

The influence of job embeddedness on black employees' organisational commitment

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ABSTRACT

The objective of the study was to explore whether individuals' organisational commitment (measured by the Organisational Commitment Scale) is significantly influenced by their job embeddedness (measured by the Job Embeddedness Scale). A cross-sectional quantitative survey was conducted on a non-probability sample of employed black (92%) and female (71%) adults (N = 355) at managerial and staff level in the South African services industry. Canonical correlation analysis and structural equation modelling were used to analyse the data. The findings add new knowledge that can be used to inform organisational practices for the retention of black staff members in the South African organisational context.

Key words: job embeddedness, organisational commitment, affective commitment, normative commitment, continuance commitment

Introduction

Keeping employees committed to the organisation has become a top priority for many contemporary organisations (Neininger, Lehmann-Willenbrock, Kauffeld & Henschel 2010). One of the most disruptive and expensive problems facing organisations today is employee turnover (Steel 2002; Muteswa & Ortlepp 2011). To keep pace with ongoing changes in governmental regulations, reimbursements and general initiatives, industries in general have seen an increase in mergers, consolidations and re-engineering activities (Anderson & Pulich 2000). These changes have resulted in organisations struggling to recruit and retain a talented

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workforce (Mitchell, Holtom & Lee 2001a; Tzeng 2002). Moreover, in the South African employment equity and affirmative action context, organisations have rising concerns about retaining their talented black staff members (Kerr-Phillips & Thomas 2009; Lesabe & Nkosi 2007; Muteswa & Ortlepp 2011).

There is now considerable evidence of the benefits to organisations of having a strongly committed workforce (Meyer & Maltin 2010; Morrow 2011) whose members feel a sense of fit and belonging to their organisations (Mitchell et al. 2001a; Mitchell, Holtom, Lee, Sablynski & Erez 2001b; Ng & Feldman 2010). At present, though, individuals seeking personal career growth can do so across different organisations owing to increased mobility opportunities in a global marketplace searching for scarce and critical talent (Feldman & Ng 2007; Ng, Sorensen, Eby & Feldman 2007; Kochanski & Ledford 2001). If career development and mobility opportunities are lacking within their current organisation, organisational commitment becomes less salient for these individuals (Weng, McElroy, Morrow & Liu 2010). The loss of such talent, however, is harmful and costly to organisations; consequently, organisations strive to prevent such talent loss by developing and ensuring a committed workforce (Ferreira 2009; Lumley 2010; McKnight, Philips & Hardgrave 2009) whose members feel close links with their organisation (Mitchell et al. 2001a; Van Dyk 2012).

Employees' job embeddedness and their organisational commitment have become important aspects to be studied in the retention context (Allen 2006; Halbesleben & Wheeler 2008; Harter, Schmidt & Hayes 2002; Lee, Mitchell, Sablynski, Burton & Holtom 2004; Van Dyk 2012). Whereas job embeddedness represents a broad set of influences on an employee's decision to stay in the job (Mitchell et al. 2001a), organisational commitment represents the affective and cognitive reasons for staying at or leaving an organisation (Allen & Meyer 1990). Research provides evidence of a significant negative relationship between employees' turnover intention and their job embeddedness and organisational commitment respectively (Burton, Holtom, Sablynski, Mitchell & Lee 2010; Crossley, Bennet, Jex & Burnfield 2007; Halbesleben & Wheeler 2008). Considering the concerns about retaining staff in the South African organisational context (João 2011; Kerr-Phillips & Thomas 2009; Lesabe & Nkosi 2007; Muteswa & Ortlepp 2011; Van Dyk 2012), research on how employees' job embeddedness relates to their organisational commitment appears to be important (Van Dyk 2012).

Job embeddedness

Job embeddedness refers to the combined forces that keep a person from leaving his or her job (Yao, Lee, Mitchell, Burton & Sablynski 2004). As shown in Table 1, these

forces represent the perceptions of individuals regarding their links with aspects of the job (people and groups), person–job fit and sacrifices involved in leaving the job (Feldman & Ng 2007; Mitchell et al. 2001a).

Table 1: Dimensions of job embeddedness

Fit	The extent to which a person perceives that the job, organisation and environment mesh with, or complement (fit), other areas and aspects of his or her life space
Links	The extent of an individual's ties with other people and activities at work in relation to/ compared with family, non-work and off-the-job interests
Sacrifice	The ease with which a person feels that links can be broken, or the person's perception of what they would have to give up if they were to leave their current position

In the retention context, research evidence indicates job embeddedness as a predictor of employee turnover and job satisfaction (Tanova & Holtom 2008). Employees who value developing close ties with co-workers and work groups (links) and desire jobs that are compatible with their goals and values (fit), and that provide desirable perks (sacrifice), generally feel more embedded in their jobs (Ng & Feldman 2010). These forces (fit, links and sacrifice) potentially act as a buffer to shocks and dissatisfaction, which are precursors to turnover (Holtom & Inderrieden 2006; Holtom, Mitchell & Lee 2006). High levels of job embeddedness generally indicate that a person feels a sense of compatibility between his or her personal career needs, goals and values and those of the job and organisation; experiences positive formal and informal connections between himself or herself and the team or organisation; and perceives the costs of leaving the job (the material and psychological benefits that may be forfeited) as being too high (Mitchell et al. 2001b).

Holtom and Inderrieden (2006) found job stayers to have high levels of job embeddedness. Research by Van Dyk (2012) shows that training and development opportunities, the characteristics of the job, supervisor support and career development opportunities significantly increase employees' perceived fit with the organisation and their jobs, and the perceived costs they would incur (benefits they would forfeit) should they decide to leave the organisation. Research has also demonstrated that a conflict between the personal characteristics of employees and the attributes of their organisation is significantly related to job dissatisfaction, low organisational commitment, substandard job performance, job stress and turnover (Judge & Ferris 1992; Peterson 2003; Schneider, Goldstein & Smith 1995).

Organisational commitment

The concept of organisational commitment has attracted considerable interest in an attempt to understand and clarify the intensity and stability of an employee's dedication to the organisation (Lumley 2010). In the context of the present study, organisational commitment is regarded as an attitude, as it relates to individuals' mindsets about the organisation (Allen & Meyer 1990).

Organisational commitment is viewed as a psychological connection that individuals have with their organisation, characterised by a strong identification with the organisation and a desire to contribute to the accomplishment of organisational goals (Meyer & Allen 1997). Meyer and Allen's (1991) three-component model of organisational commitment is therefore relevant to this research. Meyer and Allen (1991) define organisational commitment as reflecting three core themes: affective commitment, continuance commitment and normative commitment. As shown in Table 2, commitment can be seen as an affective point of reference towards the organisation (affective commitment), acknowledgement of the consequences related to leaving the organisation (continuance commitment), and an ethical responsibility to stay with the organisation (normative commitment) (Meyer & Allen 1991).

Table 2: Dimensions of organisational commitment

Dimension	Description	Reasons for staying
Affective commitment	The individual's psychological or emotional connection to, identification with and participation in the organisation	Individuals who are dedicated at an emotional level usually remain with the organisation because they see their individual employment relationship as being in harmony with the goals and values of the organisation for which they are currently working.
Continuance commitment	An awareness of the costs associated with leaving the organisation	Individuals with a high continuance commitment remain with a specific organisation because of the value they add as experienced employees in the organisation, and not because they want to.
Normative commitment	A sense of responsibility to continue employment with a specific organisation	Individuals who are normatively committed remain because of an internalised normative idea of ethical responsibility (moral obligation) to stay, which allows individuals to value their continued membership of a specific organisation.

In the retention context, affective commitment, psychological attachment (expressed as pride in the organisation) and willingness to exert extra effort (Cohen 1993; Mathieu & Zajac 1990; Meyer, Stanley, Herscovitch & Topolnytsky 2002) have been found to

significantly predict voluntary turnover. Employees who are affectively committed to the organisation will probably carry on working for it because they want to (Meyer & Allen 1991). Affective commitment development involves identification with the organisation and internalisation of organisational principles and standards (Beck & Wilson 2000). Because of the individual's awareness or consideration of the expenses and threats linked to leaving the organisation, continuance commitment is considered to be calculative (Meyer & Allen 1997). This differs from affective commitment, where individuals remain with an organisation because they want to and because they are familiar with the organisation and its principles. An internalised idea of responsibility and commitment allows appreciated employees continued membership of a specific organisation (Allen & Meyer 1990). The normative element is seen as the commitment individuals think about morally regarding their right to remain with a specific organisation, regardless of how much status improvement or fulfilment the organisation provides the individual over the years (March & Mannari 1977). According to Martin and Roodt (2008), affective commitment creates emotional bonds that result in a sense of responsibility and duty (normative commitment) towards the organisation. Normative commitment can also lead to continuance commitment due to emotional involvement with the organisation, which may lead to the desire for continuation.

Research objective

The present study aimed to explore whether individuals' organisational commitment is significantly influenced by their job embeddedness. Considering the current concerns about retaining valuable, talented staff members – especially black employees in the South African organisational context (Kerr-Phillips & Thomas 2009; Lesabe & Nkosi 2007; Muteswa & Ortlepp 2011) – the results may provide valuable insights in this regard.

Method

Research approach

A cross-sectional quantitative survey design was used to achieve the research objective (Shaughnessy & Zechmeister 2003).

Participants

The participants were a non-probability sample ($N = 355$) of employed adults in a South African service industry. The sample predominantly comprised employed black (92%) and female (71%) adults in the early adulthood life stage or in the establishment phases of their careers (26–40 years; 64%).

Measuring instruments

Job embeddedness was measured by using the Job Embeddedness Scale (JES) of Mitchell et al. (2001a). The JES measures three causal, not effect, indicators of the dimensions for embeddedness: fit (seven items), sacrifice (ten items) and links (six items) on a six-point Likert-type scale. The JES (Mitchell et al. 2001a) comprises two dimensions, namely organisational and community dimensions. In the present study, the examination was limited to the organisational dimension. Researchers have found that the organisational dimension better predicts employee performance than the community dimension does (Allen 2006; Halbesleben & Wheeler 2008; Lee et al. 2004). The Cronbach's alpha coefficients (internal consistency) for the five sub-scales (as obtained for the sample of this study) were as follows: fit (.84), links (.77) and sacrifice (.87). Research by Van Dyk (2012) confirmed the validity and reliability of the JES for the South African context.

Organisational commitment was measured by using the Organisational Commitment Scale (OCS) of Meyer & Allen (1997). The OCS is a multifactorial measure, rating affective commitment (eight items), continuance commitment (nine items) and normative commitment (six items) on a six-point Likert-type scale. The Cronbach's alpha coefficients (internal consistency) for the five sub-scales (as obtained for the sample of this study) were as follows: affective commitment (.56), continuance commitment (.73) and normative commitment (.74). Studies by Coetzee, Schreuder & Tladidyane (2007), Ferreira (2009) and Lumley (2010) confirmed the reliability and validity of the OCS in the South African context. In a South African study among engineers, Swart (2009) reported internal consistency reliability for the affective commitment scale of .89. Ferreira, Basson & Coetzee (2010) furthermore reported internal consistency reliability for the affective commitment scale of .83 in a study among human resource employees in South Africa.

Research procedure

The questionnaires were administered in a group session. Each questionnaire included a covering letter inviting subjects to participate in the study and assuring

them that their individual responses would remain confidential. Permission for the research was obtained from the institution's research ethics committee. A total of 396 participants attended the sessions, and a sample of 355 usable questionnaires was returned, yielding a response rate of 89.6%.

Statistical analysis

Descriptive and inferential statistics were used to analyse the data. Canonical correlational analyses were performed to assess the overall statistical relationship between the JES and OCS variables. Canonical correlation analysis limits the probability of committing type I errors (Hair, Black, Babin & Anderson 2010). The Wilks' Lambda chi-square test was performed to test for the significance of the overall canonical correlation between the independent and dependent variates of a canonical function. In order to counter the probability of a type I error, the significance value for interpreting the results was set at a 95% confidence interval level ($Fp \leq .05$).

Effect sizes were used to decide on the practical significance of the canonical correlation findings. In line with guidelines by Hair et al. (2010), the cut-off criteria for factorial loadings ($\geq .30$) were used to interpret the relative importance of the canonical structure correlations or loadings in deriving the canonical variate constructs. The redundancy index was also considered for assessing the magnitude of the overall correlational relationships between the two variates of a canonical function and the practical significance of the predictive ability of the canonical relationship (Hair et al. 2010). Squared canonical correlation (Rc^2) values of $\leq .12$ (small practical effect), $\geq .13 \leq .25$ (medium practical effect) and $\geq .26$ (large practical effect) ($Fp \leq .05$) (Cohen 1992) were also considered in the interpretation of the magnitude or practical significance of the results.

Structural equation modelling (SEM) was also performed using Amos 18 (Arbuckle 1995–2009) to validate the overall relationship between the two canonical construct variates (job embeddedness and organisational commitment) as latent variables. The canonical correlation analysis results were regarded as the measurement model. In line with guidelines provided by Garson (2008), we assumed that an adequate fit of the structural model to the measurement data exists when we obtain a confirmatory fit index (CFI) of .95 or higher, a root-mean-square error of approximation (RMSEA) of .08 or lower, and a standardised root-mean-square residual (SRMR) of .05 or lower.

Results

Means, standard deviations and Cronbach's alpha coefficients

As shown in Table 3, the sample of participants obtained the highest scores on the JES fit sub-scale ($M = 5.04$; $SD = 6.73$). In terms of the OCS, the sample of participants obtained the highest scores on the continuance commitment sub-scale ($M = 4.76$; $SD = 9.92$).

Table 3: Means and standard deviations of the JES and OCS (N = 355)

Scales	Mean	SD	Cronbach's alpha coefficient
JES			
Fit	5.04	6.73	.84
Links	4.68	6.48	.77
Sacrifice	4.68	1.94	.87
OCS			
Affective commitment	4.71	7.28	.56
Continuance commitment	4.76	9.92	.73
Normative commitment	4.70	7.55	.74

Canonical correlation analyses

Canonical correlational analyses were performed to assess the overall statistical relationship between the JES and OCS variables. Only the first function of the canonical model was statistically significant: $Rc = .55$ ($Rc^2 = .30$; large practical effect; $F(p) = 16.03$ ($p < .0001$); Wilks' Lambda (.682; $p = .0001$).

In line with guidelines by Hair et al. (2010), the cut-off criteria for factorial loadings ($\geq .30$) were used to interpret the relative importance of the canonical structure correlations or loadings in deriving the canonical variate constructs. Table 4 shows that the job embeddedness canonical variate construct was most strongly influenced (practically moderate to large effect) by the organisational links ($Rc = .69$; very large practical effect) and sacrifice ($Rc = .93$; very large practical effect) variables. The organisational commitment canonical variate construct was most strongly influenced by the normative commitment variable ($Rc = .93$; very large practical effect).

The influence of job embeddedness on black employees' organisational commitment

Table 4: Standardised canonical correlation analyses results for the first canonical function variates (N = 355)

Variates/variables	Canonical coefficients (weights)	Canonical loading (<i>Rc</i>) (structure correlations) <i>Rc</i>	Canonical cross-loadings
Job embeddedness (JES)			
Fit	-.01	.65	.35
Links (organisation)	.53	.98	.54
Sacrifice	.50	.98	.54
Shared variance: .78+++ Overall <i>Rc</i> ² : .30+++ Redundancy index: .23++			
Independent variate (job embeddedness)			
Organisational commitment			
Affective commitment	.40	.69	.38
Continuance commitment	-.03	.49	.27
Normative commitment	.80	.93	.51
Dependent variate (organisational commitment)			
Shared variance: .53+++ Overall <i>Rc</i> ² : .30+++ Redundancy index: .16++ F(<i>p</i>) = 16.03 (<i>p</i> = .0001); Wilks' Lambda (.682; <i>p</i> < .0001).			

+ *Rc*² ≤ .12 (small practical effect size); ++ *Rc*² ≥ .13 ≤ .25 (moderate practical effect size); + ++ *Rc*² ≥ .26 (large practical effect size)

As shown in Table 4, the job embeddedness canonical variate construct explained 78% (large practical effect) of the variance in the original JES variables, while the organisational commitment canonical variate construct explained 53% (large practical effect) of the variance in the original OCS variables. The JES organisational links and sacrifice variables contributed the most in explaining the variance in the organisational commitment canonical variate. The OCS normative commitment variable contributed the most in explaining the variance in the job embeddedness canonical variate. The job embeddedness canonical variate accounted for 30% (*Rc*² = .30; large practical effect) of the overall variance in the organisational commitment canonical variate. In terms of practical significance, the JES variables explained 23% of the overall variance in the organisational commitment canonical variate, while the OCS variables explained 16% of the overall variance in the job embeddedness canonical variate.

Figure 1 is a graphical depiction of the overall canonical relationship between the JES independent variables and the OCS dependent variables, as discussed in the previous section.

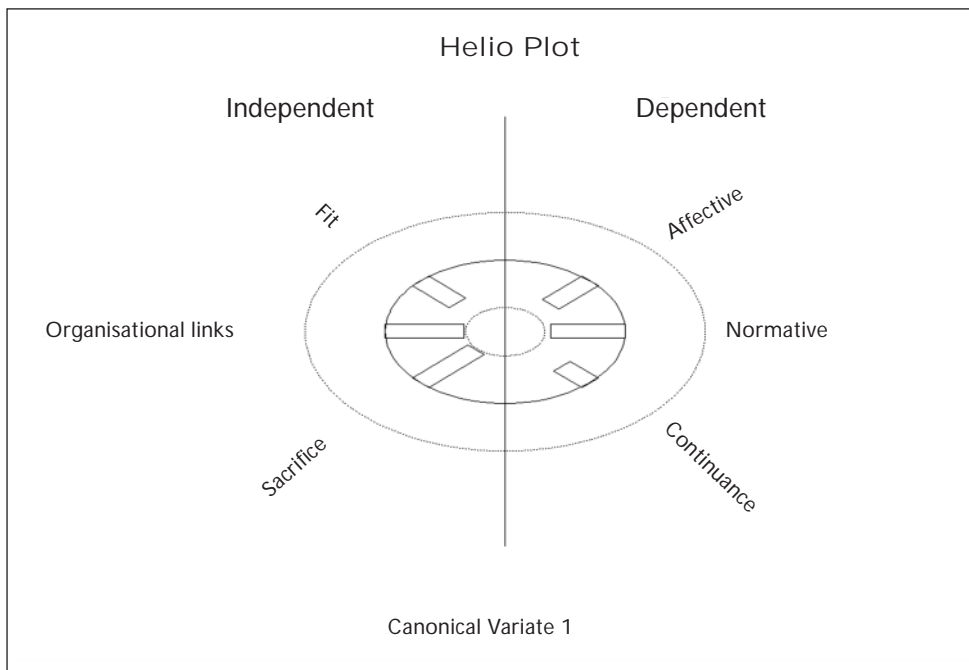


Figure 1: Canonical correlation helio plot illustrating the overall relationship between the job embeddedness canonical variate and the organisational commitment canonical variate

Structural equation modelling (SEM)

Structural equation modelling (SEM) was performed to validate the overall relationship between the two canonical construct variates (job embeddedness and organisational commitment) as latent variables. The canonical correlation analysis results were regarded as the measurement model. The initial baseline model had an adequate fit to the data because of the high CFI fit statistics ($CFI \geq .90$), with a chi-square of 961.6201 (8 df); $CMIN/df = 3.88$; $p = .000$; normed fit index (NFI) = .97; relative fit index (RFI) = .93; incremental fit index (IFI) = .98; Tucker-Lewis index (TLI) = .95; CFI = .98; RMSEA = .09 and SRMR = .03.

Figure 2 specifies the standardised path coefficient estimates between the job embeddedness construct and its variables, and the standardised path coefficient estimates between the organisational commitment construct and its variables. The

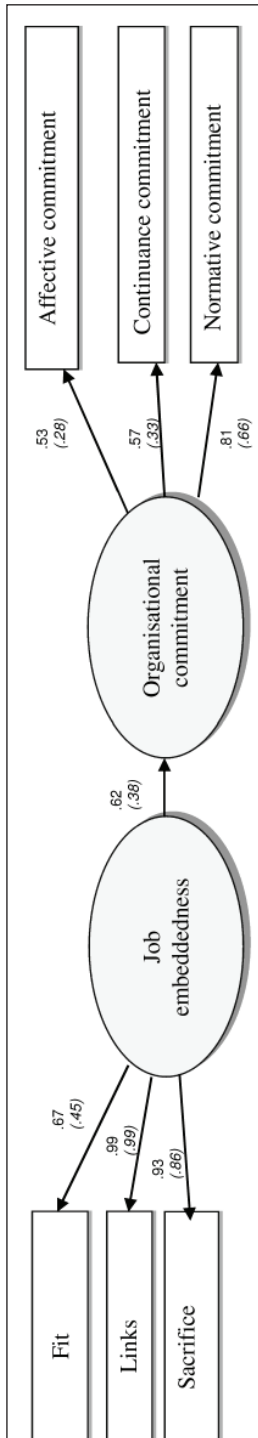
standardised path coefficient estimates between the job embeddedness and the organisational commitment construct are also specified. The model fit (shown in Figure 2) reveals that the model explains 38% (large practical effect) of the variance in the organisational commitment construct. The organisational links ($R^2 = .99$; 99% – very large practical effect) and sacrifice ($R^2 = .93$; 93% – very large practical effect) variables contributed the most in explaining the variance in the job embeddedness construct, while normative commitment ($R^2 = .66$; 66% – very large practical effect) contributed the most in explaining the organisational commitment construct.

Discussion

Overall, the results showed that the participants' organisational commitment was significantly influenced by their job embeddedness. More specifically, the participants' perceptions of the strong bonds formed with their co-workers (organisational links), and what they would have to sacrifice in terms of material and psychological benefits, appeared to have increased their sense of normative commitment.

Therefore, it appears from the findings that organisational links and sacrifice are two forces that increase individuals' sense of moral obligation (normative commitment) to remain with the organisation. Sacrifice (person–job sacrifice and person–organisation sacrifice) represents the perceived monetary and non-monetary benefits that are forfeited by organisational departure (Mitchell et al. 2001a) and the perceived ease with which a person feels that links can be broken (Feldman & Ng 2007). Therefore, the results of the present study suggest that if strong formal and informal links are formed within the organisation, individuals may come to value their continued membership of the organisation at deeper levels, which may result in a sense of moral obligation to remain a member of the organisation. Employees generally find it difficult to sever employment with the organisation when they perceive the cost of leaving and the sacrifices they have to make (financially or psychologically) as being too high (Mitchell et al. 2001a, 2001b; Shaw, Delery, Jenkins & Gupta 1998). Mallol, Holtom & Lee (2007) also suggest that the greater the number of links between the person and the social, psychological and financial web of job-embeddedness forces (constituting work and non-work friends, groups and the community and physical environment in which the person lives), the more the person is bound to the job and organisation. Employees who feel strongly embedded and committed may also define their relationships with their employers as long term and may have a lower intention to quit (Heymann 2010; Mallol et al. 2007; Mitchell et al. 2001a).

The results showed that job-embedded fit (although to a lesser extent) also strongly influenced the participants' affective, continuance and normative commitment.



Note: All standardised path coefficient estimates *** $p \leq .001$. Squared multiple correlations (R^2) shown in brackets.

Figure 2: Structural model linking the job embeddedness construct variables to the organisational commitment construct variables

Muteswa & Ortlepp (2011) suggest that perceived person–organisation fit or compatibility increases employees' intention to stay with the organisation. Research by Van Dyk (2012) found that employees' satisfaction with the characteristics of their jobs (autonomy, skill variety and challenge) is significantly related to their sense of job embeddedness (fit and sacrifice). Research by Manetje & Martins (2009) further shows that affective commitment motivates employees to maintain their membership of the organisation. According to Bagraim (2010), affective commitment encourages emotional bonds, socially supportive behaviours and low intention to leave the organisation.

Limitations of this study

Since the present study was limited to black and predominantly female early-career participants employed in the South African services industry, the findings cannot be generalised to other occupational contexts or age, race or gender groups. Furthermore, given the exploratory nature of the research design, this study can yield no statements about causation. Associations between the variables have therefore been interpreted rather than established. These findings need to be replicated with broader samples across various occupational groups and economic sectors before more comprehensive conclusions can be drawn about the relationship between employees' job embeddedness (fit, links and sacrifice) and their organisational commitment (affective, continuance and normative commitment). Longitudinal studies are also recommended to investigate the relationship between these variables and how they influence the retention of employees over the long term.

Conclusions, implications and recommendations

The findings of this study have implications for managers and human resource practitioners who are responsible for providing career development support, especially in the retention context. The findings confirmed the need to assess and develop the job embeddedness of employees, as this seems to significantly influence individuals' commitment to their work group, job and organisation. More specifically, organisations should attempt to strengthen the financial and psychological connection between the individual and the organisation. Building strong links may affectively (psychologically) bind the individual to the organisation and increase the individual's sense of moral obligation to remain with the organisation, owing to the perceived risks and sacrifices they would have to take and make should they decide to leave. Holtom and Inderrieden (2006) suggest that links can be increased by using

flexible work policies, teams and long-term projects. Sacrifice can be increased by connecting job and organisational rewards to tenure. Fit can be increased by matching employees' knowledge, skills, abilities and career needs, values and desires with the requirements of the job. Van Dyk (2012) found that training and development, career development and advancement opportunities significantly predicted employees' perceived organisational links and sense of sacrifice. Supportive relationships, such as mentoring and supervisor support, were shown to strengthen the links between employees and others in the organisation (Tanova & Holtom 2008; Van Dyk 2012).

In conclusion, our study contributes to the literature on retention and subjective (psychological) measures of individuals' career behaviour and decisions. We tested the overall relationship between job embeddedness and organisational commitment. We further validated the relationship between these constructs by means of structural equation modelling and found empirical support for the proposition that individuals' job embeddedness significantly influences their level of organisational commitment. In this regard, the research results contributed valuable new insights to the body of knowledge relating to staff retention in the South African organisational context. In the employment equity and affirmative action context, the findings may be used to inform career development support interventions that aim to assist with the retention of black staff members.

References

- Allen, D. 2006. 'Do organisational socialisation tactics influence newcomer embeddedness and turnover?', *Journal of Management*, 32: 237–256.
- Allen, N. & Meyer, J. 1990. 'The measurement and antecedents of affective, continuance and normative commitment to the organisation', *Journal of Occupational Psychology*, 63: 1–18.
- Anderson, P. & Pulich, M. 2000. 'Retaining good employees in tough times', *Healthcare Manager*, 19(1): 50–58.
- Arbuckle, J.L. 1995–2009. *Amos 18 User's Guide*. Crawfordville, FL: Amos Development Corporation.
- Bagraim, J. 2010. 'Multiple affective commitments and salient outcomes: The improbable case of information technology knowledge workers', *Electronic Journal Information Systems Evaluation*, 13(2): 97–106.
- Beck, N. & Wilson, J. 2000. 'Development of affective organizational commitment: A cross-sequential examination of change with tenure', *Journal of Vocational Behavior*, 56: 114–136.
- Burton, J.P., Holtom, B.C., Sablinski, C.J., Mitchell, T.R. & Lee, T.W. 2010. 'The buffering effects of job embeddedness on negative shocks', *Journal of Vocational Behavior*, 76: 42–51.

- Coetzee, M., Schreuder, D. & Tladinyane, R. 2007. 'Organisational commitment and its relation to career anchors', *Southern African Business Review*, 11(1): 65–86.
- Cohen, J. 1992. 'Quantitative methods in psychology: A power primer', *Psychological Bulletin*, 112(1): 153–159.
- Cohen, A. 1993. 'Work commitment in relation to withdrawal intentions and union effectiveness', *Journal of Business Research*, 26(1): 75–90.
- Crossley, C., Bennett, R., Jex, S. & Burnfield, J. 2007. 'Development of a global measure of job embeddedness and integration into a traditional model of voluntary turnover', *Journal of Applied Psychology*, 92(4): 1301–1042.
- Feldman, D. & Ng, T. 2007. 'Careers: mobility, embeddedness, and success', *Journal of Management*, 33(3): 350–377.
- Ferreira, N. 2009. The relationship between psychological career resources and organisational commitment. Unpublished master's thesis, University of Pretoria, Pretoria.
- Ferreira, N., Basson, J. & Coetzee, M. 2010. 'Psychological career resources in relation to organisational commitment: An exploratory study', *South African Journal of Human Resource Management*, 8(1): 1–9.
- Garson, G. 2008. Structural equation modeling: Statnotes. Available at: <http://faculty.chass.ncsu.edu/garson/PA765/Structur.html>. Accessed: 12 October 2011.
- Hair, J., Black, W., Babin, B. & Anderson, R. 2010. *Multivariate Data Analysis*. Englewood Cliffs, NJ: Pearson Education.
- Halbesleben, J.R.B. & Wheeler, A.R. 2008. 'The relative roles of engagement and embeddedness in predicting job performance and intention to leave', *Work and Stress*, 22(3): 242–256.
- Harter, J.K., Schmidt, F.L. & Hayes, T.L. 2002. 'Business-unit level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis', *Journal of Applied Psychology*, 87(2): 268–279.
- Heymann, M. 2010. The impact of demographics on voluntary labour turnover in South Africa. Unpublished MBA dissertation, University of Pretoria, Pretoria.
- Holtom, B. & O'Neil, B. 2004. 'Job embeddedness: A theoretical foundation for developing a comprehensive nurse retention plan', *Journal of Nursing Administration*, 34(5): 216–227.
- Holtom, B.C. & Inderrieden, E.J. 2006. 'Integrating the Unfolding Model and Job Embeddedness Model to better understand voluntary turnover', *Journal of Managerial Issues*, 18(4): 435–452.
- Holtom, B.C., Mitchell, T.R. & Lee, T.W. 2006. 'Increasing human and social capital by applying job embeddedness theory', *Organisational Dynamics*, 35(4): 316–331.
- João, T.F. 2010. The relationship between perceived career mobility, career mobility preference, job satisfaction and organisational commitment. Unpublished master's dissertation, University of South Africa, Pretoria.
- Judge, T. & Ferris, G. 1992. 'The elusive criterion of fit in human resource staffing decisions', *Journal of Business Ethics*, 15: 47–67.
- Kerr-Phillips, B. & Thomas, T. 2009. 'Macro and micro challenges for talent retention in South Africa', *South African Journal of Human Resource Management*, 7(1): 82–91.

- Kochanski, J. & Ledford, G. 2001. "How to keep me": Retaining technical professionals', *Research Technology Management*, 44(3): 31–38.
- Lee, T., Mitchell, T., Sablinski, C., Burton, J. & Holtom, B. 2004. 'The effects of job embeddedness on organisational citizenship, job performance, volitional absences, and voluntary turnover', *Academy of Management Journal*, 47(5): 711–722.
- Lesabe, R.A. & Nkosi, J. 2007. 'A qualitative exploration of employees' views on organisational commitment', *South African Journal of Human Resource Management*, 5(1): 35–44.
- Lumley, E. 2010. The relationship between career anchors, job satisfaction and organisational commitment. Unpublished master's dissertation, University of South Africa, Pretoria.
- Mallol, C., Holtom, B. & Lee, T. 2007. 'Job embeddedness in a culturally diverse environment', *Journal of Business Psychology*, 22: 35–44.
- Manetje, O. & Martins, N. 2009. 'The relationship between organisational culture and organisational commitment', *Southern African Business Review*, 13(1): 87–111.
- March, R. & Mannari, H. 1977. 'Organisational commitment and turnover: A predictive study', *Administrative Science Quarterly*, 22: 57–75.
- Martin, A. & Roodt, G. 2008. 'Perceptions of organisational commitment, job satisfaction and turnover intentions in a post-merger South African tertiary institution', *South African Journal of Industrial Psychology*, 34(1), 23–31.
- Mathieu, J. & Zajac, D. 1990. 'A review and meta-analysis of the antecedents, correlates and consequences of organisational commitment', *Psychological Bulletin*, 108(2): 171–194.
- McKnight, D.H., Phillips, B. & Hardgrave, B.C. 2009. 'Which reduces IT turnover intention the most: workplace characteristics or job characteristics', *Information & Management*, 46(3): 167–174.
- Meyer, J. & Allen, N. 1991. 'A three-component conceptualisation of organisational commitment', *Human Resource Management Review*, 1: 61–89.
- Meyer, J. & Allen, N. 1997. *Commitment in the Workplace, Theory, Research and Application*. Thousand Oaks, CA: Sage.
- Meyer, J. & Maltin, E. 2010. 'Employee commitment and well-being: A critical review, theoretical framework and research agenda', *Journal of Vocational Behaviour*, 77: 323–337.
- Meyer, J., Stanley, D., Herscovitch, L. & Topolnytsky, L. 2002. 'Affective, continuance and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences', *Journal of Vocational Behavior*, 61: 20–52.
- Mitchell, T., Holtom, B. & Lee, T. 2001a. 'How to keep your best employees: The development of an effective retention policy', *Academy of Management Executive*, 15(4): 96–108.
- Mitchell, T., Holtom, B., Lee, T., Sablinski, C. & Erez, M. 2001b. 'Why people stay: using job embeddedness to predict voluntary turnover', *Academy of Management Journal*, 44(6): 1102–1121.
- Morrow, P. 2011. 'Managing organizational commitments: Insights from longitudinal research', *Journal of Vocational Behaviour*, 79: 18–35.
- Muteswa, R. & Orllepp, K. 2011. 'Contributing factors to potential turnover in a sample of South African management-level employees', *Acta Commercii*, 11: 13–29.

The influence of job embeddedness on black employees' organisational commitment

- Neininger, A., Lehmann-Willenbrock, N., Kauffeld, S. & Henschel, A. 2010. 'Effects of team and organizational commitment: A longitudinal study', *Journal of Vocational Behavior*, 76: 567–579.
- Ng, T.W.H. & Feldman, D.C. 2010. 'The impact of job embeddedness on innovation-related behaviors', *Human Resource Management*, 49(6): 1067–1087.
- Ng, T.W.H., Sorensen, K.L., Eby, L.T. & Feldman, D.C. 2007. 'Determinants of job mobility: A theoretical integration and extension', *Journal of Occupational and Organizational Psychology*, 80: 363–386.
- Peterson, D. 2003. 'The relationship between ethical pressure, relativistic moral beliefs and organisational commitment', *Journal of Managerial Psychology*, 18(6): 557–572.
- Schneider, B., Goldstein, H. & Smith, D. 1995. 'The ASA framework: An update', *Personnel Psychology*, 48: 747–773.
- Shaughnessy, J. & Zechmeister, E. 2003. *Research Methods in Psychology*. New York: McGraw-Hill.
- Shaw, J.D., Delery, J.E., Jenkins, G.D. & Gupta, N. 1998. 'An organization-level analysis of voluntary and involuntary turnover', *Academy of Management Journal*, 41: 511–525.
- Steel, R. 2002. 'Turnover theory at the empirical interface: Problems of fit and function', *Academic Management Review*, 27: 346–360.
- Swart, B. 2009. Best company practices and organisation commitment: an exploratory study of an engineering company. Unpublished masters dissertation. University of South Africa. Pretoria.
- Tanova, C. & Holtom, B.C. 2008. 'Using job embeddedness factors to explain voluntary turnover in four European countries', *International Journal of Human Resource Management*, 19(9): 1553–1568.
- Tzeng, H. 2002. 'The influence of nurses' working motivation and job satisfaction on intention to quit: An empirical investigation in Taiwan', *International Journal of Nursing Studies*, 39: 867–878.
- Valentine, S., Godkin, L. & Lucero, M. 2002. 'Ethical context, organizational commitment and person-organization fit', *Journal of Business Ethics*, 41: 349–360.
- Van Dyk, J. 2012. The relationship between organisational commitment, retention factors and job embeddedness. Unpublished master's dissertation, University of South Africa, Pretoria.
- Weng, Q., McElroy, J., Morrow, P. & Liu, R. 2010. 'The relationship between career growth and organizational commitment', *Journal of Vocational Behavior*, 77: 391–400.
- Yao, X., Lee, T.W., Mitchell, T.R., Burton, J.P. & Sablinski, C.S. 2004. 'Job embeddedness: Current research and future directions', In Griffeth, R. & Hom, P. (Eds), *Understanding Employee Retention and Turnover*. Greenwich, CT: Information Age.