

JOB SATISFACTION AND TURNOVER INTENTION AMONG NURSES: THE MEDIATING ROLE OF MORAL OBLIGATION

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ABSTRACT

The shortage of nurses has become a worldwide issue. It is even a critical issue in that the demand for nurses is expected to increase in the next few decades while the supply of nurses is expected to decrease. Consequently, nurses' intention to leave has become a topic of great importance to researchers. Therefore this study of intention to leave among nurses in Malaysian public hospitals was conducted with two main objectives: 1) to investigate the relationship between job satisfaction and intention to leave among nurses in Malaysian public hospital, and 2) to determine the role of moral obligation as a mediator on the relationship between job satisfaction and intention to leave. The study focused on permanent nurses working in public hospitals in Peninsular Malaysia. Results of analysis supported that job satisfaction was significantly and negatively related to intention to leave. The most important finding is the significant mediating effect of moral obligation on the relationship between job satisfaction and intention to leave. The findings therefore were crucial to be looked into so that management and employers could have ample understanding and guidelines if they were to draft retention strategies.

Keywords : intention to leave, job satisfaction, moral obligation, nurses

1.0 Introduction

Around the globe, the shortage of nurses has become a critical issue. Research conducted by Pennsylvania State in 76 countries found that most of these countries are facing nursing shortage. The situation is worsening especially in poor resource countries whereby many trained nurses hop over to the private sector or leave their own countries to serve in foreign countries due to better offer and benefits. To mitigate the problem of employees' turnover in nursing field, some researchers suggested that it was better for employers to examine nurses' intention to leave instead of studying turnover itself.

Study on intention to leave is crucial since previous research found that intent to leave and actual turnover were often correlated (Castle et. al, 2007). The utilization of the turnover intention construct in predicting the actual turnover was appropriate for studies on turnover had demonstrated that turnover intention was the best predictor of voluntary turnover (Price,2000) and the strongest precursor of turnover (Allen et al, 2003). Literature showed that job satisfaction was the most compelling factors to be the predictors of intention to leave; the more satisfied the employees, the less likely they intend to quit and the less satisfied employees, the more likely they intend to quit (Simmons, 2005; Nogueras, 2006; Larkey et. al, 1995; The Free Library, 2006).

Literature also suggested that there were many reasons that contributed to workers' intention to leave. However, this paper would only focus on the one most prominent variable - job satisfaction - and its relationship with intention to leave. The role of moral obligation as a mediating variable on the relationship between job satisfaction and intention to leave would also be explained in this paper.

2.0 Literature Review

There have been abundant of studies on intention to leave. However, at time when nursing shortage has become a global issue (Buchan & Calman, 2004) and a serious problem in vast majority of post-industrialized countries (Galletta, Portoghese and Battistelli, 2011), the issue seems to be relevant and still need a special attention. In many of developing countries, the situation is worsening as many trained nurses hop over to the private sector or leave their own countries to serve in developed countries due to better offered salaries and benefits. The issues of nursing shortage in most part of the world, having high turnover rate in nursing and losing a number of nurses to private sector and foreign countries also suggest that instead of looking at the workers' turnover itself, it is better for the organizations to detect the feeling of intent to leave among their employees so that retention strategies could be drafted and implemented; thus it could then possibly minimize the turnover rate itself.

2.1 *Intention to leave*

Turnover and intention to leave are two different concepts. Intention to leave involves individual's perception towards leaving while turnover involves the act of individual actually leaving the organization or profession (Hinshaw & Atwood, 1984). An employee is said to have intention to leave when he or she has serious consideration to leave his or her current job (Castle, 2007). Intention to leave has a close link with turnover. Thus, the use of turnover intention in predicting the actual turnover seems to be reasonable since some studies on turnover have demonstrated that turnover intention is the best predictor of voluntary turnover (Price, 2000).

Many studies on intention to leave have been conducted to examine intention to leave and factors relating to intention to leave in various fields. Many researchers have attempted to answer the questions of what really determines employees' intention to leave by investigating possible antecedents of employees' intention to leave. However, to date, there is no standard reason why employees leave an organization or profession (Ongori, 2007) and there has been little consistency in the findings to the question of what really determines employees' intention to leave.

2.2 *Job Satisfaction and Intention to Leave*

Job satisfaction is one of the most frequently studied work attitudes (Pool and Pool, 2006) and is expected to remain as a topic of interest across culture and field since studies of turnover continue to accumulate and remain important to Human Resource Development professionals (Somer, 1996; Hatcher, 1999). Indeed, job satisfaction is said to be the common reason for leavers to leave their organizations or professional fields (Tull, 2007). This is proven as numerous research findings have revealed that job satisfaction is found to be significantly and negatively related to the intention to leave on a consistent basis (Chou et al., 2005).

There is empirical evidence provided by many studies that reveal a link between job satisfaction and intention to leave. Shaw (1999) found that there is a negative relationship between job satisfaction and turnover intention. This is further supported by Castle et al. (2007) whose results demonstrated that high job satisfaction scores among nurses were associated with low scores on nurses' intention to leave. Harman, Blum, Stefani and Taho (2009) also found that the relationship between job satisfaction and intent to leave is significant. Workers who are dissatisfied leave while those who are satisfied remain (Egan and Kadushin, 2004).

2.3 *Moral Obligation*

There is limited reference or past research that really discussed or focused on moral obligation as one of the variables in the study of intention to leave. Prestholdt et. al (1987), Sharkey (1994) and Lane, Mathews and Prestholdt (1988) have contributed in the understanding the role that moral obligation plays in examining the intention to leave. However, the relevance of moral obligation in predicting intention depends very much on the type of behavior, profession and sample being studied (Sharkey, 1994). In nursing, moral obligation and work responsibilities are assumed to be the two dimensions that complement each other (Cronqvist et. al, 2004). Yearwood (2007) also seemed to agree that moral obligation could provide a basis to tackle the problem of internal as well as external nurse migration.

2.4 *Problem Statement*

Proper staffing and stable nursing workforce will ensure the quality of nursing care received by patients and the quality of health care system, thus, having sufficient number of nurses is important. However, many articles and journals have discussed the nursing shortage, which has become a global issue. The shortage at the national and international level is exacerbated when nurses, especially from the public sector are lured by offers from private hospitals or even foreign hospitals (Ministry of Health, 2008; Missouri State Nursing Board, 2008). The existing and predicted national and global shortage of nurses would surely bring negative impact on society's health care needs.

In Malaysia, public hospitals seem to be the most affected. This is because both public and private hospitals are facing a severe nursing shortage (www.moh.gov.my), and many trained and experienced public nurses have moved to the private sector or overseas, causing inefficiency and disruption in the Malaysian public healthcare system. Realizing the potential negative impacts of turnover on society's

future health care needs as well as to the nation, this study on intent to leave among Malaysian nurses in the public sector is believed to be crucial since from a policy perspective, keeping the 'right nurses in the right place' requires identifying and understanding the factors affecting their work motivation and performance (Zurn, Dolea and Stilwell, 2005).

2.5 Research Objectives

The objectives of this study are:

1. To investigate the relationship between job satisfaction and intention to leave among nurses in Malaysian public hospitals.
2. To determine the role of moral obligation as a mediator on the relationship between job satisfaction and intention to leave.

2.6 Hypotheses

Based on literature research, as depicted by Figure 1 below, this study hypothesizes that:

- H1: Job satisfaction is negatively related to intention to leave among Malaysian public hospital nurses.
- H1a: Pay/Rewards is negatively related to Intention to Leave among Malaysian public hospital nurses
- H1b: Professional Status is negatively related to Intention to Leave among Malaysian public hospital nurses.
- H1c: Interaction/Cohesion is negatively relates to Intention to Leave among Malaysian public hospital nurses.
- H1d: Administration is negatively relates to Intention to Leave among Malaysian public hospital nurses.
- H2: Moral Obligation mediates the relationship between Job Satisfaction and Intention to Leave among Malaysian public hospital nurses.
- H2a: Moral Obligation mediates the relationship between Pay/Rewards and Intention to Leave among Malaysian public hospital nurses.
- H2b: Moral Obligation mediates the relationship between Professional Status and Intention to Leave among Malaysian public hospital nurses.
- H2c: Moral Obligation mediates the relationship between Interaction/Cohesion and Intention to Leave among Malaysian public hospital nurses.

H2d: Moral Obligation mediates the relationship between Administration and Intention to Leave among Malaysian public hospital nurses.

3.0 Methodology

The questions used in this survey were based on established existing instruments with some alterations and modifications to the original questions made to suit the study due to cultural factors and practice. The questions were divided into four major sections: Section A measures perceived job satisfaction, Section B measures moral obligation, Section C measures the respondents' intention to leave and Section D requires the respondents to provide their demographic data.

The survey is a self-administered survey and 700 sets of these self-administered questionnaires were sent to the selected major hospitals in Peninsular Malaysia. Prior to that, the ethical approval for the study and its method was first obtained. Since this study involved nurses working at public hospitals as the respondents, permission and approval were obtained from the Malaysian Ministry of Health and a few other important related institutions such as Malaysian Research Ethical Committee (MREC), National Institutes of Health (NIH) and the respective hospitals.

3.1 Population, Sample and Sample Size

The sample of this study is nurses working permanently in public hospitals in Peninsular Malaysia. They were chosen as the sample since this group of workers was said to be more likely to opt for offers from private health institutions (News Straits Times, 2007; malaysian.medicine.blogspot.com, 2007) or even accept offers to serve overseas (Ministry of Health, 2004, Missouri State Nursing Board, 2008). As of March 2008, there were about 75,000 of active nurses in Malaysia (Sinar Harian, 29th March 2008; Ministry of Health, 2008). According to Sekaran (2003) if the size of the population is 75,000, the sample size (S), should be 382. However, 700 sets of questions were delivered at the selected hospitals.

3.2 Measurements

The existing instruments with established reliability and validity were used to measure the variables examined in this study. Work Satisfaction Scale (WSS) which was developed by Hinshaw and Atwood (1984) was chosen to measure job satisfaction level among Malaysian public hospital nurses. This WSS was already administered to nursing staff members in 15 hospitals throughout Arizona before it was declared as one of the instruments that could be used to measure worker's job satisfaction level.

To measure moral obligation, two questions adopted from Prestholdt et. al (1987) and Sharkey (1994) and based on the literature on moral obligation, two more questions were added; one was positively worded and the other was negatively worded. Thus it made four questions altogether in this study to measure moral obligation. Finally, Anticipated Turnover Scale (ATS) which was developed by Hinshaw and Atwood (1984) was used to measure the respondents' intention to leave. This self-report

Anticipated Turnover Scales (ATS) instrument contains twelve items related to respondents' anticipated length of time to leaving and their certainty of leaving their job. All the questions used were rated on a seven point scales (Likert Scale) ranging from 1 (strongly disagree) to 7 (strongly agree).

3.3 Data Analysis

For data analysis, the responses were keyed into SPSS and analyzed using descriptive statistics such as frequency distribution, mean and median to show trends in the data. Correlation analysis and hypothesis testing were then conducted by applying SPSS Pearson Correlation and SPSS macro which was provided by Preacher and Hayes (2009).

3.4 Validity and Reliability

Principal Components Analysis (PCA) factor loadings show whether items are actually measuring what they should measure. Items with larger factor loadings provide better measures of the underlying property than do items with smaller factor loadings. As suggested by Hair (1998), loadings are considered significant if they are ± 0.50 or greater (Manning and Munro, 2004). The questions used in this study were considered valid since all the questions fell under their respective dimensions. As for reliability, if the variable has internal consistency reliability (Cronbach's alpha) of at least 0.60 (Nunally, 1978) or 0.50 (Smith and Glass, 1987) the measurement is sufficient and reliable for research purposes. The Cronbach's Alpha for all dimensions in this study were all well above 0.50.

4.0 Findings and Discussion

There were 436 responses returned, out of 700 questionnaires distributed, which then gave 62.3% overall response rate. However, only 398 responses were usable.

Table 1 : Respondents' Profiles

Demographic Characteristics		Frequency	Percentage (%)
Gender	Male	3	0.80
	Female	395	99.20
Age	Below 25 years	32	8.00
	26 – 30 years	87	21.90
	31 – 35 years	68	17.10
	36 – 40 years	66	16.60
	41 – 45 years	29	7.30
	46 – 50 years	39	9.80
	More than 50 years	77	19.30
Race	Malay	360	90.50
	Chinese	18	4.50
	Indian	18	4.50
	Others	2	0.50
Marital Status	Married	349	87.70

	Unmarried	38	9.50
	Divorced, Separated, Widowed	11	2.80
Level of Education	MCE/HSC	89	22.40
	Certificate	38	9.50
	Diploma	258	63.60
	Degree	16	4.00
	Master	2	0.50
Level of Income	Less than RM 1500	18	4.50
	RM1501 – RM 2500	167	42.00
	RM2501 – RM 3500	161	40.50
	RM3501 – RM 4500	43	10.80
	Above RM 4500	9	2.30
Organizational Tenure	Less than 1 years	78	19.60
	1 – 3 years	86	21.60
	4 – 6 years	70	17.60
	7 – 9 years	37	9.30
	10 – 12 years	40	10.10
	13 – 15 years	42	10.60
	More than 15 years	45	11.30

n=398

Out of 398 respondents, 99.2% were females and only 0.8% were males. In terms of age, most of the respondents were between 23 and 57 years of age with the mean age being in the range of 36-40 years old. Of the total respondents, 8% were below 25 years old, 21.9% were from a range of ages between 26 and 30 years, 17.1% were between 31 and 35 years, 16.6% were between 36 and 40 years, 7.3% were between 41 and 45 years, 9.8% were between 46 and 50 years, and 19.3% were from those who were more than 50 years old. The highest response rate based on the respondents' age came from the group of respondents whose age was between 26 and 30 years.

The study found that 90.5% of the respondents were Malay, 4.5% were Chinese, 4.5% were Indians and 0.5% were others. It was also found that 87.7% were married, 9.5% were single or bachelor and 2.8% were in the category of divorced, separated or widow. Based on education status, 63.6% were Diploma holders, 22.4% were those with Malaysian Certificate of education (MCE) or Higher School Certificate (HSC), 9.5% were those with certificate, 4% were degree holders and 0.5% were those with Master Degree.

Based on income, the data indicated that 42% of respondents received a salary between RM1,501.00 and RM 2,500.00 per month, 40.5% received RM 2,500.00 – RM 3,500.00, 10.8% received RM 3,501.00- RM 4,500.00 , 4.5% received RM 1,500.00 and 2.3% received a salary above RM 4,500.00 per month.

Meanwhile, the respondents' organizational tenure ranged from less than one year to more than fifteen year.

Table 2 : Descriptive Statistics for Each Variable (Minimum, Maximum, Mean and Standard Deviation)

Variable/Dimension	Min.	Max	Mean	SD
1.Job Satisfaction	2.139	3.954	2.965	0.323
2.Moral Obligation	1.751	4.480	3.191	0.561
3.Intention to Leave	1.000	2.994	2.085	0.517

Note: n=398

Table 2 shows that the scores for Job Satisfaction among nurses in Malaysian public hospitals range between 2.139 and 3.954 with a mean of 2.965 and standard deviation of 0.323. The scores for Moral Obligation range between 1.751 and 4.480 with a mean of 3.191 and standard deviation of 0.561. While the scores for Intention to Leave range between 1.000 and 2.994 with a mean of 2.085 and a standard deviation of 0.517.

Table 3 : Results of Correlations Between Job Satisfaction, Moral Obligation and Intention to Leave

Variable	Moral Obligation		Intention to Leave	
	Pearson Corr.	Sig.	Pearson Corr.	Sig.
Job Satisfaction	0.473**	0.000	-0.469**	0.000

**Correlation is significant at the 0.01 level (2 tailed)

Table 3 reveals that job satisfaction has a significant negative relationship with intention to leave with $r = 0.469$ (negative) and $p < 0.05$ and job satisfaction has a significant positive relationship with moral obligation ($r = 0.473$, $p < 0.05$).

Table 4 : Results of Estimating the Direct Effect of the Job Satisfaction and its Dimensions on Intention to Leave

Independent Variable	Coefficient	t	p
Total Job Satisfaction	-0.246	-3.379	0.001*
Pay/Rewards	-0.061	-1.298	0.195
Professional Status	-0.134	-2.262	0.024*
Interaction/Cohesion	-0.042	-0.880	0.380
Administration	0.026	0.537	0.592

* Significant at 0.05 significance level

Based on Bootstrapping macro results displayed in Table 4, it was found that the direct effect coefficient for total/overall job satisfaction on intention to leave is about 0.246 (negative). Testing significance of this coefficient using t statistic then obtained t value of -3.379 and the p value 0.001. Because the coefficient value is negative and the p value < 0.05 , it is then concluded that total/overall job satisfaction has a significantly negative relationship with intention to leave. Thus, H1 is supported.

The figures proposed that job satisfaction among nurses in Malaysian public hospitals under this study has a significant negative relationship with intention to leave. The result of the study implied that nurses who work in Malaysian public hospitals are more likely to leave if they feel dissatisfied with their work or organization as compared to those who satisfied. This in fact is not a surprise since there is empirical support for the link between job dissatisfaction and intention to leave (Zurn et al, 2005). The results also supported Hypothesis 1 (Job satisfaction is negatively related to intention to leave) and were consistent with the findings of most of previous studies that claimed job satisfaction has significantly negative relationship with intention to leave (Perry, 2008; Van der Heijden et al, 2007; Miller, 2007; Slattery and Selvarajan, 2005; Egan and Kadushin, 2004; Shaw, 1999; Zulkiple Kassim, 1997; Mohd Fikri Sutan Tahrudin, 1997).

The result of this study is also in agreement with some other studies such as Cotton and Tuttle, 1986; Arnold and Feldman, 1982; Bluedorn, 1982; Mobley, 1982; Price, 1977 who reported a quite consistent negative relationship between job satisfaction and turn over and turnover intention as well (Khatri et. al, 1999). Chen and Spector also reported that lower rates of job satisfaction would also result in higher rates of intention to quit (Reinardy, 2007). Chou (2005) claimed that Susskind et. al (2000) had further strengthened the previous findings by stating that a number of researchers found that job satisfaction to be significantly and negatively related to turnover intention on a consistent basis. In fact, Griffeth, Horn and Gaertner (2000) and Vanderberg and Lance (1992) revealed that there had been a substantial body of literature that reported job satisfaction as negatively associated with turnover intention (Slattery and Selvarajan, 2005). Several local studies (eg: Banu Nagaindran, 2006; Ishak Ismail, 2006; Zulkifli Kassim, 1997; and Mohd Fikri, 1997) also produced similar result; job satisfaction has negative relationship with employee's intention to leave.

Table 4 also depicted that the estimated results for all four dimensions of job satisfaction indicates that only one dimension of job satisfaction - professional status - shows a significantly negative relationship with intention to leave ($p < 0.05$). Whereas, three other dimensions of job satisfaction, were found to be not significantly related to intention to leave ($p > 0.05$). Pay/ Rewards ($t = -1.298$, $p = 0.195$) and Interaction/Cohesion ($t = -0.880$, $p = 0.380$) dimensions respectively have an insignificantly negative relationship with intention to leave. The Administration dimension shows a positive relationship with intention to leave ($t = 0.563$), however, the relationship is not significant ($p > 0.05$).

In general, although the results of this study yield support for the claim that job satisfaction relates to intention to leave, when the four dimensions of job satisfaction are examined independently, not all the hypotheses are supported (pay and rewards, social interaction/cohesion and administration - the results yielded insignificant results). Thus, only H1b is supported. Although the results do not support H1a, H1c and H1d, another viewpoint, they tend to support Herzberg's Two Model Theory, which states that pay

and rewards, social interaction/cohesion and administration are hygiene factors, not motivation factors. Thus, this could be a strong reason why there is an insignificant relationship between pay and rewards, interaction/cohesion and administration and intention to leave. As claimed by the Herzberg Theory, these hygiene factors are closely related to negative feelings towards a particular job but do not contribute towards motivation (Manisera, Dusseldorp and van der Kooij, 2005).

The dissimilarity in some of the results, as compared to previous studies, allows further discussion and investigation of what really triggers the dissimilarity in the results, regardless of whether the difference is due to sample, setting, measurement or culture. The difference in the findings also indicates that there might be a need to refine the measure (Labatmedience et al., 2007) to suit the sample and setting. This study found that the measurement, which is to measure job satisfaction, introduced by Hinshaw stressed on the hygiene factors rather than the motivation factors. Motivation-hygiene Profiles (Herzberg, 1974) reveals that motivation factors include achievement, recognition of achievement, work, responsibility, advancement and growth while hygiene factors include salary, work environment, relationship, administration and policies. Thus, future investigation on this particular area will surely address the issue.

Table 5 : Results of Estimating the Indirect Effect and Bootstrapping 95% Confidence Interval (CI) of Job Satisfaction and Its Dimensions

Independent Variables	Coefficient	95% CI	
		LL	UL
Total Job Satisfaction	-0.119*	-0.207	-0.054
Pay/Rewards	-0.030	-0.069	0.005
Professional Status	-0.003	-0.052	0.054
Interaction/Cohesion	-0.003	-0.04	0.032
Administration	-0.041*	-0.085	-0.007

Note: CI=confidence interval; LL= lower limit; UL=upper limit. *Significant at 0.05 significance level

Based on the results shown in Table 5, it was determined that the indirect effect coefficient for total/overall job satisfaction on intention to leave through moral obligation is 0.119 (negative). Testing the significance of this coefficient using the bootstrap method determined that the true indirect effect was estimated to lie between -0.207 and -0.054 with a 95% confidence interval. Because zero is not in the 95% confidence intervals, we can conclude that the indirect effect is significant at $p < 0.05$. Thus it is concluded that Moral Obligation is a significant mediator for the relationship between total/overall job satisfaction and intention to leave. The results of estimating the indirect effect of the individual four dimensions of job satisfaction found that the relationship between administration and intention to leave is mediated by moral obligation but for the other three dimensions of job satisfaction - pay/rewards, professional status, and interaction/cohesion - their relationships with intention to leave are not mediated by moral obligation.

6.0 Conclusion

The results of the study not only have fulfilled the objectives but also have filled the research gap, especially with respect to moral obligation as a mediating variable in the study. In fact, the inclusion of moral obligation as a mediating variable in examining the relationship between job satisfaction and its individual dimensions and intention to leave is considered a major contribution of this study.

The findings of the study regarding job satisfaction mirrored the previous findings in that it revealed a negative relationship with intention to leave. The findings also suggest that the effects of moral obligation as a mediating variable on the relationship between job satisfaction and intention to leave among nurses who work in Malaysian public hospitals is crucial to be looked into so that management and employers could have ample understanding and guidelines to draft the retention strategies.

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