

The Contribution of Demographic variables: Job Characteristics and Job Satisfaction on Turnover Intentions

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ABSTRACT

This paper presents a study that determined the relationship of job characteristics and job satisfaction and turnover intentions and examined the contribution of demographic variables, job characteristics and job satisfaction on turnover intentions. The sample consisted of 292 IT staff in Telecom Malaysia (TM). The results hypothesized that job satisfaction and job characteristic factors are negatively and significantly related to turnover intention. The study found that demographic variables, job characteristics and job satisfaction had a significant contribution and negative effect on turnover intentions. The study revealed that job satisfaction accounted for larger variance in turnover intentions than from job characteristics. The finding also revealed that job satisfaction had more effect on turnover intentions than from job characteristics. Findings and implications for managerial practices in the study are discussed and put forward.

INTRODUCTION

High productivity and performance of most organizations could not be realized without employee's support and contribution. This is because employees are partly responsible for the achievement of organization's goals and strategy. Therefore managers should concern on issues and problems encountered by employee in organizations. This includes staff in IT (information technology) of telecommunication companies. To be competent IT staff must obtain vast knowledge in all aspects as well as the technical skills to help organizations achieve their goals and vision. Turnover among IT staff in telecommunication companies can cause disastrous effects. This is due to the loss of their knowledge and acquired technical skills. Excessive turnover can be fatal to organization due to the shortage of expertise in the job market and the high cost of training new employees (Igharia and Greenhaus, 1992). Turnover also has personal costs to employee in the form of lost benefits, friendship and perhaps a disruption of the family. Literature review leading towards factors affecting turnover intentions of IT staff in telecommunication companies in Malaysia was never done. This study explored the contribution of demographic variables, job satisfaction and job characteristics on turnover intentions of IT staff in TM (Telecom Malaysia).

LITERATURE REVIEW

Turnover Intentions

Turnover is referred as an individual's estimated probability that they will stay an employing organization (Cotton and Tuttle, 1986). Meanwhile Tett and Meyer (1993) defined turnover intentions as conscious willfulness to seek for other alternatives in other organization. Reviews on the antecedents of turnover intentions have highlighted intent to leave rather than actual turnover as the outcome variable. This is due to two reasons. Firstly,

employees have decided in advance the decision to leave the organization. This is in line with attitude-behavior theory (Fishbein and Ajzen, 1975) that one's intention to perform a specific behavior is the close predictor of that behavior. Results on the study of the relationship between turnover intentions and actual turnover have given support and evidence on the significant relationship between these variables (Lambert et al., 2001). Therefore Price (2001) suggested turnover intentions construct as alternative in measuring actual turnover.

Secondly, cross sectional study is more appropriate than longitudinal study in investigating employees' intention to quit. Furthermore, turnover is not only influenced by certain factors as there are several factors that could predict turnover intentions. This includes attitudinal, behavioral and organizational factors. Literature has also identified that work related factors, personal characteristics and external factors as determinants of employee turnover tendency (Tyagi and Wotruba, 1993). Therefore, the identification of factors that relate and give impact on turnover intentions is considered as important due to some recent evidence that job characteristics and job satisfaction are more efficacious predictor of turnover intentions than is intention to remain (Kopelman et al., 1992). Most studies have focused on the great impact of attitudinal factors such as job satisfaction and organizational commitment on turnover intentions. However less study has focus on the effect or impact of job characteristics on turnover intentions among IT professional in Malaysian context. Therefore this study examined the contribution of demographic variables job characteristics and job satisfaction on turnover intentions.

Job satisfaction, Job Characteristics and Demographic Variables and Turnover Intentions

Job satisfaction is the extent to which an employee feels about his or her job (Odon et al., 1990). Demir (2002) refers job satisfaction to employees' feel of contentment and discontentment for a job. Cranny et al. (1992) concluded that job satisfaction is a contribution of cognitive and affective reactions to the differential perceptions of what an employee wants to receive compared with what he or she actually receives. Job satisfaction has long been an important concept in the organizational study of the responses employees have to their jobs.

According to Moorman et al. (1993) there are three practical points of view that illustrate the meaning of job satisfaction: First, is a valuable product of the society; second, is an early warning indicator at early stage for an organization and third, can serve as a predictor of organizational behavior. Similar to Moorman' point of view, Cranny et al (1992) found that job dissatisfaction could result in psychological frustration and low productivity. Job satisfaction plays a very critical role in attracting and retaining of employees' ability in an organization (Brookfield, 1998). According to Brookfield, individuals with high levels of job satisfaction would have healthier physical and psychological records that very likely result in higher productivity and effectiveness in their job performance and will staying longer in organization.

According to the first study of job satisfaction as reported in literature, if the presence of a factor in the work setting lead to job satisfaction, then the absence of this factor will produce job dissatisfaction. In discussing job satisfaction, Maslow's (1970) hierarchical need theory has been used to conceptualize worker motivation based on the five levels of needs. Maslow's theory constitute of five levels of individual needs: self-actualization and esteem needs at the top level whilst social, safety and physiological needs at the bottom. This theory has often been used to

conceptualize employee's motivation based on the different levels of needs. Maslow assumes that some needs are more important than other needs and must be satisfied before the other needs can serve as motivator.

Meanwhile, Herzberg's (1973) theory is based on two basis types of needs: 1) the need for psychological growth or motivating factors and 2) the need to avoid pain or hygiene factors. The motivating factors constitute elements like achievement and advancement. These are positive elements that contribute towards job satisfaction and motivation. Hygiene factors such as company or organizational policies, quality of supervision, working condition, salary, relationship with peers and subordinates, status and security are negative elements that could cause dissatisfaction at work. In Herzberg's theory, job satisfaction and job dissatisfaction are totally separate dimension. Therefore, improving a hygiene factor such as working conditions will not make people satisfied with their needs, instead it will only preventing them from being dissatisfied. Generally, Maslow's and Herzberg's theories emphasize the importance of individual in organization to advance. The advancement indirectly will change individual's needs. In consequential, it will help individuals to put extra effort to continuously achieve their needs and satisfaction. Studies have consistently reported that job satisfaction is one of the factors or reasons for employee intentions to leave the organization (Price, 2001).

The premise of motivation theory based on intrinsic and extrinsic motivation has posed some questions. This is because according to Amabile (1997) extrinsic motivation may continue synergistically with intrinsic motivation. Further, Amabile (1997) have identified three factors that could influence positive synergy or intrinsic motivation: firstly, the person's initial motivational state; secondly, the type of extrinsic motivation used and thirdly, the timing of the extrinsic motivation. Intrinsic motivation includes rewards, recognition and feedback. Zetlin (2001) stated that reward, recognition and feedback are among strategies used in retaining talent of IT professional in organization. In addition, according to Zetlin (2001) workplace is also identified as factor that affected high creativity among IT staff. Workplace orientations according to Amabile (1997) include : a) organizational encouragement (a culture that fosters, appreciates and fairly rewards creativity, has mechanisms that support innovation and has a shared vision and active flow of ideas); b) supervisory encouragement (a manager serves as a positive model, sets appropriate goals and supports and values both the work group and individual contributions); c) work group supports (characterized by skills diversity, honest communication, openness to innovative ideas, constructive challenge and mutual trust, support and commitment); d) challenging work (focusing on challenging tasks and important projects and freedom (autonomy and control over one's work, although had smallest effect on creativity) .

Some organizational impediments would also undermine creativity that could yield high turnover rates of IT staff. Among the organizational impediments are like internal politics, harsh rejection of new ideas, destructive internal competition, risk-avoidance and excessive support for the status quo. Research have revealed that workload pressure (intensive time pressure, unrealistic productivity demand and distraction creative work) had minimal impact on creativity, but have been identified as sources of job satisfaction and turnover rates among IT staff (Fisher, 2000). In addition, empirical studies indicate that demographic variables are relevant with turnover intentions (William and Hazer, 1986). Age, income and tenure are identified as negatively related to turnover intentions (Cotton and Tuttle, 1986; Morrow, 1983 and Gregersen and Black, 1982). Although the effects of employee

demographic variables on turnover intentions may differ in different international environment, empirical research in international context including in Malaysia is scanty (Naumann, 1993). Tyagi and Wotruba, (1993) supported that very few studies have investigated the effect of employee characteristics on employee turnover. In Malaysian context, a number of studies (eg. Samad, 2004) found relationship between job satisfaction and turnover intentions. However no study investigated the influence of demographic variables on IT staff turnover intentions.

Several concepts of job characteristics have been highlighted by scholars however, they share a common theme that highlighting the nature of work and their implication on job outcomes (Samad, 2004). Among the reliable and valid measure of the various job characteristics is the instrument developed by Hackman and Oldman (1975). This instrument assesses job characteristics based on five core aspects mainly skill variety, task identity, task significance, autonomy and feedback. Preceding discussion and previous research have indicated that job characteristics and job satisfaction are related and have some impact on employees' intention to leave organization. Sager and Johnston (1989) suggested that job satisfaction and job characteristics as well as demographic variables (Cotton and Tuttle, 1986; Morrow, 1983 and Gregersen and Black, 1982) exert a significant effect on employee turnover intention.

Despite of several empirical studies among organizational scholars, however, previous empirical findings are still less encouraging and have been inconclusive. This is especially in terms of the nature of the relationships and contributions of job satisfaction and job characteristics on turnover intentions (Sager and Johnston, 1989). In relation to this, further investigations are required to determine the differential contribution and effect of job characteristics and job satisfaction on turnover intentions. Most studies of the behavioral outcomes of job characteristics (Sager et al., 1998) and job satisfaction (Roznowski and Hulin, 1992) have focused on employees in certain industries. The present study expands the analysis to include a wider spectrum of workers so that helps address the issue of imbalance. Examining the turnover intentions among IT professional in the leading telecommunication firm in Malaysia is long awaited. Therefore, this study focused on turnover intentions of IT staff in TM with aims at answering the following hypotheses:

- H1: There is a relationship between job satisfaction and turnover intentions
- H2: There is a relationship between job characteristics and turnover intentions
- H3: Job satisfaction will have significant contribution on turnover intentions
- H4: Job characteristics will have significant contribution on turnover intentions
- H5: Job satisfaction will have more effect on turnover intentions than from job characteristics

METHODOLOGY

Subjects and Sampling Procedure

This study was conducted in Telecom Malaysia (TM), the biggest telecommunication company and the main provider of telecommunication services in Malaysia. A total of 300 questionnaires were distributed to

respondents based on the simple random sampling. 292 usable questionnaires were returned and analyzed and representing a response rate of 97.3%. The pre-test results of the instrument provided an acceptable level of reliable statistics ranging from .89 to .95 for all the variables. The self-administered questionnaires comprised independent variables of job satisfaction and job characteristics and dependent variable of turnover intentions. The collected data were then summarized and analyzed using Pearson Product Moment Correlation and multiple and hierarchical regression analysis.

MEASURES

Dependent Variable

Turnover intentions, the dependent variable of the study, were assessed using three items adapted from Donnelly and Ivancevich (1985). The statements or items in the instrument measure the probability of IT staff's intention to leave with the organization with the following statements: 1) "it is likely that I will actively look for a new job next year"; 2) "I often think about quitting" and 3) "I will probably look for a new job next year". Each item is represented with seven point Likert response scale to indicate their likelihood of leaving the organization in the near or distant future. A higher score indicates a higher intention to leave the organization. The reliability test of this construct is .89.

Independent Variables

Job satisfaction and job characteristics are the independent variables in the study. Job satisfaction instrument developed by Smith et al. (1969) was used to measure 9 items of organizational commitment. The scale was ranked from strongly disagree to strongly agree on the seven point Likert type scale. The reliability coefficient of job satisfaction in this study was .92. Job characteristics based on the Job Diagnostic Survey (JDS) developed by Hackman and Oldman (1985) was used to measure job characteristics. The construct contained five components: skill variety, task identity, task significance, autonomy and feedback. The response options for each of these items was based on 7 point Likert-scale ranging from strongly disagree to strongly agree. The reliability coefficient for all job characteristics score was .93.

RESULTS

Respondents' Profile

The average age of the respondent is 34.06 years while the mean of experience in the organization and total job experience is 6.98 and 10.72 years respectively. Majority of the respondent are male (63.7%) and followed by female respondents (36.3%). Most of the respondents (72%) are married and 28% of them are single. The average mean of the respondents' pay is RM 2842 while the highest pay of the respondent is RM 9000 and the lowest pay is RM 2100 (see Table 1).

Table 1: Background Characteristics of the Subjects

	Mean	SD	n	%
Age	34.06	6.24	-	-
Tenure in the organization	6.98	3.91	-	-
Tenure present department	10.72	6.22	-	-
Male	-	-	186	63.7
Female	-	-	106	36.3
Married	-	-	210	72
Single	-	-	82	28
Pay	2842	1438		
Minimum pay : RM 2100				
Maximum pay : RM 9000				

The Relationship of Job Satisfaction and Job Characteristics with Turnover Intentions

(H1 and H2)

Table 2 presents the means, standard deviations, reliability coefficients and inter-correlations analysis among the variables of the study. Based on the data presented in Table 2, the mean value of each job characteristics was slightly high ranging from 3.90 to 4.20 with standard deviations ranged from 1.60 to 1.93. The level of turnover intentions is high with mean value of 5.20 and standard deviation 1.80 while the level of job satisfaction was moderate with the mean value of 3.72 and standard deviations 1.90. Cronbach's alpha showed that the reliability coefficients for job characteristics, job satisfaction and turnover intentions measures were at the acceptable level (more than 0.60).

Table 2 also reports the inter-correlations among independent variables and dependent variable. The data indicated a negatively strong to moderate and low significant relationship between job characteristics (skill variety, task identity, task significance, autonomy and feedback) with turnover intentions. A significant and negatively moderate relationship was also reported between job satisfaction and turnover intentions. The results revealed that all of the correlations were in the expected directions indicate significantly and negatively moderate, low, moderate and high magnitude of relationship between independent variables and dependent variable.

This finding is consistent with expectations, that there were significant and negative correlations between skill variety, task identity, task significance, autonomy, feedback and job satisfaction with turnover intentions. The negative value of the correlation coefficients for all these aspects of the independent variables showed that the higher the level of these job characteristics and job satisfaction the lower the turnover intentions and vice versa. The results closely parallel earlier findings (Bliese et al., 1991 and Meyer and Allen, 1997) lending some support to the construct validity of these measures. Findings of the study tend to suggest that job characteristics and job satisfaction were perceived as the factors that associated with turnover intentions among IT staff in Telecom Malaysia. The results supported the first and second hypothesis of the study.

Table 2: Mean, Std. Dev, Reliability Coefficients and inter-correlations among variables

Variables	Mean	Std. Dev.	1	2	3	4	5	6	7
1. Turnover Intentions	5.20	1.80	(.89)						
2. Job Satisfaction	3.72	1.90	-.69*	(.92)					
3. Skill Variety	4.11	1.65	-.52*	.26*	(.90)				
4. Task Identity	3.90	1.60	-.70*	.53*	.29*	(.92)			
5. Task Significance	4.20	1.90	-.55*	.35*	.57*	.65*	(.89)		
6. Autonomy	3.92	1.62	-.36*	.32*	.39*	.19*	.27*	(.92)	
7. Feedback	4.10	1.93	-.28*	.27*	.21*	.23*	.29*	.75*	(.89)

* < 0.05 level; Cronbach's alpha are in parentheses

The Contribution of Demographic Variables, Job Satisfaction and Job Characteristics on Turnover Intentions (H3, H4 and H5)

Table 3 displays the result of hierarchical and regression analysis to test the third, fourth and fifth hypothesis of the study. Regressions analysis were obtained in three stages. In the first stage all control variables were entered as the independent variables, in the second stage job satisfaction was included as the predictors or determinants and finally in the third stage job characteristics were included as independent and predictor variables. In each step of hierarchical regression analysis the predictors or independent variables and control variables were regressed on turnover intentions accordingly. The dependent variable was the scores for turnover intentions. From Table 3 in model 1, value of R² of control variables is .23. This means that the control variable contributed 23 percent of variance in turnover intentions. The results revealed that control variables were able to explain 23 percent variation in turnover intentions. The Beta values indicated that age, income and tenure had a negative and significant effect on turnover intentions with Beta = -.16, < 0.05 ; Beta = -.24, < 0.05 and Beta = -.44, < 0.05) respectively.

Further, the analysis revealed that when the six control variables were entered in the equation together with job satisfaction variable in the second model, value of R² secured more variance (.80) than control variable with variance of .23. These results revealed that the control variables combined with job satisfaction contributed 80 percent of variance in turnover intentions. The Beta value as indicated in Table 3, showed that job satisfaction had a negative and significant effect on turnover intentions (Beta = -0.83, < 0.05). The control variables of age, income and tenure also found to have a negative and significant effect on turnover intentions with Beta = -.24, < 0.05 Beta = -.33, < 0.05 and Beta = -.36, < 0.05 respectively.

Table 3. Regression Results: Turnover Intentions By Demographic Variables, Job satisfaction and Job Characteristics

Variables		JS	JC
	Std Beta (Model 1)	Std Beta (Model 2)	Std Beta (Model 3)
Control variables			
Female(male = 0)	.02	.02	.04
Age	-.16*	-.24*	-.25*
Single (Married = 0)	.08	.04	.01
Income	-.24*	-.33*	-.21*
Tenure	-.44*	-.36*	-.24*
Education	.05	.04	.08
Model variables			
Job Satisfaction		-.83*	
Skill Varity			-.19*
Task Identity			-.62*
Task Significance			-.15*
Autonomy			-.16*
Feedback			-.15*
R ²	.23	.80	.66
Adj. R ²	.22	.79	.65
R ² Change	.23	.80	.66
Sig. F Change	14.61	166.69	50.19

*Significant at the .05 level; Dummy coded male = 0, female = 1 and single = 0, married = 1

For the third model, based on the R² value for the components of job characteristics, the study concluded that the control and model variables of job characteristics explained lower variance in turnover intentions (R² = 0.66) than from job satisfaction (R² = 0.80). This means that the control and model variables of job characteristics contributed 66 percent of variance in turnover intentions, which is lower than contribution of the combined job satisfaction and control variable on turnover intentions.

The beta values shown in the Table 3, indicated that job characteristics of skill variety, task identity, task significance, autonomy and feedback had a negative and significant effect on turnover intentions with Beta = -.19,

$<.05$; Beta = $-.62$, Beta = $-.15$. $<.05$; Beta = $-.16$, $<.05$ and Beta = $-.15$ $<.05$ respectively. The results also reported that age, income and tenure had a negative and significant effect on turnover intentions with Beta = $-.25$, $<.05$ Beta = $-.21$, $<.05$ and Beta = $-.24$, $<.05$ respectively. The study found that job satisfaction (Beta = $-.83$) is more negatively related to turnover intentions than from job characteristics of skill variety (Beta = $-.19$); task identity (Beta = $-.62$); task significance (Beta = $-.15$); autonomy (Beta = $-.16$) feedback (Beta = $-.15$).

The result of this study concluded that job satisfaction had more effect on turnover intentions than from job characteristics. The study concluded that demographic variables, job satisfaction and job characteristics contributed significantly on turnover intentions with variance explained 23, 80 and 66 percent respectively. Based on the Beta values the results showed that job satisfaction had more effect on turnover intentions than from job characteristics. In conclusion, the findings of the research supported the third, fourth and fifth hypotheses of the study.

CONCLUSION, IMPLICATIONS AND SUGGESTIONS

The objective of this study was to determine the relationship between job characteristics and job satisfaction with turnover intentions and examined the contribution and effect of demographic variables, job satisfaction and job characteristics on turnover intentions. The correlation analysis of job satisfaction and job characteristics on turnover intentions indicated negative and significant relationship. This indicated that job satisfaction and job characteristics are directly related to turnover intentions, consistent with the findings of Campbell et al. (1990). The results also implied that the job satisfaction and job characteristics of skill variety, task identity, task significance, autonomy and feedback, tend to decrease if employees experience high level turnover intentions. These findings are parallel with a study conducted by Samad (2004).

The other important issue in this study was to assess the contribution of demographic variables, job satisfaction and job characteristics and the effects of job satisfaction and job characteristics on turnover intentions. The regression results indicated that perception of job satisfaction and job characteristics of skill variety, task identity, task significance, autonomy and feedback among IT staff leads to foster negative relationship towards turnover intentions. The results that suggested demographic variables, job satisfaction and job characteristics had contributed significantly on turnover intentions implied that these variables are relevant in understanding turnover intentions of IT staff. The study also found that job satisfaction had more significant effect on turnover intentions

than from job characteristics. This result suggests that management of organization should be able to address problems pertaining to job satisfaction in order to overcome turnover intentions. Among the aspects that need to be given priority by management in addressing turnover intentions in the study are job satisfaction and job characteristics of employee in organization. These findings are parallel with a study conducted by Sager et al. (1998). The finding also suggests that when employees perceive their organizations as having greater concern on their job satisfaction and aspects of job characteristics the emotion of employees will be more positive. This result is in tandem with previous findings conducted by Sager et al. (1998) and William and Hazer (1986). Finding of this study also suggests that the positive emotion will be yielded if employees perceived as being taken care by management with regards to their job characteristics and job satisfaction. Ultimately this will develop and increase level of loyalty and commitment to the organization.

Findings of this study would help policy makers and managers of companies as well as practitioners to formulate strategies and program to overcome turnover problem among IT staff as well as to ensure efficiency, effectiveness and high productivity in organization. Consequently, the study suggests that management should consider some aspects that have been identified to be related and have affected the turnover intentions by having proper motivation to them.

The results of this study have shown a remarkable leading factor in assessing the contribution the selected factors (demographic factor, job satisfaction and job characteristics) on turnover intentions. However, this study is limited in the selected telecommunication company and based on cross sectional nature of study. The external validity of the results may be limited. Given the cross sectional nature of study it is suggested that future research should consider experimental or longitudinal approach and consider of other subject and setting of the study. A longitudinal approach may help in improving one's ability to make causal statements. Factor such as organizational, personal, occupational and cultural elements apart from job characteristics, demographic variable and job satisfaction that may influence turnover intentions should be explored for further research. Although this study may pose limitation in term of generalizability, however, it furthers our understanding by determining and testing the factors that relate and affect turnover intentions. Therefore, is an initiative towards a greater understanding of organizational attitudes and behaviors particularly on employees' intentions to leave .

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