

Employee perceptions of workforce retention strategies in a health system

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ABSTRACT: *This quantitative study explores the perceptions of 379 nurses using a survey to assess awareness of, participation in, and effectiveness of 28 workforce retention strategies offered by Queensland Health. Perceptions of workforce retention strategies were also examined to determine if any aspects of the strategy (retention factors) had an influence on turnover intention. The major findings were that respondents were more aware and had participated to a greater extent in those strategies that were included in Queensland Health policy or were part of the nursing Enterprise Bargaining Agreement. Strategies ranked as most effective included those that provided a monetary advantage and to a lesser extent, a professional development opportunity. A positive relationship was found between retention factors and decreased turnover intention.*

KEYWORDS: motivation, turnover, retention, workforce retention strategies, retention factors

Retaining a skilled workforce and decreasing unwanted employee turnover is an economic and service delivery necessity for organisations. Key to operational and service delivery excellence is high employee retention. Many studies have investigated the job satisfaction/turnover relationship. This study builds on these previous works, focusing on employee perceptions of workforce retention strategies and their relationship with employee turnover intention. Despite the many resources being invested in developing and implementing workforce retention strategies and the dire consequences that may result when turnover is unwanted; it was found that there was a paucity of research regarding retention strategies and turnover intent in Queensland Health. Using this justification, the chosen research approach was driven by four major points: a gap existed in the literature; the importance of workforce retention strategies; development of a conceptual framework as a contribution to theory; and the potential applications of the research's findings, especially in health services.

Acknowledging the increased interest and the consequent financial commitment organisations make in retaining employees, the obvious question was whether any of this effort made a difference to employee intention to turnover. The contention argued was that workforce retention strategies did have some effect on an employee's intention to turnover, but that there were probably greater influences on the decision to leave or stay.

The study was conducted within Queensland Health, a department of the Queensland Government, Australia. It is a large multi-layered, diverse and complex organisation employing approximately 74,000 staff. This diverse group includes clinicians, administrators, operational staff, trades people and artisans in 25 different occupational streams (Queensland Health, 2010). The department had 15 health service districts across the state ranging from highly populated metropolitan to sparsely populated rural and remote communities. Services provided included acute care, acute and community-based mental health, primary health care in community health settings and population health units (Queensland Health, 2008). Queensland Health's budget for 2011–2012 was \$11.046 billion (Queensland Health, 2011).

LITERATURE REVIEW

A review of the literature revealed that many studies investigating employee retention and turnover have been published (Best Practice Australia and New Zealand, 2008; Huang, Lin, & Chuang, 2005; Mitchell, Holtom, & Lee, 2001; Mobley, Griffeth, Hand, & Meglino, 1979; Udechukwu & Mujtaba, 2007), but not many studies investigated workforce retention strategies and their relationship with turnover or turnover intention (Asquith, Sardo, & Begley, 2008; Kuhar, Miller, Spear, Ulreich, & Mion, 2004; Leurer, Donnelly, & Domm, 2007). Personal and organisational

costs of leaving a job are often high and for these reasons understanding employee retention and turnover has the attention of top level managers in today's organisations (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001). Many studies presented findings suggesting why people leave. For example, motivation at work is widely believed to be a key factor for performance and a significant predictor of intention to quit the workplace (Zurn, Dolea, & Stilwell, 2005). According to Mitchell, Holtom, Lee, and Sablinski, et al. (2001), given alternatives, people stay if they are satisfied with their jobs and committed to their organisation, and leave if they are not.

As employers grapple with why people leave an organisation, one of the attempts to mitigate the problem is for an organisation to offer workforce retention strategies. Workforce retention strategies for the purposes of this study have been defined as professional development or support opportunities developed and implemented by Queensland Health, for employees of Queensland Health. There are many types of retention strategies that may be implemented. In an effort to shed some light on those most suitable, the research objective was: *To examine the perceptions of employees regarding the effectiveness of workforce retention strategies implemented in a health service.*

There were four core concepts integral to this study: Turnover and retention; workforce retention strategies; retention factors; and turnover intention. For the purposes of this study, turnover refers to voluntary employee turnover (Udechukwu & Mujtaba, 2007, p. 165 after Lambert, 2001). Retention rate may be complemented by turnover to provide a greater understanding of worker movement. However, according to some researchers, it is not simply the opposite of turnover (Waldman & Arora, 2004). Retention follows specific people and groups of people over time and there is good evidence that supports the notion that staying and leaving involve different psychological and emotional processes (Mitchell, Holtom, & Lee, 2001). Turnover and retention were therefore regarded as two separate processes and not simply the opposite of each other. Workforce retention strategies presented in previous studies included,

for example improved communication, recognition of roles, adequate staffing levels, supportive management and shared governance (Kuhar et al., 2004; Leurer et al., 2007; Wilson, Squires, Widger, Cranley, & Tourangeau, 2008). While these 'strategies' are important and must not be overlooked, a different perspective considered those workforce retention strategies that were support or development activities, or programs that had been developed and implemented by the organisation to retain the employee. Barriers to employees participating in a workforce retention strategy were also considered important to the investigation. To probe these issues, the first research question was:

RQ1: What are employees' perceptions about workforce strategies being used in Queensland Health informed by:

- (a) Employees' awareness of workforce retention strategies
- (b) The level of participation in workforce retention strategies
- (c) The perceived level of effectiveness of workforce retention strategies
- (d) The perceived barriers to participating in workforce retention strategies

It is acknowledged that a workforce retention strategy could act on known antecedents of turnover by improving job attitudes, enhancing job characteristics such as job opportunity, or increasing job embeddedness (Crossley, Jex, Bennett, & Burnfield, 2007; Mitchell, Holtom, Lee, Sablinski, et al., 2001). Rather than studying each workforce retention strategy as a whole, this study aimed to characterise the strategy by introducing the notion of 'retention factors'. The retention factors were derived from the literature pertaining to: Herzberg's two factor theory of motivation; expectancy theory; and equity theory (Atchison & Lefferts, 1972; Huseman, Hatfield, & Miles, 1987; Locke, 1975; Mukhi, Hampton, & Barnwell, 1991). Traditionally, these three motivation theories have been applied to aspects of an employee's job. However, it was determined that many of their criteria may be logically applied to aspects of a workforce retention

strategy. The adaptation was achieved by tailoring the wording of the items, but keeping the intent of the condition or criteria, as determined by the relevant theory. The association between retention factors and workforce retention strategies was investigated through the second research question:

RQ2: How do respondents characterise their preferred workforce retention strategy in terms of retention factors?

Turnover intention was included as a core concept because the study required the investigation of current employees rather than those who had exited the organisation. Those who had left were difficult to contact and survey. Consequently, turnover intention was the independent variable and its association with the independent variables, retention factors, was explored through research question three. The following directional hypothesis was supported by literature findings as they applied to employee retention and turnover (Mobley, Horner, & Hollingsworth, 1978):

RQ3: What is the relationship between various retention factors and turnover intention?

H1: There is a positive relationship between retention factors and decreased turnover intention.

The literature search about the topic 'workforce retention', clearly elicited three key disciplines: motivation, turnover and retention. The literature reflected the complexity of the interrelationships surrounding motivation and attempts have been made by some researchers to tie all of the contemporary motivation theories together to explain them (Robbins, Judge, Millett, & Waters-Marsh, 2008). The three motivation theories chosen as most applicable to this study were Herzberg's, expectancy theory and equity theory. These three theories were applied to workforce retention strategies to derive the retention factors. Further application of the three motivation theories enabled a more in-depth analysis of the study's findings. Turnover theory was studied to elicit the most appropriate proximal predictors for use as items to tap turnover intention (Griffeth, Hom, &

Gaertner, 2000). The four items selected were: job satisfaction; thoughts of quitting; job search; and intention to quit. Retention was chosen as the third important perspective to investigate the research problem. Retention of staff and the talent management of skilled practitioners are crucial to sound clinical and service delivery outcomes for a health service like Queensland Health. Studies have found numerous predictors of retention including age, motivation, rewards and job satisfaction (Tourangeau & Cranley, 2006; Zurn et al., 2005). Furthermore, it is acknowledged there are many complex processes that impact on an employee's decision to stay or leave an organisation.

The demographic variables of gender, age and tenure were also investigated to determine their influence on the relationship between the independent variables (retention factors), and the dependent variable (turnover intention). This question formed research question four:

RQ4: How does the relationship between retention factors and turnover intention vary when taking into account the demographic variables of gender, age and tenure?

Null hypotheses were chosen because there was a paucity of information in the literature pertaining to these relationships.

H2: Gender does not significantly moderate the relationship between retention factors and turnover intention.

H3: Age does not significantly moderate the relationship between retention factors and turnover intention.

H4: Tenure (length of time in the location) does not significantly moderate the relationship between retention factors and turnover intention.

H5: Tenure (length of time in the profession) does not significantly moderate the relationship between retention factors and turnover intention.

The conceptual framework was developed by applying the three motivation theories to workforce retention strategies to derive a set of retention factors. The framework included the relationship between the retention factors as the independent variables and their influence on the dependent variable – turnover intention. The demographic

variables of gender, age and tenure, derived from the literature, were included in the framework to investigate whether they moderated the retention factor/turnover intention relationship. It is important to note that the study is exploratory in nature and in no way suggests causality.

METHODOLOGY

The research paradigm applied for this study was a positivist approach emphasising a commitment to naturalism and quantitative methods (Neuman, 2003; Toma, 1997). To ensure the most rigorous design to inform the research questions required surveying a large, geographically diverse, relatively homogenous group of employees. The nursing stream within Queensland Health best met this population requirement. The sampling frame was all Grades 5 and 6 nurses listed on payrolls (6,300) from eight Health Service Districts, with 3,000 purposely selected for the study. Further to this, three important features were considered in the choice of a survey research methodology. Firstly there was the significant geographic dispersal of the sample across the length and breadth of Queensland, secondly a large sample size was targeted, and thirdly, the research objective and questions were best suited to a quantitative methodology.

A survey was posted (1,500) and emailed (1,500) to 3,000 nurses from Grades 5 and 6 located in 63 sites in eight health service districts within Queensland Health. The overall response rate was 12.6%, $n = 379$. The low response rate may be attributed to many causes. Although this is only based on speculation, some of the causes may have included the challenging times present in Queensland Health at the time, particularly for nurses as a result of the new payroll system, the difficulty in understanding the instructions for completing the survey, the length of the survey, the perceived time taken to complete it and survey fatigue. Although the response rate was low, the sample was deemed relatively homogenous and it is noted that beyond a certain point, at about 5,000 units or more, the population size is almost irrelevant and a sample size of 400 is adequate (Leedy & Ormrod, 2005, p. 207 after Gay & Airasian, 2003, p. 113). Response bias was checked for the

two survey modes, paper-based and on-line, using the independent group *t*-test. The *t*-value for all items was not significant $p > 0.05$, and therefore it could not be concluded that a significant difference existed between the two groups.

Strong and clear links must be established between items and a theoretical domain (Churchill, 1979; Hinkin, 1995). Accordingly, the constructs in this survey were clearly aligned to Herzberg's, expectancy and equity motivation theories and selected contributions from relevant turnover theories. Categorising the variables allowed for items measuring a concept to be grouped together (Cavana, Delahaye, & Sekaran, 2001; Coakes & Steed, 2007). Each of the sections in the survey was grouped conceptually as follows: workforce retention strategies; retention factors; turnover intention; barriers; demographics. Section A focused on respondents' awareness of, participation in, and perceived effectiveness of, 28 retention strategies available to nurses in Queensland Health. This section used dichotomous scales for the awareness and participation questions, and an interval scale for rating the most effective strategy. Section B focused on investigating how respondents characterised their preferred retention strategies in terms of the derived list of 22 retention factors. The retention factors were the independent variables for the study. The dependent variable was turnover intention as this was the phenomenon to be explained. The items chosen to tap this construct were identified in the literature as the best predictors of turnover (Griffeth et al., 2000), and were selected because they were most proximal to turnover intention. These items were rated using interval scales. Section C of the survey focused on identifying the individual and organisational barriers to participation using interval scales and two open-ended questions about personal and organisational barriers to participation. Section D provided general demographic information about the respondent using dichotomous, category and interval scales. The section also included an open-ended question about reasons for quitting in the next 12 months. Four focus groups were used to validate the survey content and the survey pre-testing included face validity, content validity and a pilot study at two sites. The data was analysed

using the Statistical Package for Social Sciences (SPSS) version 11.

Checks were firstly made to ensure correct data input followed by response bias and normality testing. Descriptive statistics were conducted on the demographic data and measures of central tendency and dispersion conducted on the independent and dependent variables, providing a picture of how respondents answered the survey items and the variability in the responses. Measures of central tendency and dispersion were conducted on the remaining dependent and independent variables.

Data reduction using factor analysis was conducted on the 22 retention factors (the independent variables), and the four turnover intention items (the dependent variable). Bartlett's test of sphericity and Kaiser-Meyer-Olkin sampling adequacy indicated the complete set of inter-correlations was suitable for factoring. This was achieved using principal components analysis (Coakes & Steed, 2007) and an oblique rotation. Factor analysis of the independent variables produced four components or factors, representing 67.17% of the variance. Reliability analysis assessing the degree of consistency in the factors was determined using Cronbach's α 0.92, 0.90, 0.82, 0.64. Factor analysis of the independent variables produced one factor with a variance on 78.98% and a Cronbach's α of 0.91. The four factors produced from the set of retention factors (independent variables), were labelled: personal; opportunity; workforce retention strategy; and fairness. The dependent variable was labelled turnover intention.

Multiple regression analysis was used on the independent and dependent variables to investigate the relationships. Moderated multiple regression analysis determined if any of the demographic variables influenced the relationship between the independent variables, retention factors, and the dependent variable, turnover intention. Moderated multiple regression analysis was also used to investigate the moderator effects. To explore the hypothesis that there is a positive relationship between retention factors and decreased turnover intention, a Pearson product-moment correlation was conducted on the independent variables (retention factors), and the dependent variable (turnover intention).

Ethical clearance was granted from the University of Southern Queensland and Queensland Health for permission to conduct the research. An 'Invitation to participate' letter accompanied each survey. This ensured that participants were informed and assured of anonymity, confidentiality, appropriate use of results and ability to withdraw at any time. Return of the survey indicated consent. As a courtesy, Queensland Nurses Union was notified of the survey and its purpose prior to circulation.

RESULTS

Demographics

In terms of the demographics, within the sample of 379 respondents, 90.5% were female. The overwhelming female response was expected given the ratio of female to male nurses in Queensland Health is 9:1. The greatest number of respondents was in the age bracket 41–50 years (35.9%), and the majority of respondents worked in either permanent full-time (47.0%) or permanent part-time (42.9%) positions. Most respondents worked in Grade 5 positions (59.6%) and of the groupings, most had worked in their current location for 2–5 years (26.2%). The greatest group for tenure in the profession were those in the >20 years category (47.3%).

Perceptions about workforce strategies being used in Queensland Health

The results regarding *RQ1: What are employees' perceptions about workforce strategies being used in Queensland Health informed by:*

- Employees' awareness of workforce retention strategies
- The level of participation in workforce retention strategies
- The perceived level of effectiveness of workforce retention strategies
- The perceived barriers to participating in workforce retention strategies

are summarised in Tables 1 and 2, respectively.

It is evident from Table 1 that most respondents were aware of, and had participated in, those strategies that were included in Queensland Health policy or were part of the nursing enterprise

TABLE 1: WORKFORCE RETENTION STRATEGIES: RESPONDENTS' AWARENESS; PARTICIPATION; PERCEIVED EFFECTIVENESS; AND RANK ORDER

Workforce retention strategies	Aware of		Participated in		Participated/aware** (%)	Viewed as effective		Rank order
	N	%	N	%		N	Mean#	
iv. Half-pay holidays	253	68.0	61	18.7	24.1	150	2.89	1
i. Salary packaging	362	97.3	244	70.7	67.4	278	2.82	2
iii. Prof development leave	326	87.6	184	53.3	56.4	254	2.76	3
18. Cadetship – Indigenous Nsg	89	24.0	9	3.1	10.1	32	2.75	4
ii. Prof development allowance	348	93.0	246	70.5	70.7	277	2.75	5
19. Rural scholarship scheme	215	57.6	20	6.4	9.3	85	2.72	6
20. Graduate programs (transition)	332	89.5	142	42.0	42.8	221	2.69	7
17. Indigenous mentoring program	110	29.5	9	3.0	8.2	37	2.68	8
23. Employee assistance scheme	220	58.8	44	13.8	20.0	116	2.61	9
16. Mentoring framework	171	45.7	78	25.9	45.6	107	2.60	10
15. Coaching	99	26.6	26	8.9	26.3	62	2.58	11
5. Emerging clinical leaders	124	33.2	25	7.9	20.2	65	2.54	12
4. Leadership qualities	144	38.7	38	12.2	26.4	75	2.53	13
7. Practical people management	70	18.8	16	5.1	22.9	40	2.51	14
22. SARAS	241	65.0	50	15.4	20.8	131	2.51	15
3. Coaching skills for leaders	161	42.9	28	8.8	17.4	72	2.5	16
9. Transition to retirement	70	18.8	8	2.7	11.4	33	2.48	17
1. Inspiring leadership	164	43.7	53	16.5	32.3	102	2.47	18
6. On-line leadership modules	126	33.7	42	13.3	33.3	67	2.47	19
12. Peer support program	115	30.7	37	12.5	32.2	64	2.42	20
11. Flexible work plan	99	26.6	30	10.4	30.3	71	2.39	21
14. Succession planning	105	28.1	41	13.9	39.1	73	2.34	22
13. Work shadowing	35	9.4	13	4.6	37.1	36	2.33	23
2. Energising from conflict	91	24.5	36	11.7	39.6	67	2.25	24
24. Performance appraisal & devt	346	91.3	273	80.3	78.9	283	2.25	25
10. Work/life balance agreement	126	33.7	24	8.2	19.0	70	2.19	26
8. Maturity matters	41	11.0	5	1.7	12.2	26	2.04	27
21. Better workplaces staff survey	286	76.5	198	59.5	69.2	178	2.01	28

%, valid percent; #1, not effective; 2, slightly effective; 3, effective; **number of people who were aware of the strategy and participated in it (percentage)

bargaining agreement. Respondents were most aware of: *salary packaging*; *professional development allowance*; and *performance appraisal and development*. The top three strategies that respondents

had participated in were: *performance appraisal and development*; *salary packaging*; and *professional development allowance*. The rank order indicated that most felt that those strategies that provided a

TABLE 2: PERCEIVED INDIVIDUAL AND ORGANISATIONAL BARRIERS TO PARTICIPATING IN A WORKFORCE RETENTION STRATEGY

Barriers to participation	N	Mean#	SD#
Individual			
Lack of time	312	3.69	1.17
Lack of interest	305	2.34	1.04
Did not know about them	328	3.84	1.07
Organisational			
Lack of line manager support	312	3.13	1.21
Not well accepted	308	2.91	1.03
Not well promoted	325	3.74	1.13

#1, strongly disagree; 2, disagree; 3, neutral; 4, agree; 5, strongly agree

monetary advantage and to a lesser extent, a professional development opportunity were perceived as most effective for retaining staff. The top five retention strategies ranked as most effective for retention were: *half-pay holidays; salary packaging; professional development leave; cadetships – Indigenous nursing; and the professional development allowance*. At the other end of the scale, although ranked in the top three strategies in which respondents had participated, *performance appraisal and development* was not perceived as effective, ranking 25 out of a possible 28. Perceived barriers categorised as individual and organisational are summarised in Table 2.

Table 2 shows that the main individual barriers were a perceived lack of time to participate and respondents did not know about the strategies available. The main organisational barriers were perceived as the strategies not well promoted and a lack of line manager support. Emerging themes from the free comment section reiterated these findings and in addition, individual barriers included busy with family commitments, not interested in participating and only working in casual or part-time positions. Organisational barriers to participating in workforce retention strategies from the free comments included perceptions of a demanding workload, shortage of staff, bullying and lack of leadership. Regarding inequity, it was noted that respondents felt barriers to participation as a result of being unfairly treated, or when preferential treatment was given to another staff member.

Characterisation of respondents' preferred workforce retention strategy in terms of retention factors

Table 3 summarises the results pertaining to *RQ2: How do respondents characterise their preferred workforce retention strategy in terms of retention factors?*

Table 3 shows that retention strategies producing retention factor outcomes and characteristics from the respondent's personal perspective were rated highest. These included: *I invested effort ...; My performance ...; I felt personal gain ...; I felt some level of achievement ...* Nurses taking responsibility and personal credit for achieving in a workforce retention strategy may find this assists them to cope in a challenging environment.

Retention factors and turnover intention

This section reports the results pertaining to *RQ3: What is the relationship between various retention factors and turnover intention?* The hypothesis: *H₁ There is a positive relationship between retention factors and decreased turnover intention*, was tested. The model summary from the standard (simultaneous) regression analysis indicated that all independent variables together explained only 22.4% of the variance in the dependent variable turnover intention (R^2) significant at $p < 0.01$. Although only a small percentage of the variance of the dependent variable was explained by the independent variables, the significant F statistic $p < 0.05$ indicates that the independent variables can adequately explain the variation in the dependent variable (Coakes & Steed, 2007); $F(4, 163) = 11.769, p < 0.01$. This is evident from Table 4.

A stepwise regression analysis was also conducted to examine the contribution of each independent variable (Coakes & Steed, 2007; Hair, Black, Babin, Anderson, & Tatham, 2006). The results indicated the amount of variance attributed by each independent variable and are presented in Table 5. Potential bias is noted in this procedure resulting from considering only one variable for selection at a time (Hair et al., 2006), as is multicollinearity among the independent variables that may effect sequential estimation methods.

A Pearson product-moment correlation was conducted on the independent variables and

the dependent variable to further investigate the relationship between the variables. The results are presented in Table 6.

The findings above clearly show that higher retention scores were positively correlated with lower turnover intention, thus supporting H_1 . Although the relationship between the independent variables and the dependent variable was significant $p < 0.000$, the fact that all the

independent variables together only explained 22.4% of the variance in the dependent variable (turnover intention) reiterated the complexity of the relationship including the acknowledgement of many other influences in the mix.

The moderator effect of the demographic variables

This section reports the results pertaining to the research question, *RQ4: How does the relationship between retention factors and turnover intention vary when taking into account the demographic variables of gender, age and tenure?* As this study was based on the work of previous studies on job satisfaction and turnover, and applied to workforce retention strategies and turnover intention, it was determined that inclusion of these variables as moderators was relevant (Kavanaugh, Duffy, & Lilly, 2006; Ng & Sorensen, 2008). Four hypotheses were formulated to explore this research question.

TABLE 3: RESPONDENTS' CHARACTERISATION OF THE FOUR RETENTION COMPONENTS

Retention factors	N	Mean#	SD#
Personal	195	3.79	0.82
Opportunity	196	3.13	0.91
Strategy	195	3.73	0.78
Fairness	199	3.18	0.88

#1, Strongly disagree; 2, disagree; 3, neutral; 4, agree; 5, strongly agree

TABLE 4: RESULTS OF THE STANDARD REGRESSION ANALYSIS CONDUCTED ON THE INDEPENDENT AND DEPENDENT VARIABLES

	Model summary ^b R^2	ANOVA ^b		Coefficients ^b			
		F	Sig.	Independent variable	Beta	T	Sig.
Model 1	0.224	11.769	0.000 ^a	Personal	-0.065	-0.575	0.566
				Opportunity	0.332	3.508	0.001
				Strategy	0.236	2.511	0.013
				Fairness	0.054	0.653	0.515

^aPredictors: (constant), fairness, opportunity, strategy, personal; ^bdependent variable: turnover intention; N = 168

TABLE 5: RESULTS OF THE STEPWISE REGRESSION ANALYSIS CONDUCTED ON THE INDEPENDENT AND DEPENDENT VARIABLES

Variables entered	Model summary ^a			ANOVA ^a	
	R^2	R^2 change	Sig F change	F	Sig.
Model 1: personal	0.119	0.119	0.000	22.397	0.000
Model 2: personal, opportunity	0.187	0.069	0.000	19.038	0.000
Model 3: personal, opportunity, strategy	0.222	0.035	0.008	15.604	0.000
Model 4: personal, opportunity, strategy, fairness	0.224	0.002	0.515	11.769	0.000

^aDependent variable: turnover intention

H2: Gender does not significantly moderate the relationship between retention factors and turnover intention.

H3: Age does not significantly moderate the relationship between retention factors and turnover intention.

H4: Tenure (length of time in the location) does not significantly moderate the relationship between retention factors and turnover intention.

H5: Tenure (length of time in the profession) does not significantly moderate the relationship between retention factors and turnover intention.

Three models were tested for each moderator variable (gender, age, tenure in location, tenure in profession) to determine if there was any influence on the independent/dependent variable relationship

TABLE 6: PEARSON PRODUCT-MOMENT CORRELATION CONDUCTED ON INDEPENDENT VARIABLES: RETENTION FACTORS, AND THE DEPENDENT VARIABLE: TURNOVER INTENTION

	Opportunity	Strategy	Fairness	Turnover intent
Personal	0.682	0.686	0.504	0.337
Opportunity		0.502	0.414	0.419
Strategy			0.457	0.382
Fairness				0.272
Turnover intent				

All correlations significant at the 0.01 level (1-tailed)

by noting changes in the beta coefficients, R^2 and taking in to account the significance of the change where $p < 0.05$. The variables were firstly standardised because of the variation in response scale which may make direct interpretation problematic (Hair et al., 2006):

Model 1 = independent variables and dependent variable.

Model 2 = independent variables, dependent variable and moderating variable.

Model 3 = independent variables, dependent variable, moderating variable and interaction terms.

All three models for each of the demographic variables indicated that only opportunity and strategy were statistically significant $p < 0.05$. Stata robust regression was also used to test the models and the results were relatively the same. These tests are summarised in Tables 7 and 8. The highlighted cells indicate the statistically significant results.

Of the three demographic variables; gender, age and tenure, only gender had a weak main effect $p < 0.10$ for Model 2. It was therefore determined the demographic variables did not significantly moderate the relationship between the retention factors and turnover intention. Consequently, the null hypotheses H2, H3, H4 and H5 were unable to be rejected.

DISCUSSION

Perceptions about workforce strategies being used in Queensland Health

Salary packaging, professional development leave, and the professional development allowance all

rated high participation, as well as respondents perceiving them as effective workforce retention strategies. However, some strategies were popular in the participation stakes, but respondents' perception of their effectiveness was low.

Salary packaging and performance appraisal and development are Queensland Health policy initiatives. Both initiatives are promoted throughout the organisation to all discipline areas via websites, on pay notices and through various seminars and updates.

The offer of such benefits is consistent with the findings of Kuhar et al. (2004) where financial incentives were incorporated as part of a successful retention strategy, and supports the work by Huang et al. (2005) who propose that monetary compensation remains a powerful motivator for workers, having a strong influence on retention.

It is probable that respondents were most aware of the workforce retention strategies discussed above because they were either implemented as Queensland Health policies or they were implemented as a result of the Enterprise Bargaining Agreement between Queensland Health, Queensland Nurses' Union of Employees and The Australian Workers' Union of Employees (Queensland). This meant activities would be coordinated centrally, accessible in work time and would be supported by line managers and supervisors. This finding is suggestive of studies by Mitchell, Holtom, and Lee (2001) and Asquith et al. (2008) where allocation of responsibility and resources as part of a comprehensive retention plan was mooted as an adequate retention strategy intervention.

Participation in performance appraisal is therefore understandably high, because all districts and staff are meant to comply with the policy. Inclusion of strategies such as performance appraisal as policy directives is supported in findings in the literature such as those of Leurer et al. (2007 after Advisory Committee on Health Human Resources, 2002; Aitken et al., 2001; Buchan & Calman, 2005; Rafferty, Maben, West, & Robinson, 2005; Zurn et al., 2005) where policies aimed at continuing

TABLE 7: RESULTS OF SPSS MODERATED MULTIPLE REGRESSION ANALYSIS FOR THE THREE MODELS FOR THE MODERATING VARIABLES GENDER AND AGE

N = 166	Model summary ^a		ANOVA ^a		Coefficients			
	R ²	R ² change	F	Sig.	Independent variable	Beta	t	Sig.
Gender								
Model 1	0.222	0.222	11.579	0.000 ^a	Personal	-0.059	-0.523	0.602
					Opportunity	0.325	3.409	0.001
					Strategy	0.241	2.548	0.012
					Fairness	0.048	0.577	0.564
Model 2	0.236	0.014	9.944	0.000 ^b	Personal	-0.069	-0.613	0.541
					Opportunity	0.312	3.275	0.001
					Strategy	0.262	2.768	0.006
					Fairness	0.031	0.374	0.709
Model 3	0.242	0.006	5.573	0.000 ^c	Gender	0.119	1.694	0.092
					Personal	-0.063	-0.543	0.588
					Opportunity	0.283	2.789	0.006
					Strategy	0.268	2.726	0.007
					Fairness	0.055	0.606	0.545
					Gender	0.066	0.764	0.446
					Gender × personal	0.033	-0.269	0.788
					Gender × opportunity	0.034	0.244	0.808
Gender × strategy	0.060	0.694	0.489					
Gender × fairness	-0.105	-0.824	0.411					
Age								
Model 1	0.222	0.222	11.453	0.000 ^d	Personal	-0.055	-0.482	0.630
					Opportunity	0.323	3.375	0.001
					Strategy	0.240	2.525	0.013
					Fairness	0.045	0.544	0.587
Model 2	0.228	0.007	9.463	0.000 ^e	Personal	-0.028	-0.244	0.807
					Opportunity	0.292	2.946	0.004
					Strategy	0.247	2.604	0.010
					Fairness	0.041	0.498	0.619
Model 3	0.262	0.034	6.168	0.000 ^f	Age	-0.086	-1.180	0.240
					Personal	-0.008	-0.072	0.942
					Opportunity	0.248	2.383	0.018
					Strategy	0.257	2.725	0.007
					Fairness	0.051	0.616	0.539
					Age	-0.110	-1.494	0.137
					Age × personal	-0.054	-0.504	0.615
					Age × opportunity	0.184	1.804	0.073
Age × strategy	-0.118	-1.339	0.182					
Age × fairness	0.105	1.313	0.191					

All scores standardised; ^adependent variable: turnover intention; ^apredictors: personal, opportunity, strategy, fairness; ^bpredictors: personal, opportunity, strategy, fairness, gender; ^cpredictors: personal, opportunity, strategy, fairness, gender, gender × personal, gender × opportunity, gender × strategy, gender × fairness; ^dpredictors: personal, opportunity, strategy, fairness; ^epredictors: personal, opportunity, strategy, fairness, age; ^fpredictors: personal, opportunity, strategy, fairness, age, age × personal, age × opportunity, age × strategy, age × fairness

TABLE 8: RESULTS OF SPSS MODERATED MULTIPLE REGRESSION ANALYSIS FOR THE THREE MODELS FOR THE MODERATING VARIABLES TENURE IN LOCATION AND TENURE IN PROFESSION

N = 166	Model summary [^]		ANOVA [^]		Coefficients [^]								
	R ²	R ² change	F	Sig.	Independent variable	Beta	t	Sig.					
Location													
Model 1	0.222	0.222	11.579	0.000 ^g	Personal	-0.059	-0.523	0.602					
					Opportunity	0.325	3.409	0.001					
					Strategy	0.241	2.548	0.012					
					Fairness	0.048	0.577	0.564					
Model 2	0.232	0.010	9.725	0.000 ^h	Personal	-0.084	-0.736	0.463					
					Opportunity	0.327	3.435	0.001					
					Strategy	0.262	2.750	0.007					
					Fairness	0.044	0.541	0.589					
Model 3	0.263	0.031	6.227	0.000 ⁱ	Location	-0.100	-1.420	0.157					
					Personal	-0.091	-0.774	0.440					
					Opportunity	0.347	3.571	0.000					
					Strategy	0.297	3.091	0.002					
					Fairness	0.039	0.479	0.632					
					Location	-0.061	-0.838	0.403					
					Location × personal	-0.098	-0.822	0.412					
					Location × opportunity	0.153	1.555	0.122					
Model 3	0.263	0.031	6.227	0.000 ⁱ	Location × strategy	-0.178	-1.741	0.084					
					Location × fairness	0.035	0.434	0.665					
					Prof								
					Model 1	0.222	0.222	11.579	0.000 ^j	Personal	-0.059	-0.523	0.602
										Opportunity	0.325	3.409	0.001
										Strategy	0.241	2.548	0.012
										Fairness	0.048	0.577	0.564
					Model 2	0.224	0.002	9.291	0.000 ^k	Personal	-0.052	-0.453	0.651
Opportunity	0.307	3.064	0.003										
Strategy	0.245	2.577	0.011										
Fairness	0.044	0.538	0.592										
Model 3	0.237	0.013	5.416	0.000 ^l	Profession	-0.042	-0.576	0.565					
					Personal	-0.036	-0.311	0.756					
					Opportunity	0.266	2.512	0.013					
					Strategy	0.282	2.866	0.005					
					Fairness	0.050	0.596	0.552					
					Profession	-0.054	-0.708	0.480					
					Prof × personal	-0.074	-0.643	0.521					
Prof × opportunity	0.115	1.119	0.265										
Prof × strategy	-0.109	-1.120	0.264										
Prof × fairness	0.025	0.281	0.779										

All scores standardised; [^]dependent variable: turnover intention; ^gpredictors: personal, opportunity, strategy, fairness; ^hpredictors: personal, opportunity, strategy, fairness, location; ⁱpredictors: personal, opportunity, strategy, fairness, location, location × personal, location × opportunity, location × strategy, location × fairness; ^jpredictors: personal, opportunity, strategy, fairness; ^kpredictors: personal, opportunity, strategy, fairness, prof; ^lpredictors: personal, opportunity, strategy, fairness, prof, prof × personal, prof × opportunity, prof × strategy, prof × fairness

professional development were commonly cited as a significant retention strategy.

The workforce retention strategies implemented by Queensland Health that have been perceived as most effective in decreasing employee turnover were: *half-pay holidays*; *salary packaging*; and *professional development leave*. Therefore our findings show the respondents were extremely cognisant of the monetary aspect of their roles indicated by their awareness, participation in, and perception of effectiveness for those workforce retention strategies that reflect a monetary value. When comparing these findings with literature findings from other studies, this cohort of nurses is possibly more focused on the pay aspect of their work role than various other groups of employees (Asquith et al., 2008; Mukhi et al., 1991, p. 313, Smith et al., 2003). It is important to note however, that these findings are in contrast with some nursing studies such as Hegney, Plank, and Parker (2006 after Tovey & Adams, 1999) where it was found that the significance of remuneration was unclear with the suggestion that it was only relevant if nurses perceived a discrepancy between their own and other professionals. However, the finding is consistent in studies by Zurn et al. (2005) who identified that the provision of adequate and timely remuneration is important to guarantee the recruitment of motivated and qualified staff. These contrasting results may be explained by the fact that this study includes only Grades 5 and 6 registered nurses, ensuring homogeneity of the group, without higher nursing levels influencing the findings. Furnham, Eracleous, and Chamorro-Premuzic (2009) conclude that individuals in lower job status may be more oriented towards the hygiene aspects of a job compared with individuals higher up the hierarchy who were motivated by the prospect of more power and status. As individuals move up the hierarchy, Furnham et al. (2009) suggest that it may be the case that hygiene factors are no longer salient as they have been achieved and/or taken for granted. This progression towards self-actualisation, the higher up the individual progresses, is also in line with Maslow's seminal work (Stum, 2001). Building on the notion of the influence of job level, it is therefore postulated that respondents from this study

perceive remuneration and working conditions as important retention factors because they are at the lower end of the nursing pay scale.

The most common themes identified as *individual barriers* to participate were that respondents did not know about the various retention strategies on offer and that there was a lack of time. It becomes clear that although respondents may be interested in participating in retention strategies, not knowing what is available as a result of the reasons mentioned, is a significant barrier. Regarding lack of time as a barrier to participating, findings indicated that retention strategies implemented under Queensland Health policy were the most likely to provide time off for employees to participate. The results also showed that the mostly female respondents had a reluctance to attend activities in their own time because they were already juggling a very busy and tiring work schedule with equally busy family commitments. These findings are consistent with studies by Griffeth et al. (2000) and Dockery (2004) where members of the female workforce were more involved with the responsibilities of household chores and child care. The findings regarding demanding workloads experienced by respondents are supported in studies by Hegney, Plank, and Parker (2003) and Aitken, Clarke, Sloane, Sochalski, and Silber (2002), where they found this was frequently the case.

Respondents identified two main themes explaining non-participation in a retention strategy as a result of *organisational barriers*. These were; the retention strategies available were not well promoted in the various work areas, and a perceived lack of support from line managers. Studies in the literature by Aitken, Marks, Purcell, Woodruffe, and Workman (2006) support the findings that knowing what's going on, what's planned and why it's crucial for staff to engage, and importantly, knowing this relies on line managers.

Accordingly, the theme regarding lack of promotion overlaps with the second most prominent theme identified by respondents as an organisational barrier; that is, a lack of support from line managers. This theme was multi-faceted with comments from respondents including: not being given time off to attend the retention strategy; receiving no acknowledgement that the initiative was worth

attending; the manager not supporting a culture of learning in the unit; the manager allowing certain staff over others to attend various activities. Regarding inequity, it is noted in the findings that respondents felt barriers to participation in strategies as a result of being unfairly treated, or when preferential treatment was given to another staff member. This may be explained when examining these findings within the realm of equity theory where efforts expended and rewards received are compared to others in similar work situations (Ivancevich & Matteson, 1990). Further analysis of the findings in light of Herzberg's two factor theory establishes that both intrinsic retention factors such as recognition, and extrinsic retention factors such as quality of interpersonal relations, are deficient.

Characterisation of respondents' preferred workforce retention strategy in terms of retention factors

Respondents' characterisation of their preferred workforce retention strategy presented four retention factor groupings: personal perspective; the strategy itself; fairness and opportunity. In considering the impact of respondents' characterisation of the various workforce retention strategies regarding their personal perspective, the pattern appears to reflect the criticism to Herzberg's theory where it was postulated that as a means of ego-defence, respondents may be more likely to attribute satisfaction to their own achievements and accomplishments (Ondrack, 1974 after Vroom, 1964). On the other hand, this personalisation may be an effort to have more control over an uncontrollable and busy work environment (Hegney et al., 2003). Nurses taking responsibility and personal credit for achieving in a workforce retention strategy may find this assists them to cope in such a challenging environment.

Investigation of these results provides further insight by analysing two of the retention factors within the framework of expectancy theory; *I invested effort ...* and *I felt personal gain ...* Individuals in the work setting hold an effort–performance expectancy which represents their perception of how hard it is to achieve a particular outcome (Ivancevich & Matteson, 1990). These findings indicate that participants had a preference

for investing effort in a retention strategy, and accordingly receiving a positive outcome on the performance. The analysis shows that the action of investing effort when participating in a workforce retention strategy is a first-level outcome producing the second-level outcome of a feeling of personal gain. The perception of the individual that the first-level outcome will lead to the second, suggests positive instrumentality (Ivancevich & Matteson, 1990). Further to this, the effort is positively valent because the person prefers attaining it to not attaining it (Lee, 2007 after Vroom, 1964).

Collectively, these findings indicate a duality between remuneration and development strategies when compared to Herzberg's two factor theory. This duality reflects the importance of the presence of both motivator and hygiene retention factors to the respondents. Studies by Bassett-Jones and Lloyd (Mabey et al., 1998) found that expectancy theory and equity theory have combined to reinforce the view that financial inducement is a critical motivator.

Retention factors and turnover intention

Our findings indicated that turnover intention was most strongly correlated with opportunity retention factors, followed by the strategy itself, personal perspective, and fairness and equity. Focusing on opportunity, this included retention factors such as: *receiving recognition; increased work responsibility; possibility of advancement; and possibility of growth as a result of participating in the retention strategy*. In the context of Herzberg's two factor theory, these factors indicate the presence of intrinsic conditions such as: achievement; recognition; responsibility and advancement. Regarding opportunity, the literature presents studies, such as those by Leurer et al. (2007) and Zurn et al. (2005), that found younger nurses were likely to want further opportunities to develop their career, while older nurses were likely to be a more stable workforce. The directional hypothesis for this question: *There is a positive relationship between retention factors and decreased turnover intention*, was supported.

The findings show that increased support of retention factors resulted in a decreased intention to turnover. The findings also indicated that respondents generally were motivated by the economic

downturn to stay employed with Queensland Health. These findings mirror studies by Hegney et al. (2003, 2006) where dissatisfaction with the aspects of the job impacts on nurses' intention to leave. It is pertinent to note that while some retention factors influence an employee's intention to leave an organisation, there are many other influencing factors in the work milieu. This is consistent with studies by Albion, Fogarty, Machin, & Patrick (2008) who suggest that the theoretical models designed to trace the interconnections among factors affecting turnover reveal a complex pattern.

Further to this, studies by Bluedorn (1982), Porters and Steers (1973) and Tett and Meyer (1993), posit the importance of job satisfaction as a central factor to withdrawal and turnover and worked on models and frameworks to explain this complex pathway. Research purports that although overall job satisfaction represents an important force in an individual's intention to leave, it is not sufficient for explaining the withdrawal process, with most of the variance unexplained. In fact, previous studies by Mobley et al. (1978) and Mitchell, Holtom, and Lee (2001) suggest that only 20–25% of the variance in turnover is explained. That is, there are many internal and external forces impacting on an employee's intention to leave and they can be multi-dimensional and multidisciplinary and not simply a linear sequence (Hom & Griffeth, 1991). Tourangeau and Cranley (2006) also support these findings, reiterating there are other unexplained important predictors of nurse intention to turnover, noting much of the variance was unexplained in their studies also. Although the contexts are slightly different in that traditional studies investigated job satisfaction and turnover, whereas this study investigates retention factors and turnover intention, there is a parallel of results.

The moderator effect of the demographic variables

With respect to *gender*, the findings indicated only gender had a weak main effect on the relationship between the various retention factors and turnover intention. Although no literature findings regarding gender and its moderating effect on the relationship between retention factors and

turnover intention were identified, there were studies that reported on gender and turnover.

However, the empirical evidence supporting gender as a moderating variable on turnover was inconclusive; evidenced as follows. Studies by Griffeth et al. (2000) regarding the latest estimate of gender–turnover correlation indicate that women's turnover rate is similar to that of men. Further to this Griffeth et al. (2000), also suggest that other evidence indicates that women were more likely to remain on the job as they age. The reason for the latter occurrence may be because women, having the primary responsibility for household chores and child care, find their responsibilities in this area decrease as they age (Griffeth et al., 2000; Ng & Sorensen, 2008). The inconclusive evidence continues with studies by Zurn et al. (2005 after Wai Chi Tai, Bame, & Robinson, 1998) which found that gender showed a consistent non-significant relationship with staff turnover. It is important to consider gender as a demographic because the survey results indicated that 90% of the respondents were female, reflecting the nursing population within Queensland Health. There is however, a body of literature that purports the blurring of gender roles and that gender differences are diminishing (Ng & Sorensen, 2008 after Baruch-Feldman, Brondolo, Ben-Dayan, & Schwartz, 2002; Frieze, Parsons, Johnsons, Ruble, & Zellman, 1978).

Regarding *age*, the results show that age did not significantly moderate the relationship between retention factors and turnover intention. Further interpretation of the results indicates the spread of the respondents' age ranged from 21 years to over 60 years. This implies that respondents were from four generations of nurses ranging from the Veterans who were born before 1945, the Baby Boomers who were born between 1946 and 1964, Generation X born between 1965 and 1979 and Generation Y or Millennials who were born from 1980 onwards (Wilson et al., 2008). Accordingly, it is noted that generational differences regarding work values and attitudes have been identified through numerous studies such as those by Wilson et al. (2008 after Zemke, Raines, & Filipczak, 2000; McNeese-Smith & Crook, 2003) and Lavoie-Tremblay, O'Brien-Pallas, Gelinas, Desforges, and Marchionni (2008). Although the

findings indicated a multi-generational workforce, the majority of the respondents were in the age group 41 years and over. This finding is supported in the literature where studies have identified that ageing of the nursing workforce is a major issue (Australian Government Department of Health and Ageing, 2008). The findings revealed that regardless of the varying generations represented, respondents' age did not influence the relationship between retention factors and turnover intention.

Finally, regarding *tenure*, it was found this demographic variable did not significantly moderate the relationship between the retention factors and turnover intention. Tenure included the length of time the respondent worked at the current location and length of time the respondent worked in the nursing profession. The findings indicated that regardless of the length of tenure in either the location or the profession, there was no moderating effect on the relationship between retention factors and turnover. Looking more closely at the results, most respondents were in permanent positions, being either full-time or part-time. This job permanency, coupled with the fact that the majority of nurses had been in the profession for greater than 20 years points towards the importance of job security. This is supported by Dockery (2004) whose study found that job security was the one job aspect measure in which nurses reported satisfaction. Analysing these findings in the context of Herzberg's two factor theory may suggest the presence of job security as a hygiene factor. This suggestion lends further weight to findings about the preference for the extrinsic conditions that need to be maintained so that at least there is a level of no dissatisfaction.

CONCLUSIONS

In view of the benefits and importance of workforce retention and workforce retention strategies (Barney, 2002; Studer, 2004; Zurn et al., 2005) and the lack of research on workforce retention strategies and their importance in supporting and retaining staff (Kavanaugh et al., 2006), this study makes a specific contribution in the area of the range and type of workforce retention strategies and what aspects of them (retention factors) may influence employee turnover intention.

One of the principal findings was that most employees were aware or had participated in workforce retention strategies that were Queensland Health policy or enterprise bargaining conditions. Respondents were less aware of one-off or personal interest retention strategies. It could be concluded that Queensland Health policy initiatives have a higher profile and are better marketed than other retention strategy initiatives.

The most important findings regarding which workforce retention strategies respondents had participated in, were firstly, those that were Queensland Health policy and secondly, those that were supported by appropriate resources and mechanisms to allow participants to effectively engage with the strategy. Although some retention strategies had high participation rates, this did not mean their level of effectiveness was also high. The findings concerning the effectiveness of workforce retention strategies clearly indicated that support by way of time off to participate and financial assistance for participation in retention strategies results in higher perceived effectiveness. Having analysed awareness of, participation in, and perceived effectiveness of the listed workforce retention strategies, the key findings indicate that nurses are very cognisant of the remunerative aspects of their job, coupled with a perception that professional development is also important. In the context of Herzberg's two-factor theory, these results suggest a presence of both motivator and hygiene retention factors. Although these key findings contrast somewhat with studies in the literature such as those by Zurn et al. (2005) and Dockery (2004) who purport that non-pay aspects of the job appear to have a stronger influence on nurses' job satisfaction and intention to leave, they can be explained when analysed in the context of the three motivation theories: Herzberg's two factor theory; expectancy theory; and equity theory.

Nurses characterised their preferred workforce retention strategy by more strongly agreeing with those retention factors that exhibited a personal perspective. The findings for this preference were two-fold. Firstly, it is postulated that the attribution of satisfaction to their own achievement and results was one opportunity for nurses to have more control over work situations when they are perceived

as uncontrollable. Secondly, participating in professional development opportunities required effort and this was rewarded by positive outcomes. This was closely followed in preference by those retention factors that described the workforce retention strategy itself. Findings indicated that retention strategies embedded in organisational policy were most preferred and the importance of professional development as a retention strategy was again highlighted. Respondents moderately preferred retention strategies concerned with fairness. The findings indicated that individuals did compare their efforts and rewards with others. However it was salient to note that there are levels of complexity in these findings because individuals may react differently in similar situations. Although a number of respondents did not indicate a strong preference for those retention factors concerned with opportunity, those that felt this was important also most strongly indicated a decreased intention to turnover.

The strongest predictor for turnover intention was opportunity retention factors. Most significantly, it is postulated the presence of intrinsic conditions in opportunity retention factors are more important to younger nurses than they are to the majority of older nurses. Further to this, the hypothesis posed suggesting a positive relationship between the retention factors and decreased turnover intention was supported. This study is consistent with the findings in the job satisfaction/turnover literature where studies show that there are many factors still to be quantified that influence an employee's intention to leave an organisation. Moreover, the process is more complex than initially expected as evidenced by findings in this study indicating that all the retention factors together explained only 22.4% of the variance in turnover intention. Of the three demographic variables; gender, age and tenure, only gender weakly moderated the relationship between retention factors and turnover intention. These findings lead to the conclusion that gender is a weak moderator because of the majority of respondents were female and juggled busy work and home lives.

Three of the most concerning findings from the survey were that generally most respondents thought about quitting, generally many respondents were motivated by the economic downturn

to stay with Queensland Health, and slightly more than half had intentions to quit within the next 12 months. It is salient to note that the ageing workforce also impacts on this cohort's intention to quit in the next 12 months.

Even though Queensland Health's ongoing commitment to recruit new staff and promote nursing refresher skills programs is acknowledged, several recommendations are made in view of the findings:

- (1) Develop and implement a campaign aimed at promoting and recognising the role of nurses;
- (2) Ensure the organisation's response to feedback is acted upon in a timely manner;
- (3) Invest in designing or updating workforce retention strategies that include the identified retention factors positively associated with decreased turnover intention;
- (4) Offer the opportunity to participate in workforce retention strategies as part of an overall employee retention framework;
- (5) Develop and implement a targeted Retention Management Policy.

All of these recommendations would be generalisable to the wider nursing community.

The findings from the research questions have contributed to the further development of the conceptual framework regarding retention factors and their impact on turnover intention. The findings have also enabled articulation of specific retention factors that have influenced employees' turnover intention and perceived barriers to participation have been identified. Exploration of the moderating effects of the demographic variables provided new insights about whether they influenced the retention factor/turnover intention relationship and a number of emerging themes as to why nurses may quit in the next 12 months was also divulged.

LIMITATIONS AND FUTURE RESEARCH

Caution must be exercised when applying these findings to other settings because the study was conducted within one organisation, Queensland Health and focused on one occupational group – nurses. Other limitations were that the study was undertaken against the background of severe economic changes during the height of the global financial crisis. Further to this, survey methodology

has limitations including common method bias due to the self-report aspect (Podsakoff, MacKenzie, & Lee, 2003). As a result, generalisation of the research findings should be approached cautiously; however the survey instrument could be applied to other organisations. A number of opportunities for further research have arisen as a result of this study. The research methodology may be applied to other occupational groups within the organisation to investigate their perception of workforce retention strategies with the intent of developing strategies with preferred characteristics to decrease turnover intention. Focusing on one workforce retention strategy and investigating the effect of various retention factors related to that particular strategy on turnover intention could lead to a more controlled study. This may provide more insight to the questions surrounding causality and the antecedents of turnover intention. The open-ended question section enriched the quantitative findings. To widen the research opportunities, the emerging themes from the free comment sections could be expanded through a qualitative methodology approach within an interpretivist or critical research paradigm.

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