EMPLOYEE RETENTION IN A HIGHER EDUCATION INSTITUTION: AN ORGANISATIONAL DEVELOPMENT PERSPECTIVE

B. J. Erasmus*
Vice-Principal: Operations

A. Grobler*
Unisa School of Business Leadership
e-mail: grobla@unisa.ac.za

M. van Niekerk*
Academic Research Assistant
University of South Africa
Pretoria, South Africa

ABSTRACT

Talent retention and employee turnover are major concerns for higher education institutions (HEIs) because they are losing highly qualified staff to the private sector and to other HEIs that are able to offer better rewards and benefits. The turnover of talented staff is therefore a major concern for the institution under investigation. The retention and voluntary turnover decisions among a workforce of 4 651 employees was thus investigated. A quantitative cross-sectional study was conducted by means of the objective analysis of organisational data in combination with the structured questionnaire (organisational climate survey). Descriptive and inferential statistics were applied to analyse the data across demographic groups, including age, employment category (academic as well as professional and support), etc. The results indicated that the institution's turnover rate was acceptable (4.34%) and that dysfunctional turnover was marginal because employees with below-standard performance ratings had voluntarily resigned. Positive correlations and significant beta (*b*) values were reported between *Organisational citizenship*,

Leadership, *My manager* and *Compensation* and the employees' intent to stay in or to leave the organisation. These organisational climate factors were found to explain approximately 30 per cent of the variance in the employees' intent to stay in or to leave the organisation. The article recommends that a talent retention tool be developed. In addition, it contributes to the literature on retention and turnover of high-performing employees, as it underscores the importance of measuring employee turnover.

Keywords: causal model, high-performing employees, organisational climate survey, intention to leave, retention, turnover, voluntary turnover

1. Introduction

The necessity to attract and retain high-performing employees is both a concern and a challenge for organisations in general. Given the effort and expense that go into recruitment and retention, does this not imply that affected organisations – and certainly higher education institutions (HEIs) as discussed in this article – should be paying more attention to determining why their employees leave?

The South African Board for People Practices (2012) found in its annual HR survey that a significant 32 per cent of South African organisations do not concern themselves with this phenomenon at all. However, 46 per cent of them did indicate the matter of talent retention as a major concern.

Management at the institution under investigation, prior to the inception of the present study (and having recognised retention as one of the pillars of its talent management strategy) had already deemed it necessary to investigate the matter. According to Robyn (2012, 1), talent retention has become a major concern for the higher education sector because of an aging workforce and limited prospects of recruiting and retaining young, talented individuals. Robyn (2012, 1) further states that the strength of an institution lies in its human capital and that it is therefore important to align human resource policies and procedures so as to attract and retain skilled employees.

Retention is defined as the effort by employers to retain talented and high-performing employees in order to achieve organisational objectives (Fatima 2011, 25). Retaining high-performing employees or the 'best professional talent' is of great significance to organisations as it eliminates the recruitment, selection and on-boarding costs that would otherwise be incurred in replacing them (Tymon, Stumpf and Smith 2011, 293). In addition, it maintains continuity in their area of expertise. Turnover among top talent is a major concern for the higher education institution investigated here and, for this reason, the researchers took the decision to investigate retention and voluntary turnover decisions within the institution.

2. Purpose/objectives of the study

The purpose of this study is to investigate voluntary turnover at an open distance learning (ODL) higher education institution in South Africa. The results of the investigation will allow the researchers to determine trends and tendencies as well as whether it is necessary to develop a general retention strategy for the institution or to implement customised retention tools for specific groups within the institution.

2.1. Research objectives

The following research objectives are addressed in this article:

- to analyse the institution's 2012 voluntary employee turnover trends based on demographic and performance-related variables

- to analyse the results of an organisational climate survey (OC) completed both by respondents intending to leave the institution and by respondents intending to remain in the employ of the institution, with analyses of the OC examining the proportions and composition of each group as well as differences between them

- to determine which of the six OC factors contribute (variance explained) to employees' intention to leave or to stay, and how that factor impacts on the different demographic variables

- to make recommendations in terms of employee retention at the institution

3. Theoretical background

3.1. Turnover

Employee turnover, and especially turnover of top talent, has been a concern for psychologists and managers for many years (Masoga 2013, 76) and, as a result, has received considerable attention in literature. Masoga (2013, 76) further states that it is one thing to understand *why* employees leave, but to reduce turnover of and retain high-performing employees is a challenge for most organisations. The need for organisations to measure employee turnover is substantial because that measure is a predictor of organisational effectiveness (Masoga 2013).

Van Zyl (2011, 10) defines turnover as 'an employee's decision to leave the organisation', thereby reflecting some form of decision-making on the employee's part. Vandenberg (1991) as cited in Taylor, Murphy and Price (2006) further states that when an employee starts contemplating leaving the organisation (intent) turnover automatically increases. Griffeth and Hom (2001) in Mitiku (2010) distinguish between voluntary and involuntary turnover. Voluntary turnover occurs when the employee chooses to

leave the organisation (i.e. resign) and thereby terminates the employer–employee relationship. The decision and control therefore lie with the employee (Masoga 2013, 79). Voluntary turnover is further categorised into functional turnover (exit of sub-standard or poor performers) and dysfunctional turnover (exit of effective performers) (Mitiku 2010). According to Buck and Watson (2002, 176) dysfunctional turnover correlates with a decline in morale and productivity among the remaining employees and is often undesirable, disruptive and costly for the organisation. Involuntary turnover, on the other hand, is based on reasons beyond the employee's control – for example, retrenchment, dismissal, retirement, ill-health and death. In such instances, the better-performing employee is generally retained (Brown 2009, 7). The current research study focuses on voluntary turnover because the aim of the study is to determine which factors contribute to an employee's intention to leave or to stay, and to develop a retention tool to limit dysfunctional turnover.

In order to retain performing employees, it is necessary for management and HR practitioners to concern themselves with the determinants of voluntary turnover, i.e. the conditions that prompt employees to leave voluntarily. For the purposes of this study, Price and Mueller's causal model of turnover (refer to figure 1) is deemed appropriate.
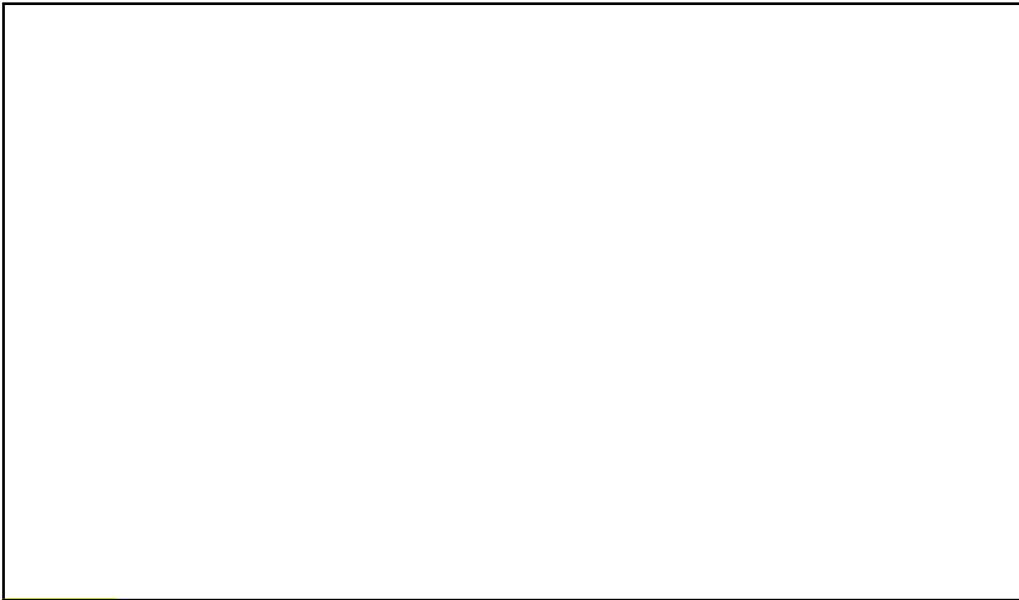
Figure 1: Price and Mueller's causal model of turnover>

Price and Mueller's model analyses the causal determinants of turnover. The model includes exogenous variables which are subdivided into three major groups: (1) environmental, (2) individual, and (3) structural variables. These variables are briefly discussed below.

3.2. Environmental variables

Two environmental variables have been identified as possible determinants of turnover, namely opportunity and kinship responsibility. 'Opportunity is the availability of alternative jobs in the environment' (Price 2000, 602), and the more job opportunities there are, the more aware the employee will be. Kinship responsibility, on the other hand, refers to the employee's responsibility towards relatives (such as parents, children, and grandparents) living in the community (Price 2000). The existence of kin produces a sense of obligation in the employee, who is therefore less likely to quit his/her job. Kinship responsibility therefore reduces turnover (Price 2000). This variable does not form part of this study.

3.3. Individual variables

Four individual variables have been investigated, namely general training, job involvement, positive affectivity and negative affectivity. According to Price (2000, 604–605), increased training opportunities produce a greater amount of turnover; secondly, increased job involvement leads to more rewards and job satisfaction and thus reduces turnover; and, lastly, high positive affectivity (favourable emotional state) increases job satisfaction and reduces turnover (this variable does not form part of this study).

3.4. Structural variables

Seven structural variables have been identified, namely autonomy, justice, stress, pay, promotional chances, routinisation and social support (Price 2000, 605). Price (2000, 605–607) found that autonomy, distributive justice, sufficient compensation, promotional chances and social support reduce turnover due to their positive impact on job satisfaction. Job stress and routinisation, on the other hand, decrease turnover due to their negative influence on job satisfaction. This variable is applicable to this study as it links with the organisational climate survey undertaken.

In summary, an employee will typically become dissatisfied with his/her job, search for alternative career opportunities and compare them with his/her current job, and will depart if any of the alternatives are considered to be better than the current situation. The traditional turnover process has been described as beginning with employee dissatisfaction, thoughts of quitting, undertaking a job search and evaluating the prospects, and as culminating in a decision to resign. Intent to leave, the antecedent to turnover, is the employee's own estimation of the probability that he/she will be resigning. Here, an increased intent to leave corresponds with a resultant higher turnover. Consequently, this investigation examines both intent to leave and those organisational climate-related variables that might affect turnover and retention.

3.5. Organisational climate variables (structural variables) and turnover

Organisational climate is defined as the employees' perceptions of the organisation (Grobler and Steyn 2010). For the purposes of this study, the relationships between six organisational climate variables (*Leadership*, *My manager*, *Organisational citizenship*, *Compensation*, *Interpersonal relationships* and *Clients, capacity and values*) and turnover have been examined.

3.4.1. Leadership and turnover

The relationship between leadership and turnover intention has been explored by a number of researchers (Long, Thean, Ismail and Jusoh 2012, 576). Their results have generally shown that leadership is a key factor in reducing or mitigating turnover intentions. Wells and Peachey (2010) examined the relationship between leadership behaviours, satisfaction with the leader, and voluntary turnover intentions among 208 participants in the United States, and they found a direct negative relationship between leadership behaviours and voluntary turnover intentions. Also, satisfaction with leaders mediated the negative relationship between leadership behaviours and turnover intent (Wells and Peachey 2010, 23). Gul, Ahmad, Rehman, Shabir and Razzaq (2012, 44), Martin and Epitropaki (2001) in Long et al. (2012, 576) and Bycio, Hackett and Allen (1995) in Wells and Peachey (2012, 27) also found that there is a negative association between turnover intentions and leadership styles.

In summary, according to Wells and Peachey (2012, 27), the rationale underlying the relationship between leadership and voluntary turnover is that the behaviours exhibited by leaders can be perceived by employees as indicators of organisational intentions. This is because leaders are the main source of information for employees about the goals and strategies of the organisation.

3.4.2. Managerial style and turnover

Previous research indicates that the manager has an effect on the employee's intention to leave. For example, Boyle, Bott, Hansen, Woods and Taunton (1999) in Tourangeau, Cummings, Cranley, Ferron and Harvey (2010) examined the effects of managerial characteristics on employees' intention to leave in the nursing sector. The researchers found that nurses with a higher intention to stay exerted higher influence on the manager. In a similar study conducted by Tourangeau et al. (2010, 29) the researchers found that nurses' relationships with and support from their managers influenced their intention to remain employed. In another study conducted by Tourangeau and Cranley (2006) the researchers found no direct relationship between managerial support and intention to stay, but they did hypothesize that managerial support indirectly affects an employee's intent to remain employed, i.e. intent was mediated through job satisfaction. Finally, in

studies conducted by Taplin and Winterton (2007), Tymon et al. (2011, 293) and Maertz, Griffeth, Campbell and Allen (2007), the researchers found that the manager plays a greater role in turnover and retention than the literature often suggests.

3.4.3. Organisational citizenship and turnover

Citizenship develops through the 'voluntary efforts of employees to exceed prescribed instructions and tasks' (Paillé and Grima 2011, 479). Citizenship is categorised as individual and organisational citizenship whereby individuals are viewed as members of the organisation and citizenship is revealed as 'helping' (forms of behaviour which reflect social, moral or practical assistance). Helping may reflect traits such as altruism, conciliation, and courtesy. Organisational citizenship is expressed through civic virtue and sportsmanship (Paillé and Grima 2011, 479).

Paillé and Grima (2011) investigated the relationship between organisational citizenship behaviour and employee intention to leave among a sample of French employees. They found that the relationship between these two variables was negative (Paillé and Grima (2011, 484)). In a similar study, Paillé (2012) examined the relationship between perceived job alternatives, intention to search, intention to leave and organisational citizenship behaviour. The researcher found that helping was positively related to intention to leave, while altruism was positively related to intention to search (Paillé 2012, 18). This suggests that the greater the level of help and altruism among employees, the more likely they are to leave their employer.

Coyne and Ong (2007) investigated the relationship between organisational citizenship behaviour and turnover intention among 162 production workers in three countries. The results illustrated that organisational citizenship behaviour was negatively related to turnover intention (Coyne and Ong 2007). This shows that employees who display lower levels of organisational citizenship behaviour are more likely to report an intention to leave the organisation than those showing higher levels of organisational citizenship behaviour.

In summary, organisational citizenship behaviour is negatively related to turnover intent (Lam, Chen and Takeuchi 2009).

3.4.4. Compensation and turnover

Snelgar, Renard and Venter (2013) investigated the impact of reward categories on the organisation's ability to attract, motivate and retain employees among a sample of 250 participants. They found that base pay was the most important reward when attracting and retaining employees. Mohlala, Goldman and Goosen (2012) found that employees will leave the organisation if they are offered better salaries elsewhere. Moncarz, Zhao and Kay (2008, 437) and Butt and Jinnah (2008, 184) found that rewards and compensation positively reduce non-management employee turnover.

In summary, ~~it could be concluded that~~ a highly competitive salary will promote employee commitment and satisfaction and thus reduce turnover. Inadequate compensation, on the other hand, will increase turnover.

3.4.5. Interpersonal relationships and turnover

'Interpersonal relationships' refers to how employees interact with one another. Bertelli (2006) found that employees who perceive that they work with friendly people have lower turnover intentions, and this was confirmed by Golden (2007), who found that satisfaction with co-workers was negatively associated with turnover intention. Regts and Molleman (2012) also found that there is an indirect and negative relationship between interpersonal relationships and turnover intention.

In summary, interpersonal relationships are negatively related to turnover intent.

3.4.5. Clients, capacity and values and turnover

The retention of skilled employees is a serious concern for managers worldwide. According to Samuel and Chipunza (2009, 410), the business environment has become very competitive and skilled employees are the differentiating factor for most organisations. Skilled employees are therefore inclined to leave the organisation when they are offered better incentives at another organisation (Samuel and Chipunza 2009, 410). Consequently, the more talented the employee the more likely he/she is to leave the organisation.

3.6. Turnover at higher education institutions and an acceptable turnover rate

Talent retention has become a major concern for all organisations in South Africa, and especially in the higher education sector, which is facing an aging workforce and limited prospects of recruiting and retaining young talented individuals (Robyn 2012, 1). Higher education institutions are also particularly vulnerable to losing their highly-qualified staff to the private sector and to other higher education institutions that offer better rewards and benefits (Ngobeni and Bezuidenhout 2011, 9962). In a study conducted by Daly and Dee (2006), the researchers made use of Price and Mueller's Causal Model of Turnover to determine the intent to stay of 1 500 participants at 15 urban universities in the United States. The results indicated that autonomy, communication openness, role conflict and distributive justice – as well as the two intervening psychological variables (job satisfaction and organisational commitment) – had a significant positive effect on intent to stay (Daly and Dee 2006, 793).

According to Rosser (2004, 319), turnover can be costly to the higher education institution as it can result in a less loyal and knowledgeable workforce, the loss of

valuable institutional memory, an increase in training cost and time, and a greater incidence of behavioural problems such as absenteeism and tardiness.

In a recent study, Metcalf, Rolfe, Stevens and Weale (2005) reported that higher education institutions' turnover rates were between 4 per cent and 8 per cent. Only one of the case studies within that study reported a significantly higher turnover rate of 13 per cent (Metcalf et al. 2005). Various studies indicated that human resource managers did not know the current turnover rate of their institution and that many did not have an opinion on whether turnover in the institution was high or not – at the same time, however, they did not believe that their institution had a turnover problem (Metcalf et al. 2005). To contextualise the turnover in higher education institutions, it is reported that internationally, the average annual turnover among employees at public research institutions is approximately 17 per cent (Buck and Watson 2002, 177). A benchmark for South Africa is currently unavailable.

An important question is thus 'What constitutes an optimal turnover rate?' Early findings (Abelson and Baysinger 1984; Mosher and Kingley 1936) indicated that too little turnover leads to stagnation and that too much turnover leads to instability and a lack of expertise – but that an optimal turnover rate minimises turnover costs. In a study conducted by Glebbeek and Bax (2004) in Kohn (2008, 15) the researchers proved that employee turnover and organisational performance have an inverted U-shape relationship and that both overly-high and overly-low turnover rates are harmful to the organisation. Findings (Kohn 2008; Luketic 2009; Mead and Andrews 2009) indicate that (1) the turnover of high-performing groups should be minimised to maintain the investment of good working people and working relationships; (2) turnover rates vary across industries and organisations; and (3) extremely low turnover rates can be dysfunctional, unhealthy and costly. Therefore, (4) the optimal level of turnover maximises the difference between its benefits and costs. In summary, there is no base percentage that is specified as an acceptable turnover rate (Masoga 2013, 109).

4. methodology

The methodology used in this study was quantitative in nature. The researcher made use of two methods to collect data: (1) objective organisational data (the actual employee turnover data and performance management data were analysed) and (2) the 2012 organisational climate survey undertaken in the institution.

4.1. Objective employee turnover data (2012)

The data reflected below was extracted from the institution's human resource databases:
● 'End-of-year headcount' is the number of people employed at the institution at the close of business on 31 December 2012.

● Only voluntary terminations were analysed and the analysis was limited to resignations from the institution (employee-initiated action or cause). For the purpose of this investigation only resignations by permanent staff and fixed-term contract staff who resigned prior to the end of their contracts were included.

● The performance management data (IPMS) used was the mean IPMS score for 2011 and/or 2012. A five-point Likert scale was used, where five was 'outstanding' and one 'poor'.

4.2. Organisational climate (OC) survey

The OC survey was designed to measure the general perceptions of the workforce against critical human capital drivers; to identify areas of strengths and weaknesses throughout the institution; to identify the issues impacting on employee commitment and motivation; and to address workforce issues and prioritise organisational development issues in the survey outcomes (Grobler and Grobler 2015). A unique six-factor model was developed and sixty items/statements were used to measure the dimensions on a five-point Likert scale. The six factors examined were: *Leadership*, *My manager*, *Organisational citizenship*, *Compensation*, *Interpersonal relationships* and *Clients, capacity and values*. These factors are briefly summarised in table 1.

Table 1:   Factors of the adopted OC survey

Factor	Description
Leadership	The ability to constantly seek new and better ways of doing things, to solve problems, to communicate effectively, to make effective changes to help the institution and to put people first and building relationships.
My manager	This factor refers to the availability and accessibility of the manager, whether he/she is responsive to the employee's concerns and whether he/she can recognise performance and provide constructive feedback.
Organisational citizenship	The extent to which an individual's voluntary support and behaviour contributes to the organisation's success.
Compensation	How the employee perceives his/her remuneration package in comparison to his/her performance and job roles and responsibilities.
Interpersonal relationships	How employees interact with each other encompasses the principles of collective work ethos and Ubuntu at the university.
Clients, capacity and values	The activities that the university uses to acquire skilled staff; to identify employees with potential and develop them to create a pool of talented employees; and how employees aspire to deliver good service to the university's clients in line with its values, vision, mission and goals.

41

1.1.1. Sampling

The workforce of 4 651 was targeted to participate in the OC survey. Workforce composition was made up of permanent and non-permanent employees, all of whom were either permanently appointed or on fixed-term contracts. The roles of the workforce were categorised as academics, professionals and support staff. The demographic information used was collected by means of the OC questionnaire.

1.1.2. Data collection process/measurement instruments

The retention of staff is considered to be a high priority within the organisation concerned, and this study was mandated through the organisation's existing institutional operational plan as part of the established talent management strategy. Permission was obtained from the ethics committee to conduct the study. Permission to access the organisation's Human Resource Information System (HRIS) in order to obtain the required employee turnover data was also obtained.

The research design used for this study is known as cross-sectional design. According to Leedy and Ormrod (2010, 186), in a cross-sectional study people from several different demographic groups are compared. A cross-sectional design is 'a type of research design involving the collection of information from any given sample of population elements only once' (Moutinho and Hutcheson 2011, 68).

This design was deemed appropriate for this study as it will be able to better describe relationships between organisational climate (as independent variable) and the intention/propensity to leave the organisation as dependent variable. Cross-sectional studies are in general easier to conduct because the researcher can collect all of the needed data at a single time (Moutinho and Hutcheson 2011, 68). Considering that this project has a tight schedule and must be completed within a year, a cross-sectional study was considered more appropriate.

In terms of the OC, all the staff members were invited via e-mail to participate in the survey. The e-mail sent to each affected staff member contained a link to the online questionnaire. This method of data collection is appropriate because it is inexpensive and not too time consuming. In addition, data entry is automated and a large amount of data can be obtained in a relatively short period of time.

Cronbach's alpha coefficients were calculated for each construct to determine scale reliability, with all six factors reporting acceptable alpha coefficients of higher than .70 (Grobler and Grobler 2015).

1.1.3. Statistical analysis

Statistical analysis was conducted using the statistical program Statistica (Version 11). The researcher made use of descriptive statistics (e.g. arithmetic means, standard deviations, skewness and kurtosis) and inferential statistics. Correlation coefficients were used to

determine the relationships between the variables and were interpreted with .1 (small effect), .30 (medium effect) and .5 (large effect) as the minimum criterion for practical significance (Cohen 1988). Effect sizes were used to determine the significance of the findings (Tabachnick and Fidell 2007, 54). One-way ANOVA was used to determine the differences between the groups (level of significance was $p<.05$), and the researcher also made use of a *Scheffe* post-hoc test to determine if the groups were different. To determine the percentage of variance in the dependent variable that is explained by the independent variable, the researcher made use of multiple regression analysis. Beta (b) values were reported to answer the question of which of the independent variables (OC factors) have a greater effect on the dependent variable (intention to leave the organisation) in the multiple regression analysis.

5. Results

5.1. Objective institutional data

5.1.1. Turnover data

The following data were retrieved by the researchers from the human resource information system (HRIS) regarding turnover.

Table 2:   Employee turnover: 2010–2012

Category	2010 Staff = 4 227		2011 Staff = 4 470		2012 Staff = 4 651	
	n	% of staff population	*n*	% of staff population	*n*	% of staff population
Contract expired	6	.14	6	.13	5	.10
Deceased	5	.11	12	.26	16	.34
Dismissal	5	.11	7	.15	10	.21
Early retirement	11	.26	10	.22	2	.04
Ill-health retirement	8	.18	5	.11	4	.08
Resignation – permanent appointment	86	2.03	80	1.78	87	1.87
Resignation – contract appointment	0	0	0	0	2	.04
Retirement	78	1.84	88	1.96	76	1.63
Voluntary early retirement	0	0	10	.22	0	0
Redundancy/retrenchment	0	0	2	.04	0	0
	199	4.70	219	4.89	202	4.34

The analysis over a three year period yielded consistent results, with the overall employee turnover being the highest in 2011 (4.89%) compared to 2010 (4.70%) and to 2012 (4.34%), the last-mentioned representing the lowest turnover. The main reason for the slight deviation reflected in 2011 was 10 voluntary early retirements and two redundancies. Due to the fact that the overall turnover, as well as the voluntary turnover (resignation in table 2), is consistent over the three year period, only the 2012 voluntary turnover will be analysed in depth, with the assumption that it may be generalised for other periods as well.

The information provided as part of the 2012 annual report was further analysed in terms of the race and gender demographic categories used in the OC survey. The rationale for this was to identify high-risk employee turnover groups and the findings are presented in table 3.

Table 3:   Turnover of high risk groups (2012)

Race	Gender	Professional and support staff			Academic staff			Combined	
White	Female	610	34	5.57	458	28	6.11	1 068	62
White	Male	287	8	2.79	331	21	6.34	618	29
Total White		897	42	4.68	789	49	6.21	1 686	91
African	Female	1 060	20	1.89	221	10	4.52	1 281	30
African	Male	966	43	4.45	381	24	6.30	1 347	67
Total African		2 026	63	3.11	602	34	5.65	2 628	97
Coloured	Female	73	4	5.48	15	0	0	88	4
Coloured	Male	59	2	3.39	20	0	0	79	2
Total Coloured		132	6	4.55	35	0	0	167	6
Indian	Female	53	3	5.66	45	3	6.67	98	6
Indian	Male	42	1	2.38	30	1	3.33	72	2
Total Indian		95	4	4.21	75	4	5.33	170	8
Total	Female	1 796	61	3.39	739	41	5.54	2 535	102
Total	Male	1 354	54	3.98	762	46	6.03	2 116	100
Total		3 150	115	3.65	1501	87	5.80	4 651	202

The overall turnover rate for the institution for the period studied was 4.34 per cent. This result represented the combined turnover rate in the academic environment (5.80%) and the professional and support environment (3.65%). The highest turnover rate was recorded by the White racial group at 5.00 per cent, followed by the Indian, African and Coloured groups with 4.71 per cent, 4.00 per cent and 3.59 per cent respectively. The race and gender combination reflecting the highest turnover rate was Indian female

(6.00%) and White female (5.81%) while the African female (2.00%) and Coloured male (2.53%) race–gender demographic groups reported the lowest turnover rate.

The highest turnover rate for the academic environment was among Indian females (6.67%), followed by White males (6.34%), African males (6.30%) and White females (6.11%). The lowest turnover rate was for the Coloured group (none), followed by Indian males (3.33%) and African females (4.52%).

The highest turnover rate in the professional and support environment was among the Indian female group (5.66%), followed by White females (5.57%) and Coloured females (5.48%).

5.1.2. Voluntary turnover data

Resignation as a type of service termination was used solely in the analysis of voluntary employee turnover. The voluntary turnover rate was relatively consistent over the three-year period reported in table 2, with 2.03 per cent, 1.78 per cent and 1.87 per cent for 2010, 2011 and 2012 respectively. The voluntary turnover data are displayed in table 4.

Table 4:   Voluntary turnover data (2012)

Race	Gender	Professional and support staff			Academic staff			Combined		
		n	Voluntary turnover	% Turnover	n	Voluntary turnover	% Turnover	n	Voluntary turnover	% Turnover
White	Female	610	2	.32	458	11	2.40	1 068	13	1.22
White	Male	287	1	.34	331	6	1.81	618	7	1.13
Total White		897	3	.33	789	17	2.15	1 686	20	1.19
African	Female	1 060	16	1.50	221	8	3.61	1 281	24	1.87
African	Male	966	14	1.44	381	20	5.24	1 347	34	
Total African		2 026	30	1.48	602	28	4.46	2 628	58	2.21
Coloured	Female	73	3	4.10	15	0	0	88	3	3.41
Coloured	Male	59	1	1.69	20	0	0	79	1	1.27
Total Coloured		132	4	3.03	35	0	0	167	4	2.40
Indian	Female	53	1	1.88	45	3	6.66	98	4	4.08
Indian	Male	42	0	0	30	1	3.33	72	1	1.39
Total Indian		95	1	1.05	75	4	5.33	170	5	2.94
Total	Female	1 796	22	1.24	739	22	2.97	2 535	44	1.74
Total	Male	1 354	16	1.18	762	27	3.54	2 116	43	2.03
Total		3 150	38	1.20	1 501	49	3.26	4 651	87	1.87

The overall voluntary employee turnover for the institution was 1.87 per cent for 2012, with the academic environment returning a rate of 3.26 per cent and the professional and support environment a rate of 1.20 per cent. The highest voluntary turnover percentage was reported for Indian females (6.66%), followed by African males (5.24%) in the academic environment.

5.1.3. Voluntary employee turnover and performance management data

As discussed in the literature review, it is important to retain high-performing employees and eliminate dysfunctional turnover. The IPMS scores of employees who resigned were thus compared with the institution's IPMS mean score, and the researchers differentiated between the academic and professional and support environments. The results are indicated in table 5.

Table 5:   IPMS (performance management) scores

Category	Subcategory	IPMS (2011 and 2012)					
		University's mean score (2012)	Mean score of subjects	n*	SD	Minimum	Maximum
Role	Academic	3.55	3.42	46	.30	2.90	4.10
	Professional and support	3.48	3.33	32	.28	2.60	3.70

The mean IPMS score reported by the 46 academic employees included in the voluntary turnover analysis was 3.42, compared to the institution's mean score for academics in 2012 of 3.55. Those employees who resigned ~~were,~~ can be considered as relatively below-average performers, as 71.7 per cent (33 of the 46) reported performance scores below the mean score of their group (academic employees) in 2012.

The professional and support employees who resigned reported a mean IPMS score of 3.33, with the professional and support employees obtaining a mean IPMS score of 3.48 in 2012 – the same trend as with the academic employees with 58.1 per cent of the resigned employees performing below the mean score of the professional and support employees in the institution. The distribution across the five-point scale is presented in table 6.

Table 6: Distribution of IPMS scores of employees who have resigned, on a five-point scale

Sub-category	Mean score (n)	1 ≤ x < 2		2 ≤ x < 3		3 ≤ x < 4		4 ≤ x < 5	
Academic	3.42 (n=46)	0	0%	1	2.04%	42	85.7%	3	6.12%
		Below group mean score of 3.42				Above group mean score of 3.42			
		33		71.7%		13		28.3%	
Professional and support	3.33 (n=35)	0	0%	3	7.9%	32	76%	0	0%
		Below group mean score of 3.33				Above group mean score of 3.33			
				58.1%		15		41.9%	

The majority of employees who resigned (85.7% and 76% of the academic and professional and support employees respectively) fell within the 3–4 IPMS score range. Three (or 7.9%) of the professional and support employees had scored a sub-standard (below three) performance rating, as had one (or 2.04%) of the academic employees. It is further important to note that seven of the 42 academic employees falling within the 3–4 point range received a rating of three, along with five of the 32 professional and support employees.

- *Dysfunctional turnover:* The three academic employees who fell in the 4–5 point range were three White females – two of them professors and one a senior lecturer – aged 57, 40 and 43 respectively.

- *Functional turnover:* The single academic who scored a below-three IPMS rating was a 51-year-old White female. The three employees in the professional and support environment who also scored a below-three IPMS rating were one African male, one White female and one African female, aged 45, 37 and 47 respectively.

5.2. Organisational climate (OC) survey

5.2.1. Item level

The negative responses to questions in the 2012 OC survey regarding the individual's propensity to leave (very high intention and high intention) were isolated and analysed per demographic group. They are expressed here as a percentage of that specific group and the results are presented in table 7.

Table 7: The employee's propensity to leave

Category	Sub-category	Very high intention to leave (%)	High intention to leave (%)	% of *n*
Role	Academic	4.59	6.24	10.83[1]
	Professional and support	2.93	3.53	6.46
Race	African	2.53	3.43	5.96
	Coloured	5.08	3.39	8.473
	Indian	6.58	2.63	9.21[1]
	White	4.09	5.58	9.67[1]
Disability	Yes	0	4.17	4.17
	No	3.41	4.25	7.66[3]
Age	>25	2.56	2.56	5.12
	25–29	1.95	3.91	5.86
	30–39	3.37	4.22	7.59[3]
	40–49	2.88	4.23	7.11
	50–59	4.11	4.93	9.04[2]
	60 +	7.32	2.44	9.76[1]
Tenure	1–2	2.29	4.33	6.62
	2–3	2.38	3.70	6.08
	4–7	3.09	4.64	7.73[3]
	8–15	4.40	4.89	9.29[2]
	15+	10.0	3.33	13.33[1]
Gender	Female	2.97	4.26	7.23
	Male	3.98	4.23	8.21[3]
Employment type	Permanent	3.38	4.31	7.69[3]
		3.27	3.74	7.01
		3.31 SD=1.99	4.17 SD=.91	7.48 SD=2.00

[1]High risk – relative (≥ Mean + SD)
[2]Moderate risk – relative (≥ Mean + SD/2)
[3]Risk – relative (≥ Mean)

The demographic groups that reported the highest intention to leave (high risk), were academic employees (10.83% of the academic respondents), employees with 15 years and more of service, employees 60 years and older (it is noted that both groups are nearing retirement and that this result may represent natural attrition – it is thus considered less serious), followed by White (9.67%) and Indian (9.04%) respondents within the respective demographic groups.

The moderate risk group were the tenure group 8–15 years at 9.29 per cent and the age group 50–59 at 9.04 per cent.

The general risk group were the Coloured group (8.47%), followed by the total male group (8.21%).

The demographic groups that reported the lowest intention to leave (as a percentage of that specific group) were employees with disabilities (4.17%), followed by the age group of employees younger than 25 (5.12%).

A further analysis was conducted on item level by comparing the mean scores obtained by the respondents who indicated an intention to leave the institution with those who indicated their intent to stay. The difference between the two sets of data was calculated, with a positive score indicating a higher mean score on the item by the respondents with the intent to stay. The differences on item level were ranked, with one being the lowest difference and 60 the highest. These results are presented in table 8.

Table 8:   Analysis on item level, comparing the mean scores of respondents who indicated their propensity to leave or to stay in the organisation

Factor	Nr	Item	Respondents who indicated to:		Diff	p value	Rank /60
			Stay	Leave			
Leadership	58	In general, policies are applied fairly and consistently	3.43	2.34	1.09	$p<.01$	42#
	44	The culture of the university maintains and promotes pride and a sense of continuing excellence	3.74	2.39	1.35	$p<.01$	59
	52	We are constantly seeking new and better ways of doing things	3.81	2.96	.84	$p<.01$	15
	50	The current structure (levels of management) allows me to be effective as an employee	3.41	2.20	1.21	$p<.01$	53
	54	The university values and promotes creativity and innovation	3.75	2.57	1.18	$p<.01$	50#
	27	Communication between employees and management is effective	3.10	1.99	1.11	$p<.01$	44#
	28	Communication between levels of management is effective	3.12	2.06	1.06	$p<.01$	38
	39	The university cares about its employees	3.56	2.15	1.41	$p<.01$	60
	40	We value the many different opinions of our employees	3.38	2.19	1.19	$p<.01$	52

Factor	Nr	Item	Respondents who indicated to:		Diff	*p* value	Rank /60
			Stay	Leave			
	32	The university's leadership know what is going on in the institution	3.20	1.95	1.25	*p<.01*	56
	32	The university's leadership know what is going on in the institution	3.20	1.95	1.25	*p<.01*	56
	31	The university's leadership make decisions with courage and conviction	3.50	2.38	1.12	*p<.01*	46
	36	The university's leadership are making effective changes to help the institution be successful	3.54	2.30	1.24	*p<.01*	54#
	38	The university's leadership communicate a clear and compelling vision for the institution	3.78	2.81	.97	*p<.01*	32#
	33	The university's leadership act in a manner that is consistent with our institution's values	3.45	2.18	1.27	*p<.01*	57
	37	The university's leadership are committed to serving the needs of others first	3.24	2.09	1.15	*p<.01*	49
	35	The university's leadership build effective relationships with all employees	3.28	2.19	1.09	*p<.01*	42#
	34	The university's leadership communicate effectively and transparently to all employees	3.35	2.28	1.07	*p<.01*	39#
My manager	64	I am satisfied with my opportunities for growth and development at the university	3.56	2.26	1.30	*p<.01*	58
	53	I am encouraged to come up with new ideas and suggestions for improving our work	3.71	2.64	1.07	*p<.01*	39#
	30	I am consulted on important matters that affect my job	3.34	2.23	1.11	*p<.01*	44#
	22	My manager expects a high quality of work from everyone	4.12	3.33	0.78	*p<.01*	11
	73	My performance is assessed against clear and measurable objectives	3.44	2.37	1.07	*p<.01*	39#

Factor	Nr	Item	Respondents who indicated to:		Diff	*p* value	Rank /60
			Stay	Leave			
	63	I receive regular training to do my job to the best of my ability	3.58	2.84	.74	*p<.01*	8#
	24	I can speak openly without fear of victimisation	3.46	2.33	1.13	*p<.01*	48
	18	I clearly understand what my manager expects of me in my job	3.99	3.10	0.89	*p<.01*	22#
	21	My manager distributes work evenly among our team	3.51	2.56	.95	*p<.01*	29
	74	My performance goals and objectives are established in consultation with my supervisor	3.66	2.80	.86	*p<.01*	17#
	68	I usually hold discussions with my line manager about my career aspirations	3.07	2.34	.74	*p<.01*	8#
	70	My performance feedback discussions (formal and/or informal) are constructive and valuable to me	3.57	2.59	.98	*p<.01*	34
	19	My manager is easily available/ accessible to me	3.98	3.16	.83	*p<.01*	14
	23	My manager listens to me and is responsive to my concerns	3.81	2.84	.97	*p<.01*	32#
	20	My manager creates an environment of support and trust	3.74	2.75	.99	*p<.01*	35
	75	My manager regularly recognises me for doing a good job	3.46	2.60	.86	*p<.01*	17#
	69	My manager gives me regular feedback on how I am doing	3.25	2.53	.72	*p<.01*	7
	62	My manager helps me develop my skills and abilities	3.63	2.71	.92	*p<.01*	25#

Factor	Nr	Item	Respondents who indicated to:		Diff	*p* value	Rank /60
			Stay	Leave			
Organisational citizenship	86	The institution has clear strategic priorities and goals to reach our objectives	3.91	3.26	.64	*p<.01*	5
	10	I am willing to go the extra mile when necessary	4.67	4.25	.42	*p<.01*	1
	9	Overall, I am committed to doing my best work at the university	4.65	4.20	.45	*p<.01*	2
	42	I clearly understand the university's vision, mission and values	4.19	3.63	.56	*p<.01*	4
	43	I willingly support my the university's vision, mission and values	4.27	3.74	.52	*p<.01*	3
Compensation	72	There is a clear link between my performance and pay	3.12	2.16	.96	*p<.01*	30#
	78	I am satisfied with the benefits packages provided by my institution	3.49	2.60	.88	*p<.01*	20#
	76	I feel that my total compensation package is fair compared to similar jobs in the market	3.47	2.53	.94	*p<.01*	28
	77	I believe my pay matches my job role and responsibilities	3.28	2.32	.96	*p<.01*	30#
Interpersonal relationships	17	I feel supported by other employees even in the face of challenging situations	3.69	2.84	.85	*p<.01*	16
	25	Communication amongst members of my department is effective	3.44	2.58	.87	*p<.01*	19
	15	I enjoy working with the people in my team	4.08	3.16	.92	*p<.01*	25
	14	The people I work with treat me with respect	3.97	3.26	.71	*p<.01*	6
	16	People within my department collaborate with each other and work as a team	3.62	2.72	.90	*p<.01*	24
	13	The people I work with help each other when needed	3.86	2.93	.93	*p<.01*	27

Factor	Nr	Item	Respondents who indicated to:		Diff	*p* value	Rank /60
			Stay	Leave			
Clients, capacity and values	51	We have the right employees in job roles that fit their experience, skills and career goals	3.02	1.83	1.18	*p<.01*	50#
	83	We are raising the talent levels of our lecturers through appointments/promotion	3.46	2.34	1.12	*p<.01*	46#
	84	We attract and hire talented lecturers at the university	3.50	2.50	1.00	*p<.01*	36
	82	Meeting the aspirations and expectations of our learners is a top priority at the university	3.79	2.78	1.01	*p<.01*	37
	45	Employees behave in a way that reflects our value of Social Justice and Fairness	3.32	2.45	.88	*p<.01*	20#
	81	We appreciate and understand the aspirations of our learners with regard to their education	3.75	2.86	.89	*p<.01*	22#
	80	We maintain very high standards of quality education at the university	3.69	2.45	1.24	*p<.01*	54#
	85	Our lecturers instil a passion for learning	3.45	2.71	.74	*p<.01*	8#
	46	Employees behave in a way that reflects our value of Integrity	3.33	2.51	.82	*p<.01*	12#
	47	Employees behave in a way that reflects our value of Excellence	3.30	2.48	.82	*p<.01*	12#

The areas of highest difference between employees who indicated their intent to stay compared to those who indicated their intent to leave were items related to the leadership of the institution, with the lowest difference reported on items related to the respondent him/herself (organisational citizenship). The differences between the two groups (those who have a propensity to stay and those who want to leave the organisation) on all the items are statistically significant, on p<.01 level.

5.2.2. Factor level

As mentioned in the literature review, the employee's intention to leave is regarded as an antecedent to turnover; therefore an increased intent to leave corresponds with a

resultant high turnover. In order to determine the factors contributing to the individual's intention to remain or leave the institution, the OC item and propensity to stay/leave was used as the dependent variable. The six OC factors were used as independent variables in a multiple regression by using the respondent group as a whole. The results are presented in table 9.

Table 9: Multiple regression analysis with the propensity to stay or leave the organisation as dependent (predicted) variable, and the six organisational climate factors as independent (predictor) variables

Organisational climate factors						
Leadership	My manager	Organisational citizenship	Compensation	Interpersonal relationships	Clients, capacity and values	R2 only
.25	.11	.28	.07	−	−	.31 (p <

The propensity to stay or to leave the employ of the institution depends on four of the six OC factors (31% of the variance explained). The significant beta values (*b*) reported for each of the OC factors that have an effect on the dependent variable (i.e. propensity to stay in the organisation) are *Organisational citizenship* (*b*=.28), *Leadership* (*b*=.25), *My manager* (*b*=.11) and *Compensation* (*b*=.07) (in ranking order). *Interpersonal relationships* and *Clients, capacity and values* did not contribute to the propensity to stay.

As it is necessary to differentiate between the retention factors for the different demographic groups in the institution, the analysis was extended to perform a separate multiple regression analysis per demographic group. The OC item, propensity to stay or leave the institution, was used as dependent variable, with the six OC factors (role, race, disability, age, tenure, gender and employment type) as independent variables. Only the significant results ($p \leq .05$) are reported and are presented in table 10.

Table 10: Propensity to stay or leave of different demographic groups: Multiple regression analysis

Category	Sub-category	Organisational climate factors						R² only p≤.05 reported
		Leadership	My manager	Org. citizenship	Compensation	Interpersonal relationships	Clients, capacity and values	
Role	Academic	b =.36*	–	b =.28*	–	–	–	.44
	Professional and support	b =.20**	–	b =.25*	–	–	–	.23
Race	African	b =.40**	–	b =.22**	–	–	–	.24
	Coloured*	–	–	–	b =.63**	–	–	.23
	Indian*	–	–	b =.45**	–	–	–	.48
	White	b =.19**	b =.12**	b =.34*		–	–	.36
Disability	Yes*	–	–	–	–	–	–	–
	No	b =.25*	b =.10*	b =.28*	b =.07*	–	–	.32
Age	< 25*	–	–	–	–	–	–	–
	25–29	–	–	–	–	–	–	–
	30–39	b =.35*	–	b =.20*	–	**-	–	.29
	40–49	–	–	b =.43*	–	b =.18*	–	.39
	50–59	b =.26*	b =.25*	b =.26*	–	–	–	.30
	60+*	–	–	–	–	–	–	–
Tenure	0–1*	–	b =.34*	b =.33*	–	–	–	.40
	1–2	–	–	b =.37*	b =.27*	–	–	.34
	2–3	–	–	b =.24*	–	–	–	.36
	4–7	b =.55*	–	–	–	–	–	.34
	8–15	b =.24*	b =.19*	b =.28*	–	–	–	.26
	15+	–	–	–	–	–	–	–
Gender	Female	–	–	b =.35*	–	–	–	.27
	Male	b =.40*	–	b =.23*	–	–	–	.38
Employment type	Permanent	b =.24*	b =.11*	b =.31*	b =.08*	–	–	.35
	Contract	–	–	–	–	–	–	.14
Number of occurrences		11	6	16	4	1	0	

Demographic groups with a relatively low representation in the study
*** Only significant on beta values (b) reported*

The propensity to stay or to leave the employ of the institution depends mainly on four of the six OC factors across the demographic groups, with *Organisational citizenship* reflecting the highest number of occurrences (16). This is followed by *Leadership* (11), *My manager* (6), *Compensation* (4) and *Interpersonal relationships* (2). The factor *Client, capacity and values* did not contribute to the propensity to stay for any of the demographic groups.

6. discussion

6.1. turnover

The results of this investigation indicate that the employee turnover rate for the institution over a three-year period was very consistent, ranging from 4.89 per cent (highest; 2011) to 4.34 per cent (lowest; 2012), with 2010 being 4.70 per cent (refer to table 2). When compared to the results obtained in the literature review, it seems as if the institution's turnover rate compares well with the international higher education benchmarks of 4 per cent to 8 per cent and even 13 per cent. The turnover rate obtained is thus sufficient because, according to Kohn (2008), the turnover rate should be minimised to maintain the investment of good working people and working relationships. In addition, an annual turnover rate of more than 10 per cent could cause damage to the organisation (Mead and Andrews 2009).

It is important to note that the voluntary turnover rate of the academic environment (3.26%) was higher than that of the professional and support environment (1.20%) and that the demographic group that reported the highest voluntary employee turnover rate was the Indian female group in the academic environment ($n = 45$) with 6.66 per cent, followed by the African male group, also in the academic environment (5.24%).

As discussed in the literature review, voluntary turnover can be classified into functional turnover (exit of poor performers) and dysfunctional turnover (exit of effective performers) (Mitiku 2010). It would therefore be optimal to reduce dysfunctional turnover and increase functional turnover. In this research study the performance management results of the employees who resigned were compared to those of the institutional means (academics = 3.55; professional and support = 3.33). It was found that the group as a collective – as well as the group from the academic and professional and support environment that had resigned – measured below the institutional and group means. Of the academic employees who resigned, 71.7 per cent scored below the group mean score, while 58.1 per cent in the professional and support environment scored below the group mean. This phenomenon is thus functional turnover. The turnover of below-average performers could be attributed to (1) poor recruitment and appointment and/or (2) insufficient training and development opportunities. Only three cases of dysfunctional voluntary employee turnover were identified among White females in academic posts.

The employee's intent to leave (an antecedent to turnover) was further used to determine which groups were more susceptible to voluntary employee turnover. The high risk groups were academic employees ($\pm11\%$) followed by the White and Indian groups. There are, however, factors such as age and tenure that also contributed to intentions to leave, but these were more related to natural attrition, namely retirement, death, and medical boardings.

6.2. Organisational climate

The OC survey was used to determine how employees perceive their work environment by assessing the general perceptions of the workforce against the six human capital drivers.

Factors that had a positive relationship on the participants' intention to stay were *Organisational citizenship* (30%), followed by *Leadership* (14%), *My manager* (14%) and *Compensation* (7%). *Interpersonal relationships* and *Clients, capacity and values* did not contribute to the propensity to stay. These results are consistent with the findings of the literature. Paillé and Grima (2011) found that employees who show lower levels of organisational citizenship behaviour are more likely to leave the organisation than employees who show high levels of organisational citizenship. This notion is also supported by Coyne and Ong (2007). Gul et al. (2012, 44), Long et al. (2012, 576) and Wells and Peachey (2010) perceived a negative relationship between leadership and intention to leave: i.e. if employees are satisfied with their leader, their likelihood of leaving the organisation is reduced. Employees leave if their managers fail to lead them – this was confirmed by Maertz et al. (2007), Taplin and Winterton (2007), Tourangeau et al. (2010), and Tymon et al. (2011). Lastly, literature confirms that competitive salaries will promote employee commitment and satisfaction, and thus reduce the employee's intent to leave (Butt and Jinnah 2008; Mohlala et al. 2012; Moncarz et al. 2008; Snelgar et al. 2013).

In summary, the following conclusions could be drawn: (1) the turnover rate of the institution for 2012 was within an acceptable range (4.34%); (2) dysfunctional turnover was marginal because employees with below standard performance ratings had voluntarily resigned from the organisation; and (3) four OC factors – *Organisational citizenship, Leadership, My manager* and *Compensation* – were positive predictors of the employees' intent to stay.

7. RECOMMENDATIONS AND CONCLUSION

In conclusion, it was not deemed necessary to develop a retention tool for the institution because (1) the turnover rate is within an acceptable range and (2) dysfunctional turnover is not a concern. It was suggested, however, that a retention toolkit be developed to assist line managers regarding options for retaining high-performing employees who have indicated that they intend to leave. Such a retention tool may include career discussions, setting of personal goals, aligning organisational and personal goals, mentoring, coaching, identification and facilitation of developmental and training needs, and lastly requests for adjusted remuneration.

Based on the findings and conclusion of the study, the following recommendations can be made:

Firstly, in this study, the voluntary employee turnover rates were within an acceptable range and there were no high risk groups identified. It is therefore recommended that management rather focus on specific high-performing valued employees and not on generic institutional plans and strategies. Secondly, because turnover might be due to inadequate hiring practices (a conclusion derived from the low performance rates among leavers), it is recommended that appropriate selection processes be utilised. Such processes may, for example, include presenting applicants with realistic job previews, invoking certain organisational activities such as induction and orientation programmes, and analysing data related to recruitment sources. Thirdly, it is recommended that organisations focus on organisational commitment, engagement and citizenship to improve retention. Such a focus has been shown to have a significant negative correlation with employee turnover and appears to be a direct antecedent of employee intent to leave the organisation. These concepts should be included in all HR and management development initiatives. Fourthly, continuous analysis should be conducted on turnover and the results should be included in the general talent management processes and in departmental and specific HR planning processes. Everyone in a managerial position, and within HR itself, must be held accountable for their role in reducing employee turnover. This requirement can even be included in the performance management system. Lastly, it is emphasised that employees are motivated by more than money. Higher order needs such as job enrichment practices, career growth, challenging assignments, feedback from peers, and better leadership, among others, become the hallmark of the organisational mindset. It is therefore important for management to create such opportunities.

Two possible limitations have been identified in the study. Firstly, two environmental variables have been identified as possible determinants of turnover, namely opportunity and kinship responsibility. These variables were not considered in this study and need to be further investigated. Secondly, the study was conducted in only one institution and the results may not, therefore, be generalisable throughout the higher education sector.

REFERENCES

Abelson, M. and B. Baysinger. 1984. Optimal and dysfunctional turnover: Toward an organisational level model. *Academy of Management Review* 9(2): 331–342.

Bertelli, A. M. 2006. Determinants of bureaucratic turnover intention: Evidence from the Department of the Treasury. *Journal of Public Administration Research and Theory* 17: 235–258.

Brown, C. 2009. Why South African engineers choose to leave companies: A replication in the developing world. MBA thesis. Pretoria: University of Pretoria.

Buck, J. M. and J. L. Watson. 2002. Retaining staff employees: The relationship between human resource management strategies and organisational commitment. *Innovative Higher Education* 26(3): 175–193.

Butt, K. A. and M. A. Jinnah. 2008. Impact of compensation on the turnover intentions of employees: A case of Pakistan telecom sector. *The Business Review* 10(2): 178–184.

Cohen, J. 1988. *Statistical power analysis for behavioural science.* Rev. ed. Orlando, FL: Academic Press.

Coyne, I. and T. Ong. 2007. Organisational citizenship behaviour and turnover intention: A cross-cultural study. *The International Journal of Human Resource Management* 18(6): 1085–1097.

Daly, C. D. and J. R. Dee. 2006. Greener pastures: Faculty turnover intent in urban public universities. *The Journal of Higher Education* 77(5): 776–803.

Fatima, H. 2011. Does employee retention affect organisational competence? *Industrial Engineering* 1(1): 24–39.

Golden, T. 2007. Co-workers who telework and the impact on those in the office: Understanding the implications of virtual work for co-worker satisfaction and turnover intentions. *Human Relations* 60(11): 1641–1667.

Grobler, A. and S. Grobler. 2015. Organisational climate: Conceptualisation and measurement in an ODL HEI. *South African Journal of Higher Education* 29(4): in press.

Grobler, A. and R. Steyn. 2010. The construction of an organisational climate questionnaire for the South African Police Service. In *Proceedings of the 1st International Conference on Leadership and Management for Sustainable Development*. Pretoria, South Africa, October.

Gul, S., B. Ahmad, S. U. Rehman, N. Shabir and N. Razzaq. 2012. Leadership styles, turnover intentions and the mediating role of organisational commitment. *Information and Knowledge Management* 2(7).

Kohn, H. D. 2008. A test of Abelson and Baysinger's (1984) optimal turnover hypothesis in the context of public organisations using computational simulation. DPhil thesis. Alexandria: Virginia Polytechnic Institute and State University.

Lam, W., Z. Chen and N. Takeuchi. 2009. Perceived human resource management practices and intention to leave of employees: The mediating role of organisational citizenship behaviour in a Sino-Japanese joint venture. *The International Journal of Human Resource Management* 20(11): 2250–2270.

Leedy, P. D. and J. E. Ormrod. 2010. *Practical research: Planning and design.* 4th ed. Upper Saddle River, NJ: Pearson Education.

Long, C. S., L. Y. Thean, W. K. W. Ismail and A. Jusoh. 2012. Leadership styles and employees' turnover intention: Exploratory study of academic staff in a Malaysian College. *World Applied Sciences Journal* 19(4): 575–581.

Luketic, H. 2009. *The mastery of the ideal turnover rate.* HR Voice. www.hrvoice.org/the-mystery-of-the-ideal-turnover-rate/ (accessed 22 May 2013).

Maertz, C. P., R. W. Griffeth, N. S. Campbell and D. G. Allen. 2007. The effects of perceived organisational support and perceived supervisor support on employee turnover. *Journal of Organisational Behaviour* 28: 1059–1075.

Masoga, L. 2013. The role of personality and organisational climate in employee turnover. DLit thesis. Pretoria: University of South Africa.

Mead, R. and T. G. Andrews. 2009. *International Management*. 4th ed. Chichester, West Sussex: John Wiley.

Metcalf, H., H. Rolfe, P. Stevens and M. Weale. 2005. *Recruitment and retention of academic staff in higher education*. National Institute of Economic and Social Research. Research Report 658. Nottingham: Department for Education and Skills.

Mitiku, M. 2010. An investigation of the nature of academic staff turnover: The case of Addis Ababa University. MBA thesis. Ethiopia: Addis Ababa University.

Mohlala, J., G. A. Goldman and X. Goosen. 2012. Employee retention within the information technology division of a South African bank. *South African Journal of Human Resource Management* 10(2): 1–11.

Moncarz, E., J. Zhao and C. Kay. 2008. An exploratory study of US lodging properties' organisational practices on employee turnover and retention. *International Journal of Contemporary Hospitality Management* 21(4): 437–458.

Mosher, W. and J. Kingsley. 1936. *Public personnel administration.* New York: Harper.

Moutinho, L. and G. Hutcheson. 2011. *The SAGE dictionary of quantitative management research*. London: SAGE.

Ngobeni, E. K. and A. Bezuidenhout. 2011. Engaging employees for improved retention at a higher education institution in South Africa. *African Journal of Business Management* 5(23): 9961–9970.

Paillé, P. 2012. Organizational citizenship behaviour and employee retention: How important are turnover cognitions? *The International Journal of Human Resource Management:* 1–23. DOI:1 0.1080/09585192.2012.697477.

Paillé, P. and F. Grima. 2011. Citizenship and withdrawal in the workplace: Relationship between organisational citizenship behaviour, intention to leave current job and intention to leave the organisation. *The Journal of Social Psychology* 151(4): 478–493.

Price, J. L. 2000. Reflections on the determinants of voluntary turnover. *International Journal of Manpower* 22(7): 602.

Regts, G. and E. Molleman. 2012. To leave or not to leave: When receiving interpersonal citizenship behavior influences an employee's turnover intention. *Human Relations* 66(2): 193–218.

Robyn, A. M. 2012. Intention to quit amongst generation Y academics at higher education institutions. MCom thesis. Stellenbosch: Stellenbosch University.

Rosser, V. T. 2004. A national study on midlevel leaders in higher education: The unsung professional in the academy. *Higher Education* 48(3): 317–337.

Samuel, M. O. and C. Chipunza. 2009. Employee retention and turnover: Using motivational variables as a panacea. *African Journal of Business Management* 3(8): 410–415.

Snelgar, R. J., M. Renard and D. Venter. 2013. An empirical study of the reward preferences of South African employees. *South African Journal of Human Resource Management* 11(1): 1–14.

South African Board for People Practices. 2012. *HR survey 2012*. 4th update. Randburg: Knowres.

Tabachnick, B. G. and L. S. Fidell. 2007. *Using multivariate statistics.* 5th ed. Boston: Pearson Education.

Taplin, I. M. and J. Winterton. 2007. The importance of management style in labour retention. *International Journal of Sociology and Social Policy* 27(1/2): 5–18.

Taylor, L. J., B. Murphy and W. Price. 2006. Goldratt's thinking process applied to employee retention. *Business Process Management Journal* 12(5): 646–670.

Tourangeau, A. E. and L. A. Cranley. 2006. Nursing intention to remain employed: Understanding and strengthening determinants. *Journal of Advanced Nursing* 55(4): 497–509.

Tourangeau, A. E., G. Cummings, L. A. Cranley, E. M. Ferron and S. Harvey. 2010. Determinants of hospital nurse intention to remain employed: Broadening our understanding. *Journal of Advanced Nursing* 66(1): 22–32.

Tymon, W. G., S. A. Stumpf and R. R. Smith. 2011. Manager support predicts turnover of professionals in India. *Career Development International* 16(3): 293–312.

Van Zyl, M. A. 2011. *Employee turnover in a financial institution*. MBA thesis. Potchefstroom: North-West University.

Wells, J. E. and J. W. Peachey. 2010. Turnover intentions: Do leadership behaviours and satisfaction with the leader matter? *Team Performance Management* 17(1/2): 23–40