



Role of Demographic Variables in Predicting Turnover Intention among Registered Nurses in Nigerian Public Hospitals

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ABSTRACT

Prior research has indicated that employee turnover is detrimental to both individuals and organizations. Because a turnover intention in the workplace is detrimental, several factors have been suggested to better understand the reasons why employees may decide to leave their organizations. One of the significant predictors of employee turnover is related to the demographic characteristics. Some of the demographic characteristics have been studied to date include age, gender, education, experience and tenure, among others. Despite these empirical studies, literature indicates more studies are needed to further understand the role of demographic variables in predicting turnover intention. Hence, the present study fills in the gap by examining the role of age and gender in predicting turnover intention among 175 Registered Nurses in Nigerian public hospitals. Results indicated that male nurses were more likely to leave their organizations or the profession than their female colleagues. Furthermore, the results showed that younger nurses were more likely to leave their organizations or the profession than their older colleagues.

Keywords: Employee turnover, turnover intention, demographic variables, public hospitals, Nigeria.

1. INTRODUCTION

Employee turnover is defined as the ratio of the number of organizational members who had left, either voluntarily or involuntarily during the period under consideration, to the total number of people in that organization during the period (Price, 1977). *Turnover intention is one of the most important attitudinal challenges* that managers constantly faced at work. It has been defined as the tendency of employees to leave their jobs or organization that they are currently working for (Lee, Hung, & Chen, 2012; Mobley, 1982; Price, 1977; Schyns, Torka, & Gössling, 2007).

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In a meta-analytic study of turnover intention, it is suggested that employee's intention to leave is the best predictor of the actual turnover behavior (Tett, & Meyer, 1993). Similarly, Moore (2000) concurred that employee's intention to quit is a stronger signal of the actual turnover. Employee's turnover is costly to organizations. For example, it is estimated that employee turnover is costly to organizations regarding the separation costs; replacement costs of departed employees and training costs of new employees (Cascio, 2000; McKinney, Bartlett, & Mulvaney, 2007; Mobley, 1982).

Due to its significant costs, several factors have been suggested to explain why employees intent to leave. To date, some of the factors that have been considered include perceived organizational justice (Ali, & Jan, 2012; Cantor, Macdonald, & Crum, 2011; Koys, 2001; Parker, & Kohlmeyer III, 2005), organizational culture (Deery, & Shaw, 1999; Gregory, Harris, Armenakis, & Shook, 2009; San Park, & Kim, 2009; Way et al., 2007), job satisfaction (Grissom, Nicholson-Crotty, & Keiser, 2012; Hellman, 1997; Koys, 2001; Mobley, 1977; San Park, & Kim, 2009; Yau-De, Chyan, & Kuei-Ying, 2012), human resource management practices (Allen, Shore, & Griffeth, 2003; Batt, & Valcour, 2003; Haines III, Jalette, & Larose, 2009; Kim, 2012; Long, Perumal, & Ajagbe, 2012; Staufenbiel, & König, 2010), perceived psychological contract breach (Blomme, van Rheede, & Tromp, 2010; Kickul, & Lester, 2001) and perceived organizational support, among others (DeConinck, & Johnson, 2009; Jawahar, & Hemmasi, 2006; Maertz, Griffeth, Campbell, & Allen, 2007). Despite the a fore mentioned empirical studies, however, little studies have been conducted on the role of individual differences in predicting turnover intention in developing countries, particularly in Nigerian context. The purpose of this study was to examine the role of demographic variables in predicting turnover intention among Registered Nurses in Nigerian public hospitals.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Role of Gender and Age in Predicting Turnover Intention

In the present study, gender and age were included to further understand their role in predicting turnover intention. Gender and ages variables were considered in this study since both factors are the most commonly demographic variable included in organizational studies. Firstly, the prior researches findings regarding age differences in predicting turnover intention, have been inconclusive. Lyness and Judiesch (2001) studied 11,076 female and 15,283 male managers who had held diverse jobs, including both supervisory and professional positions from different locations in the United States. They found that men were more likely to leave their organization than women. Lee's (2012) longitudinal survey of 6,199 sample found that married women had higher turnover rates than men, plausibly

due to family reasons and domestic commitments. Conversely, Thatcher, Stepina and Boyle's (2002) study among 128 males and 63 females information technology (IT) workers in a Southeastern U.S. State government showed that the rates of turnover intention was higher in women than men. In a recent study among 187 surviving employees of downsized organizations in Malaysia, it was reported that there was no significant difference in turnover intention for the males and the females (Ho, Sambasivan, & Liew, 2013).

Secondly, research regarding age differences in turnover intention has consistently shown that overall turnover rates were higher for younger employees than the older employees. For example, in their longitudinal survey of 754 Nursing personnel working in various departments at a large Sweden hospital Fochsen et al., (2006) reported that younger nurses were more likely to leave their organizations compared to their older counterparts. Similarly, Jiunn-Horng, Hsing-Yi, Hsiu-Yueh and Hung-Da (2007) studied 76 male nurses working in southern Taiwan. They found that younger nurses were more likely to leave their organizations than their matured counterparts. In a study of 2119 Registered Nurses from 16 small, medium and large-scale hospitals in Germany showed that age was related to nurses' tendency to leave their organization; and younger nurses were more likely to leave their organizations or the profession than did their mature colleagues (Simon, Müller, & Hasselhorn, 2010). Recently, Almalki, FitzGerald and Clark (2012) studied a total of 508 primary health care (PHC) nurses in the Jazan Region of Saudi Arabia and reported that overall turnover rates were higher for younger nurses compared to older ones. Therefore, the following hypotheses are advanced:

H1: Male nurses are more likely to leave their organizations or the profession than their female colleagues.

H2: Younger nurses are more likely to leave their organizations or the profession than their older colleagues.

3. METHODOLOGY

Research Design

The purpose of this study was to investigate the role of individual differences in predicting turnover intention among Nigerian nurses. The study adopts cross-sectional research design. The unit of analysis is nurses working in public hospitals located in Zaria, Kaduna State. Zaria was selected as the context of the study because it has highest concentration of health institutions in Kaduna State, Nigeria.

Participants

Our sample consisted of 175 Registered Nurses from Nigerian public hospitals. Of 175 participants, 47 were males and the remaining 128 were females. The participants were between 21-30 years old (11.43%), 62 of them were between 31-40 years old (35.43%). Majority of the respondents were between 41-50 years old (42.86%) and the remaining 18 of the target participants' age were 51 years and above (10.29%). Of 175 participants, 2.29% identified as Assistant Director of Nursing Service, 8% identified as Chief Nursing Officers, 11.43% were classified as Assistant Chief Nursing Officers, 22.29% identified as Principal Nursing Officers, 35.43% identified themselves as Senior Nursing Officers, 12% identified as Nursing Officers I and the remaining 8.57% identified as Nursing Officers II.

3.1 Measures

Turnover intention

Turnover intention ($\alpha = .87$) was assessed using 3-item from prior research (e.g., Aryee, & Yue Wah, 2001; Lam, Chen, & Takeuchi, 2009). Participants were asked to indicate the extent to which they agreed with each statement. Sample items include, "There any likelihood that you would resign from the hospital and "There is likelihood that you would not continue to be a staff of the hospital during your tenure of employment with your present hospital". Turnover Intention Scale, was assessed on a five-point scale ranging from 1 = "strongly disagree" to 5 = "strongly agree."

Demographic variables

The demographic variables of age was a continuous variable and gender was nominal variable coded as 1 = male and 2 = female.

3.2 Analytical Procedure

Prior testing the simple mediator model, several assumptions of multiple regressions were met. Specifically, No missing data was found. Five multivariate outliers were detected using Mahalanobis distance. None of these five outliers detected were deleted because removal of outliers does not produce a significant change in the mean differences between two groups (i.e., before removal of outliers and after removal of outliers) (see Osborne, & Overbay, 2004). All items in the dataset were screened to ensure that normality assumption was not violated. The results of the normality test show that only one item was found to violate the normality assumption, hence, the item was transformed using cumulative distribution function (CDFNorm).

4. RESULTS

In order to test the hypotheses, Independent Sample T-test and one-way Analysis of Variance (ANOVA) between age groups were used. It could be recalled that *Hypothesis 1* stated that male nurses are more likely to leave their organizations or the profession than their female colleagues. This hypothesis was tested using an independent sample t-test and the results are presented in Table 1.

Table 1: Independent Sample T-test for Gender and Nurses' Turnover Intention

	Levene's Test for Equality of Variances		T-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Equal variances assumed	3.825	.052	-2.002	173	.047
Equal variances not assumed			-2.416	125.204	.017

As indicated in Table 1 that there was a significant difference regarding Nurses' gender in predicting turnover intention at $p < 0.05$ level for the males (mean = 4.25, SD = .59) and the females (mean = 3.97, SD = .90). The findings of the current study suggest that male nurses are more likely to leave their organizations or the profession than their female colleagues.

Finally, *Hypothesis 2*, which stated that younger nurses are more likely to leave their organizations or the profession than their older colleagues, was tested using one-way Analysis of Variance (ANOVA) between groups. In this test, the participants were divided into four age groups (i.e., 21-30 years, 31-40 years, 41-50 years and above 51 years). The results of the one-way Analysis of Variance (ANOVA) between age groups are presented in Table 2.

Table 2: ANOVA - Age and Nurses' Turnover Intention

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.164	3	.388	.555	.646
Within Groups	119.640	171	.700		
Total	120.804	174			

As indicated in Table 2, there were statistically significant differences at $p < 0.05$ level in the turnover intention for the four age groups ($F = .555$, $p = .646$). Specifically, 21-30 years age group (mean = 4.23, SD = .77) had the highest turnover intention. The results showed that younger nurses are more likely to leave their organizations or the profession than their older colleagues. Hence, indicating support for this hypothesis 2.

5. DISCUSSION

The main focus of the present research was to examine the role of individual differences in predicting turnover intention in developing countries, particularly in Nigerian context. Consistent with previous research that male nurses are more likely to leave their organizations or the profession than their female colleagues (Lyness, & Judiesch, 2001), the results of the present study provide strong support for sixth hypothesis. Regarding the role of age in predicting turnover intention, the findings of the current study suggest that younger nurses are more likely to leave their organizations or the profession than their older colleagues. This finding is not surprising because it is consistent with previous studies that demonstrated that (e.g., Almalki et al., 2012; Fochsen et al., 2006; Jiunn-Horng et al., 2007; Simon et al., 2010).

Although this study has provided support for all hypotheses, however, several of its limitations need to be recognized and discussed. Firstly, the participants in the present study were mainly Registered Nurses from public hospitals located in Kaduna, Nigeria, which makes it impossible for generalizing these findings. Therefore, it is recommended that future research should to be conducted by collecting data from diverse populations, including Registered Nurses from private hospitals to allow comparisons to be made with prior research as well as to generalize the findings. In conclusion, in line with previous research, results indicated that male nurses were more likely to leave their organizations or the profession than their female colleagues. Furthermore, the results showed that younger nurses were more likely to leave their organizations or the profession than their older colleagues.

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