



Commitment and the emigration intentions of South African professional nurses

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The emigration of skilled nurses from South Africa exacerbates the crisis in the provision of public health services. A descriptive, quantitative design was applied to investigate the relationship between intention to emigrate and employee commitment. Over 400 registered nurses ($N = 419$), working within public sector tertiary hospitals in the Western Cape, responded to a cross-sectional survey questionnaire. Three foci of employee commitment (organisational, professional and national) were examined but only national commitment significantly helped predict intention to emigrate from South Africa in the regression model ($\beta = -0.0525$, $p < 0.0001$). The implications of the results obtained in this study are discussed.

Die emigrasie van verpleegkundiges uit Suid-Afrika vererger die krisis in die verskaffing van gesondheidsorgdienste in die land. 'n Beskrywende, kwantitatiewe ontwerp is gebruik om die verwantskap tussen werknemertoewyding en die voorneme om te emigreer te ondersoek. Meer as 400 verpleegsters ($N = 419$) wat in openbare tersiêre hospitale in die Wes-Kaap werk, het op die vraelys gereageer. Drie fokusareas van toewyding (organisasories, professioneel en nasionaal) is gemeet, maar net nasionale toewyding het daartoe bygedra om emigrasievoorneme te voorspel ($\beta = -0.0525$, $p < 0.0001$). Die implikasies van hierdie resultate word bespreek.

Introduction

South Africa is facing a crisis in the provision of nursing services that has been long anticipated and that requires urgent attention (Department of Health 2008; Ehlers 2003). In 2006 there were 13 500 South African registered nurses working abroad, whilst 32 000 nursing posts remained vacant in South Africa. There is no indication that this situation has improved and little promise that the situation will improve in the future. There are a number of reasons for this dismal conclusion: the global shortage of professional nurses is likely to persist at least until 2020 (Ehlers 2003), fewer than 3% of South African nurses are under 30 years of age (Steenkamp 2007), the profession is likely to remain under-resourced, and a poor professional image coupled with changing societal values means that fewer people are choosing nursing as a vocation (Department of Health 2008). A persistent shortage of professional nurses in clinics and hospitals has direct costs in terms of quality of care (Nogueras 2006; Steenkamp 2007) as recent widely publicised incidents have evidenced.

The emigration of skilled professionals is not unique to the nursing profession and neither are the reasons that motivate these decisions. However, Miller, Haskell and Thatcher (2002) reported that South Africa faces the highest general emigration rate in its history. Many chose to leave the country because of factors such as crime, affirmative action, discrimination as well as overall better living conditions (Brain-drain and gain in South Africa: Who loses, who gains? 2002). Hlangani (2002) noted that many nurses emigrated for better pay and working conditions. These 'push' factors are complemented by 'pull' factors as several developed countries such as the United States, Canada, United Kingdom, Ireland, New Zealand and Australia have also actively recruited nurses from South Africa (Aiken *et al.* 2004).

The Health Department has identified the brain drain (emigration) of nurses as a continuing trend (Department of Health, 2008). To counter the trend, the National Minister of Health announced pay increases for public sector nurses, as well as improved medical cover and housing subsidies. These are not comparable with overseas salaries but are at least more in line with private sector salaries (Health Systems Trust 2007). The Health Department (Department of Health, 2008) has recognised the important role of effective management practices; though little can be done if nurses decide to emigrate for personal reasons, management may be able to intervene to reduce the incidence of nurses leaving in other instances (Sourdif 2004).

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Emigration, leaving one country to move to another, is costly (Efrat 1997) to both the country losing critical skills and the person in terms of the personal costs of moving to another country (Schuster 1994). Emigration also has an effect on the people left behind in the sense that they may have to deal with an increased workload. Understanding the emigration intentions of South African nurses are important as over 40 million South African are dependent on public health services in which nurses play a primary role. As a critical component of the South African healthcare system (Horwitz & Pundit 2008) professional nurses must be retained within South Africa to ensure the effectiveness and sustainability of healthcare delivery (Department of Health 2008). It is therefore evident that managers within the South African healthcare system need to be cognisant of the factors influencing nurses' decision to remain in South Africa, despite the temptations of higher remuneration and better working conditions abroad. Such an understanding is necessary prior to the development of appropriate strategies to retain nursing professionals.

Individual commitment has long been shown to help predict intention to quit and there is already considerable evidence that organisational commitment is related to intentions to quit an organisation (Meyer & Allen 1997). One study investigated the relationship between organisational commitment and intention to emigrate and found a significant negative relationship, indicating that higher levels of organisational commitment result in lower levels of intention to emigrate (Miller *et al.* 2002). According to the social integration theory of emigration (Hartman & Hartman 1995), a high individual attachment to a country will lower an individual's intention to emigrate. This implies that high commitment to a country should reduce emigration intention, but this relationship has not been empirically investigated. The relationship between professional commitment and intention to emigrate has also not been investigated prior to this study.

In their seminal paper, Allen and Meyer (1990:11) defined commitment as 'a psychological state that binds an individual to an organisation' and distinguished between three components of commitment (affective commitment, continuance commitment and normative commitment). They later acknowledged that employees may have different levels of commitment to different foci (Meyer *et al.* 2001). These foci of commitment may include commitment to an organisation, profession and country. Considerable research indicates that affective commitment, the employee's degree of emotional connection to a focus of commitment, has the most explanatory power in predicting important organisational outcomes (Cohen 1998). Gardner (1992) emphasised the importance of commitment in nursing and the fact that such commitment is beneficial for the employee, patient and healthcare organisation. The distinction between the organisational commitment and professional commitment of nurses has also been demonstrated (Irving, Coleman & Cooper 1997). No previous studies have used all the above foci of commitment to examine intention to emigrate and this study is unique in this respect.

Research purpose and propositions

The purpose of this study was to investigate the explanatory power of affective employee commitment on the intention of public sector professional nurses to emigrate from South Africa. The study was conducted in the context of a crisis in the provision of public healthcare services exacerbated by a shortage of nurses, partly because of the emigration of nurses from South Africa. Given the predictive power of employee commitment in explaining turnover decisions in other contexts, its effect on nurses' intention to emigrate was deserving of further investigation. The specific propositions of this study are:

1. Commitment to country is distinct from commitment to an organisation and commitment to a profession.
2. Intention to emigrate (i.e. intent to quit South Africa) is distinct from intention to quit a profession (i.e. nursing) and intention to quit an organisation (i.e. hospital).
3. Commitment to South Africa; the hospital employer and the nursing profession amongst professional public sector nurses in the Western Cape explains a significant proportion of the variance in nurses' intention to emigrate.

The research question arose as to the specific source of commitment that interventions should target to help counter the emigration intentions of South African nurses.

Research method

Research design

A descriptive, cross-sectional quantitative research design was used to elicit primary data (Hair *et al.* 2003). A descriptive design is appropriate because the objective of the study was to describe a situation by providing measures of attitudes and the relationships between them. Descriptive research designs produce cross-sectional data (snapshot descriptions collected at a single point in time). Most survey research is cross-sectional given the costs and logistical problems associated with longitudinal studies, in which a time series of observations are obtained and from which causality can be better inferred (Hair *et al.* 2003).

Research methods

Population and sampling

The purposive sample in the study was drawn from the population of full-time public sector professional nurses employed in public tertiary hospital in the Western Cape Province of South Africa. A professional nurse was defined as someone who is 'qualified and competent to independently practice comprehensive nursing in the manner and to the level prescribed, and who is capable of assuming responsibility and accountability for such a practice' (Department of Health 2008:6). Professional nurses are distinct from less qualified student, staff and auxiliary nurses. All registered professional nurses at the public tertiary hospitals were eligible for inclusion.



Research participants

The majority of respondents were female, 94% ($n = 392$). More than half of the respondents were married (55%). Mother tongue speakers of all the three official languages of the Western Cape (i.e., Afrikaans, 51%, $n = 212$; English, 24%, $n = 101$; and Xhosa, 8%, $n = 32$) were represented amongst the respondents. The age of the respondents ranged from 21 to 65, with an average age of 41 years ($SD = 9.61$). The majority worked 40 hours ($SD = 3.76$) per week. The average organisational tenure was 16 years ($SD = 9.66$), whilst the average professional tenure was 20 years ($SD = 9.61$). These demographics broadly reflect the demographics of the research population and provide some reassurance regarding the extent of non-response bias.

Data gathering

A total of 950 questionnaires were distributed by hand to registered, professional nurses in the Western Cape. Of the 950 distributed, 419 questionnaires were returned, representing a response rate of 44.1%. The research was conducted during a turbulent period characterised by a national strike that included professional nurses. This contextual factor may have affected the response rate and the mean of self-reported employee commitment to their employer, the hospital. A vacancy rate of 28.5% of professional nurses was reflected in the Annual Performance Plan 2007 and 2008 of Department of Health of the Western Cape which indicates the participants in this study were probably experiencing particularly high workloads necessitated by the shortage of staff. Despite these two contextual factors, the response rate is, nevertheless, relatively high for survey research and given the context of the strike and the busy schedules of the professional nurses surveyed, seems to indicate high interest in the topic of this study.

Research measuring instruments

Data were collected for this study using a self-administered structured questionnaire. The measurement scales used in the questionnaire were adapted from non-proprietary previously used scales. All scales (detailed below) were adapted from scales that had demonstrated high internal consistency reliability (with Cronbach alpha coefficients above 0.7) and strong factorial validity in the studies from which they were drawn. All responses were made on a 5-point intensity of agreement Likert scale. Having determined the content validity of the chosen scales from the extant literature, the face validity of the questionnaire was also assessed prior to distribution by asking senior South African nursing staff to inspect the items and confirm that the items were appropriate for the research population and seemed to reflect the behaviours and attitudes being measured.

Commitments: Commitment to the organisation was measured with a five items scale adapted from the affective commitment scale developed by Meyer and Allen (1997). Commitment to the profession was measured with a 6-item scale adapted from Wallace (1995). Commitment to South

Africa was measured with a 4-item scale adapted from Meyer, Allen and Smith (1993), with the referent term changed from 'occupation' to 'South Africa'.

Intention to quit: Three 3-item scales were used to measure the three intentions to quit variables; intention to quit the organisation, the profession and South Africa (i.e. emigrate). Actual behaviour could not be measured because of the absence of accurate records and time limitations and it was assumed that intentions would serve as a close proxy for actual future behaviour (Ajzen 1991).

Control variables: Organisational as well as professional tenure have been shown to relate to intention to quit and both were, therefore, included as control variables (Chang, Chi & Miao 2007; Reilly & Orsak 1991).

Data analysis

Statistical analysis using STATISTICA 9.1 was conducted to test the propositions. The psychometric properties of each scale were assessed using reliability analysis and factor analysis. Cronbach's alpha was used to assess the reliability of each scale. The research propositions were investigated using Pearson product-moment correlation analysis and standard hierarchical regression analysis.

Results

Principal Axis factor analysis with Varimax normalised rotation were conducted on the intention to quit items and the commitment items. Only factors with eigenvalues greater than one were extracted (Kaiser's criterion) and scree plots were scrutinised to check the factor structure. All items loaded as expected; with high factor loadings and low cross-loadings (detailed factor analysis results are available from the authors). Cronbach's alpha reliability coefficients were calculated for each scale. The alphas range from $\alpha = 0.86$ to $\alpha = 0.93$ which indicates good internal consistency and reliability (Hair *et al.* 2003). Average inter-item correlations within each scale exceeded the 0.3 cut-off recommended by Hair *et al.* (2003).

Table 1 shows the means, standard deviations, reliabilities and Pearson correlation coefficients for the intention to quit and commitment variables. The mean of *affective commitment to the profession* ($M = 4.312$, $SD = 0.716$) was high and the mean for *affective commitment to the organisation* ($M = 3.202$, $SD = 0.902$) was moderate. The mean on the intention to emigrate scale ($M = 2.175$, $SD = 1.042$) was lower than the midpoint of the scale.

Almost 60% (58.7%; $n = 240$) of the nurses indicated that, if they leave their current employment in the community clinic they would stay in South Africa and continue to work in nursing whilst 15.2% said that would stay in South Africa but change careers. A further 18% ($n = 74$) of respondents stated that if they did decide to leave the country, they would continue to work in nursing.

**TABLE 1:** Correlation of commitments with intention to emigrate from South Africa.

Variable	N	SD	Variable					
			ACORG	ITQORG	ACPROF	ITQPROF	ACSA	ITQSA
ACORG	3.2	0.9	(.86)	-	-	-	-	-
ITQORG	2.7	1.1	-0.40****	(.91)	-	-	-	-
ACPROF	4.3	0.7	0.33****	-0.22****	(.93)	-	-	-
ITQPROF	2	1	-0.25****	0.42****	-0.58**	(.91)	-	-
ACSA	3.8	0.9	0.41****	-0.24****	0.38****	-0.23****	(.90)	-
ITQSA	2.2	1	-0.20****	0.35****	-0.18****	0.28****	-0.52***	(.93)

N = 365 (Casewise deletion of missing data).

Cronbach's Alpha coefficients are represented on the diagonal in parenthesis.

AC, Affective Commitment; ITQ, Intention to Quit; SA, South Africa; ORG, Organisation; SD, standard deviation.

*, $p < .05$; **, $p < .01$; ***, $p < .001$; ****, $p < .0001$

There was a strong negative correlation between affective commitment to the profession (ACPROF) and intention to quit the profession (ITQP) ($r = -0.59$, $p < 0.0001$). There was also a large negative correlation between affective commitment to South Africa (ACSA) and the intention to quit South Africa (ITQSA), i.e. ($r = -0.51$, $p < 0.0001$). The relationship between affective commitment to the organisation (ACORG) and intention to quit the organisation (ITQORG) was also statistically significant ($r = -0.40$, $p < 0.0001$).

Standard hierarchical multiple regression was used to assess the magnitude of the association between commitment variables and intention to quit South Africa. Both *organisational tenure* and *professional tenure* were used as control variables and the three different foci of affective commitments (i.e. affective commitment to South Africa, affective commitment to the profession and affective commitment to the organisation) were entered in the second step as the independent variables.

The standard hierarchical regression analysis is shown in Table 2. The control variables were entered in the first step and the commitment variables in the second step. In Step 1, *organisational tenure* was not statistically significant ($\beta = .095$, $p = 0.254$), whereas *professional tenure* was statistically significant ($\beta = -0.22$, $p < 0.001$). That is, a one standard deviation increase in *professional tenure* is associated with a decrease in the dependent variable, *intention to quit South Africa*, of 0.22 standard deviation from the mean. The larger the absolute value of the standardised beta coefficient, the more relative importance it assumes in predicting the effect on the dependent variable. After Step 1, R^2 was 0.025, which was not statistically significant.

As shown in Table 2, after entering the three independent commitment variables into the regression equation, R^2 increased significantly ($\Delta R^2 = 0.25$, $p < 0.0001$). *Affective commitment to South Africa* was a statistically significant predictor ($\beta = -0.53$, $p < 0.0001$), reflecting the strength of the explanatory power of *affective commitment to South Africa* in explaining *intention to quit South Africa* (i.e. emigrate). The two other commitment variables were not significant in the regression equation, so *affective commitment to South Africa* was the only significant predictor of *intention to quit South Africa* in the model. In the presence of the commitment

variables, *professional tenure* was also not significant. The regression model explained 27.6% ($R^2 = 0.276$, $p < 0.0001$) of the variance in the dependent variable, *intention to quit South Africa* (i.e. emigrate).

Ethical considerations

The research protocol of this study was reviewed and approved by a university ethics review board. Permission was obtained from the relevant authorities and administrators to access the sample. A cover letter informed participants about the nature and intentions of the study. Response was voluntary and respondents were asked not to identify themselves on the returned questionnaire, which were returned anonymously. Questionnaires were stored in a secure office and only aggregated data was reported.

Validity and reliability

The study applied well-established quantitative research methods to investigate the theoretically considered explanatory relationships between theoretically rooted constructs. The psychometric properties of all the measurement scales were carefully examined using factor analysis to assess factorial validity and reliability analysis, using Cronbach's coefficient alpha, to assess internal consistency reliability of the items within each scale.

Discussion

The purpose of this study was to examine the relationship between the commitments of professional nurses in the Western Cape province of South Africa and their intention to emigrate from South Africa. The present findings convincingly demonstrate the usefulness of considering

TABLE 2: Regression model for affective commitment to South Africa and the intention to emigrate.

Variable	Step 1	Step 2
Organisational Tenure	0.095	0.036
Professional Tenure	-0.221**	-0.126
Affective Commitment to the Organisation	-	0.04
Affective Commitment to the Profession	-	0.013
Affective Commitment to South Africa	-	-0.525****
R^2	0.025	0.276****
Change in R^2	-	0.251****

N = 373 (Casewise deletion of missing data).

*, $p < .05$; **, $p < .01$; ***, $p < .001$; ****, $p < 0.0001$



commitment in managing the retention of nurses and specifically indicate the importance of considering national commitment when considering emigration intentions amongst professional nurses. This study further supports the usefulness of distinguishing between different foci of commitment and different forms of intention to quit. The analyses showed that the different foci of commitment were distinct from one another as were the different forms of intention to quit; confirming research propositions one and two respectively. This is consistent with commitment theory that posits the distinctiveness of different foci of commitment and the relationship between commitment and intention to quit decisions (Meyer & Allen 1997).

Overall levels of commitment were high across all three commitment foci. This was surprising and reassuring. The very high level of affective commitment to the profession indicates a strong desire by professional nurses to stay in the profession, but may also reflect the tendency of more committed employees to complete survey questionnaires. Statistically significant and practically strong relationships were found between the commitment variables and the intention to quit variables with the strongest relationships between the proximal focus of commitment and its related intention to quit outcome. That is, commitment to the organisation was most strongly related to intention to quit the organisation, commitment to the profession was most strongly related to intention to quit the profession, and commitment to stay in South Africa was most strongly related to intention to emigrate (i.e. intention to quit South Africa). A strong relationship between all the commitment and intention to quit variables was noted with all three foci of commitment significantly related to intention to emigrate. That is; the psychological bond of affective commitment, an emotion-based loyalty to an entity, exercises a powerful influence over the attachments formed by public sector professional nurses (Allen & Meyer 1990).

The results of this study support previous research by further evidencing the relationship between commitment and intention to quit. In this study, commitment explained 27.6% of the variance in intention to quit South Africa amongst professional nurses. Affective commitment to South Africa emerged, as expected, as having the strongest relationship (beta = -0.53, $p < 0.0001$) with intention to emigrate (quit South Africa). As indicated earlier, the majority of the sample of nurses, almost 60%, indicated that they would prefer to continue to stay in South Africa and work in nursing. It appears that nurses are still loyal to South Africa despite negative conditions. Of course, there may be other ties and responsibilities that bind professional nurses to South Africa such as; family commitments, friendships and the like that were not investigated in this study.

The findings presented in this study further confirm the findings of Miller *et al.* (2002) that there is a strong, positive

relationship between affective commitment to South Africa and affective commitment to the organisation. A positive correlation between affective commitment to South Africa and affective commitment to the profession was also found in this study. Miller *et al.* (2002) indicated that if an employee was committed to the organisation they would be less likely to intend to emigrate. This study did confirm the correlation between organisational commitment and intention to emigrate but showed an even stronger relationship with affective commitment to South Africa. In the regression analysis only affective commitment to South Africa was a significant predictor of intention to emigrate, showing that it shares variance with the other foci of commitment. This finding is also consistent with Meyer and Allen's (1997) advice to seek proximal predictors for commitment outcomes.

Implications for practice

'Nursing is facing a serious crisis' (Department of Health 2008:7) because of the loss of experienced professional nurses from the healthcare system, which has been greatly exacerbated by lucrative job offerings outside South Africa. The reasons precipitating the nursing crisis are complex and multifaceted but there is convincing evidence that effective management by administrators and nursing management could help stem the exodus of nurses from South Africa. Of course, this is extremely challenging in a context characterised by limited resources, aggressive international recruitment (Oosthuizen, Ehlers & Jooste 2005) and a declining number of people choosing to pursue a career in nursing (Department of Health 2008). Managers are typically well aware of general factors that could help retain nurses such as better working conditions and better pay, but are also acutely conscious of their limitations in influencing the resource allocation decisions that could ameliorate these areas of concern to nurses. Managers do, however, have control over the culture that they foster within the workplaces that they manage. This study, whilst not dismissing the importance of better remuneration and working conditions, found that the psychological bond of commitment between nurses and their organisation, profession and country create psychological bonds that will improve the retention of nurses. This is supported by a significant body of literature confirming the direct relationship between commitment and intention to quit (Meyer & Allen 1997), as well as the empirical evidence showing the beneficial effects of commitment to individuals and organisations (Gardner 1992). Brewer and Lok (1995) found that positive managerial strategy can generate greater commitment. They also stated that hospital and nursing administrators relied too heavily on the dedication of nurses and their altruism. Sourdif (2004) implored managers to do all they could to encourage nurses to stay. Linking these strands of research findings and recommendations, together with the findings of this study, and what emerges is a clear exhortation to administrators and nursing managers to pay careful attention to developing commitment energy amongst professional nurses to their country. To date, there has been a



'paucity of research on ... the factors that lead to the retention of nurses' in South Africa (Horwitz & Pundit 2008:1) and none concerned directly with the predictors of emigration intention amongst professional South African nurses. The result has been that targeted and creative initiatives have not been developed to tackle the emigration of nurses. Such initiatives must be evidence-based and this study provides preliminary evidence for the importance of national commitment oriented initiatives. It would be inappropriate to suggest specific initiatives prior to conducting further research aimed at uncovering the mechanisms for enhancing national commitment amongst professional nurses. Perhaps the most important implication for practice of this study is for administrators and nursing managers to acknowledge the importance of national affective commitment to South Africa and to pay further attention to its enhancement amongst professional nurses.

The strong predictive relationship between affective commitment to South Africa and intention to emigrate (quit South Africa) implies that if nurses feel a greater emotional connection to South Africa they will be significantly less likely to leave South Africa. There is no literature on this but it does seem intuitive and, importantly, this result shows the importance of fostering affective commitment to South Africa as a retention strategy. The implication is that health service organisations should consider human resource interventions that help develop a deeper commitment to South Africa as a country and help foster a sense of connection to the country so that South African professional nurses feel emotionally bound to a country of which they are proud, feel part of, and are positive about to the extent that they would want to stay here despite the prevalence of negative conditions (e.g., high crime rate, low salaries, and the like).

Possible limitations of the study

This study only surveyed public sector professional nurses in the Western Cape and the generalisability of its findings is therefore limited. The results of this study cannot, therefore, be directly generalised to nurses in private hospitals or to nurses outside the public healthcare system in the Western Cape. Even if the design limitations of this cross-sectional study are considered and the possible effects of common method bias, self-report bias and the like acknowledged, the results of this investigation are still robust enough to demand further attention.

Suggestions for future research

Future studies should attempt to uncover the mechanisms that foster affective commitment to South Africa and not restrict the scope of investigations to factors such as remuneration and working conditions. Care obligations to parents, community involvements and family relationships have strong affective content and may exert a powerful effect on emigration decision-making. None of these variables have been comprehensively investigated in South Africa. The mediating role of affective commitment to South Africa

on the relationship between these variables and intention to emigrate also deserves careful consideration. Future research could also explore regional differences, urban-rural differences and differences across different levels of nurses because such variations in work attitudes have been found amongst South African nurses (Pillay 2009).

Conclusion

This study provides evidence for the predictive power of affective commitment to South Africa in explaining the intention of professional nurses in the public sector to emigrate. Retaining nurses in South Africa is a national priority and this study indicates that developing mechanisms for encouraging an emotional connection to South Africa could yield low-cost interventions, policies and practices that may make a significant difference to hospital managers, nurses and the well-being of all South Africans.

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Competing interests

The author declares that he has no financial or personal relationship(s), which may have influenced him inappropriately in writing this article.

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