Table 5. Mean Scores: Retention-Related Dispositions Variables (Job Level)

Scale dimension	Manager/supervisor		Staff	
Retention-related dispositions	Mean	SD	Mean	SD
Work engagement	93.56	24.42	80.90	27.67
Vigour	36.70	8.74	32.28	9.66
Absorption	34.24	9.85	29.81	11.03
Organisational commitment foci	137.28	18.51	125.76	23.59
Career foci	23.14	3.41	22.17	4.00

5 Discussion

The aim of the study was to determine whether individuals from different socio-demographic groups differ in terms of their career meta-capacities and retention-related dispositions construct variables.

5.1 Gender

The results indicated that the male and female participants did not differ significantly with regard to their career meta-capacities (psychological career resources). However, they did differ significantly with regard to their retention-related dispositions (work engagement and organisation commitment foci).

It is interesting to note from the results that the male participants seemed to be more committed to their careers than their female counterparts. This is consistent with the research by Maxwell and Steele (2003) who reported that gender could influence the way staff view their membership in the organisation and their attitudes to the organisation. However, the results of the present study contradict the findings of Lumley (2010), who found that females tend to be

more committed to the employing organisation than their male counterparts.

The lower mean scores on the retention-related dispositions (engagement and commitment foci) of the female participants could be explained by the fact that women generally have to overcome more barriers to attain their positions in the organisation and this effort might translate to females being less engaged and committed. Considering that the majority of the participants are females, retention practices should look at ways of increasing the female participants' commitment should they want to retain them.

In the present research, statistical significant differences were observed with regard to vigour and absorption, with males scoring significantly higher than their female counterparts. Van den Berg, Bakker, and Ten Cate (2013) found that employees' attitudes towards the organisation and the organisation's commitment to individuals, made the most significant contributions to employees' level of vigour and absorption. The results thus suggest that the male participants feel significantly more positive than the female participants toward their employing organisation. In terms of work engagement, the

findings are inconsistent with the research findings of De Villiers (2009) which indicate that females tend to more engaged than their male counterparts.

Overall, the results suggest that the males seem to be more engaged in their jobs, more committed and experience more fulfilment than their female counterparts. Male participants seem to be generally more immersed in their work and at times may even experience difficulties detaching themselves from their jobs. The results contradict the findings of Schaufeli and Bakker (2004), who report that females seem to derive a higher sense of significance from their work, and feel more enthusiastic and proud about their jobs as well as feel more inspired and challenged by their jobs than males.

5.2 Job level

According to the research findings, participants employed in managerial positions are more engaged and committed towards their careers than the participants employed at staff level. The managerial level participants seem to devote most of their time towards their careers which have seemingly extreme personal value to them. The level of responsibility that comes from being in a management position may have contributed to the managerial staff level participants' high levels of energy, their mental resilience while working, their willingness to invest effort in their work and persistence in the face of adversities.

The managerial staff level participants may also feel more established in their jobs than the staff level participants, which may explain their higher levels of engagement and commitment. Having authority to influence the organisation's goals seems to increase participants' commitment to their organisation. It appears that the feeling of authority and responsibility over others tend to increase people's sense of accountability and their need to stay in the same occupation and organisation (Ferrira and Coetzee, 2010).

Overall, the results of the present study suggest the importance of using a person-centered approach in addition to the psychological behavioural variable-centered approach in designing retention practices that are aimed to increase the engagement and commitment of organisational staff members. A person-centered approach that considers the socio-demographic characteristics of staff members involves the identification and comparison of homogenous subgroups (for example, gender and job level) within an organisation.

Using a person-centered approach by considering the socio-demographic characteristics pointed out in this research will help ensure that individual staff members are treated in a more holistic manner and that the possibility exists that a particular set of psychological career meta-capacities and retention-related dispositions might be experienced differently by members of the socio-demographic sub-groups

(males and females, managerial and staff level employees). Retention practices should therefore consider the diverse needs of their staff members with regard to the psychological career meta-capacities and retention related dispositions.

6 Conclusion and recommendations

Given that employment equity and affirmative action have contributed to a more demographically diversified workforce in South African workplaces, it may be concluded that the findings of the present study contribute new knowledge that may be used to inform human resource career development practices concerned with the attraction and retention of particularly female employees in South African service industry.

Using a person centred approach by considering the socio-demographic characteristics pointed out will ensure that individual staff members are treated in a more holistic manner and that a possibility exists that a particular set of psychological career meta-capacities and retentionmight be related dispositions experienced differently by members of the socio-demographic sub-group (males and females, managerial and staff level employees. Retention of staff and their career development support may potentially be improved by taking the socio-demographic differences into consideration in the planning process. Retention practices should consider the diverse needs of their staff members with regards to the psychological career meta-capacities and the retention related dispositions.

Furthermore, organisations should invest in the psychological contracts with their employees because if these psychological contracts are neglected, employees may tend to perceive that there has been a breach of contract which may lead to reduced levels of engagement and commitment. This in turn may increase employees' intentions to leave the organisation. Organisations should also have a strategy in place to help individuals to develop different career meta-capacities that will inform and support them in their career decision-making process.

Organisations should consider providing women with the work-life balance opportunities to help them to overcome barriers to attain high positions in the organisations. Mentoring programmes for women should also be reviewed and be formalised by the organisations to help women in meeting organisational goals. Organisations should consider reviewing their succession plan by identifying talent in women at staff level.

Future research should replicate the study with a broader, demographically more representative sample. The main limitation of the study was arguably the relatively small sample size that was used. The socio-demographic mix of the sample might have had an effect on the observed results – hence it is

recommended that a truly representative study be conducted in future.

References

- Arthur, M. B. Khapova, S. N. and Widerrom, C. P. M. (2005). Career success in a boundaryless career world. *Journal of Organisational Behaviour, vol.* 26, pp. 177–202.
- 2. Baruch, Y. (2004). Transforming careers: From linear to multi-directional career paths. *Career Development International*, Vol. 9 No. 1, pp. 58–73.
- 3. Burke, R. J. and Ng, E. (2006). The changing nature of work and organisations: Implications for human resource management. *Human Resource Management Review, Vol. 16*, pp. 86–94.
- Chughtai, A.A. and Buckley, F. (2008). Work engagement and its relationship with state and trait trust: A conceptual analysis. *Institute of Behavioural* and Applied Management, Vol 1, pp. 47-71.
- Coetzee, M. (2008). Psychological career resources of working adults: A South African survey. South African Journal of Industrial Psychology, Vol. 34 No. 2, pp. 10–20.
- Coetzee, M & Schreuder, D. 2008. A multi-cultural investigation of students' career anchors at a South African higher education institution. SA Journal of Labour Relations, Vol. 32 No. 2, 1-11
- 7. Coetzer, C. F. and Rothmann, S. (2007). Job demands, job resources and work engagement of employees in a manufacturing organisation. *Southern African Business Review*, Vol 11 No. 1, pp. 17–32.
- Colarelli, S. M. and Bishop, R. C. (1990). Career commitment functions, correlates and management. *Group and Organisation Studies*, Vol. 15 No. 2, pp. 158-176.
- Converse, P. D. Pathak, J., DePaul-Haddock, A. M. Gotlib, T., and Merbedone, M. (2012). Controlling your environment and yourself: Implications for career success. *Journal of Vocational Behaviour, Vol.* 80, pp. 148–159.
- De Villiers, M. (2009). The relationship between employee wellness and career anchors. Unpublished master's dissertation, University of South Africa, Pretoria.
- Döckel, A. Basson, J. S. and Coetzee, M. (2006). The effect of retention factors on organizational commitment: An investigation of high technology employees. South African Journal of Human Resource Management, Vol. 4 No. 2, pp.20–28.
- Ebberwein, C. A. Krieshok, T. S., Ulven, J. C. and Prosser, E. C. (2004). Voices in transition: Lessons on career adaptability. *Career Development Quarterly*, Vol. 52 No. 4, pp. 292–308.
- 13. Ferreira, N. (2010). The relationship between psychological career resources and organisational commitment. Unpublished master's dissertation. University of Pretoria, Pretoria.
- Ferreira, N. (2012). Constructing a psychological profile for staff retention. Unpublished doctoral thesis. University of South Africa, Pretoria.
- Ferreira, N. and Coetzee, M. (2010). Psychological career resources and organisational commitment: exploring socio-demographic differences. South African Journal of Labour Relations, Vol. 34 No. 2, pp, 25-41.

- 16. Fugate, M. Kinicki, A. and Ashforth, B. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behaviour, Vol. 65*, pp.14–38.
- 17. Geldenhuys, M. Laba, K. and Venter, C.M. (2014). Meaningful work, work engagement and organisational commitment. SA Journal of Industrial Psychology, Vol 40 No. 1, pp. 1-10.
- Griffin, B., and Hesketh, B. (2005). Adaptable behaviours for successful work and career adjustment. Australian Journal of Psychology, Vol. 55 No. 2, pp. 65–73.
- Hall, D., and Chandler, D. (2005). Psychological success: When the career is a calling. *Journal of Organisational Behaviour*, Vol. 26 No. 2, pp.155–176.
- Kim, N. (2005). Organisational interventions influencing employee career development preferred by different career success orientations. *International Journal of Training and Development, Vol. 9* No. 1, pp. 47–61.
- Kniveton, B. H. (2004). Managerial career anchors in a changing business environment. *Journal of European Industrial Training*, Vol. 28 No. 7, pp. 564–573.
- Lee, K. Carswell, J. J. and Allen, N. J. (2000). A metaanalytic review of occupational commitment: Relations with person- and work-related variables. *Journal of Applied Psychology*, Vol. 85, pp. 799–811.
- 23. Lockwood, N.R. (2007). Leveraging employee engagement for competitive advantage: HR'S strategic role (SHRM Research Quarterly Report). Alexandria, VA: Society for Human Resource Management.
- Lumley, E. (2010). The relationship between career anchors, job satisfaction and organisational commitment. Master's dissertation, Department of Industrial and Organisational Psychology, University of South Africa, Pretoria
- 25. Mallol, C., Holtom, B., and Lee, T. (2007). Job embeddedness in a culturally diverse environment. *Journal of Business Psychology, Vol.* 22, pp. 35–44.
- Maxwell, G. and Steele, G. (2003). Organisational commitment: a study of managers in hotels, International: *Journal of Contemporary Hospitality Management, Vol. 15 No. 7, pp. 362–369*
- McArdle, S. Waters, L. Briscoe, J. P. and Hall, D. T. (2007). Employability during unemployment: Adaptability, career identity and human and social capital. *Journal of Vocational Behaviour*, Vol. 71, pp. 247–264.
- Meyer, J. & Allen, N. (1997). Commitment in the workplace: theory, reseach and application. London: Sage.
- Mueller, C. W. Wallace, J. E. and Prince, J. L. (1992). Employee commitment. Work and Occupations, Vol. 19 No. 3, pp. 211–236.
- 30. Peterson, D. K. (2003). The relationship between ethical pressure, relativistic moral beliefs and organisational commitment. *Journal of Managerial Psychology*, Vol. 18 No. 6, pp. 557–572.
- 31. Pretorius, A. A. S. and Roodt, G. (2004). Die verband tussen werknemertevredenheid en organisasieverbondenheid. *South African Journal of Industrial Psychology, Vol. 30* No. 3, pp. 65–74.
- 32. Roodt, G. (1997). Theoretical and empirical linkages between work-related commitment foci. *South African Journal of Industrial Psychology, Vol. 23* No. 2, pp.

- 33. Rossier, J. Zecca, G. Stauffer, S. D. Maggiori, C., and Dauwalder, J. (2012). Career Adapt-Abilities Scale in a French-speaking Swiss sample: Psychometric properties and relationships to personality and work engagement. *Journal of Vocational Behaviour, Vol.* 80, pp. 734–743.
- Savickas, M. L. (2011). New questions for vocational psychology: Premises, paradigms, and practices. *Journal of Career Assessment, Vol. 19* No. 3, pp. 251– 258.
- Savickas, M. L. Nota, L. Rossier, J., Dauwalder, J. P. Duarte, M. E. and Guichard, J. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behaviour*, Vol. 75, pp. 239–250
- Savickas, M. L. and Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal* of Vocational Behaviour, Vol. 80, pp. 661–673.
- Schaufeli, W. B. and Bakker, A. B. (2004). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organisational Behaviour*, Vol. 25, pp. 293–315.
- Schaufeli, W. B. Bakker, A. B. and Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, Vol. 66 No. 4, pp. 701–716.
- Storm, L. and Roodt, G. (2002). Die verband tussen organisasiesosialisering en organisasieverbondenheid. Tydskrif vir Bedryfsielkunde, Vol. 28 No. 1, pp. 14–21.

- 40. Storm, K. and Rothman, S. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African Police Service. *South African Journal of Industrial Psychology*, Vol. 29 No. 4, pp.62–70.
- 41. Swart, B. (2009). Best company practices and organisational commitment: an exploratory study of an engineering company. Master's dissertation, School of Business Leadership, University of South Africa, Pretoria.
- Tanova, C. and Holtom, B. C. (2008). Using job embeddedness factors to explain voluntary turnover in four European countries. *International Journal of Human Resource Management*, Vol. 19 No. 9, pp. 1553–1568.
- 43. Torrington, D. Hall, L, Taylor, S & Atkinson, C. (2009). *Fundamentals of human resource management*. London: Pearson.
- 44. Valentine, S. Godkin, L. and Lucero, M. (2002). Ethical context, organizational commitment and person-organization fit. *Journal of Business Ethics, Vol.* 41, pp. 349–360.
- 45. Van Den Berg, B.A.M. Bakker, A.B. and Ten Cate, T.J. (2013). Key factors in work engagement and job motivation of teaching faculty at a university medical centre. *Perspective on Medical Education, Vol 2* No. 5, pp. 264-275.
- Van der Heijde, C. M. and Van der Heijden, B. I. J. M. (2006). A competence-based and multidimensional operationalisation of employability. *Human Resource Management*, Vol. 45 No. 3, pp. 449–476.