



The Investigation of Determinants in Voluntary Turnover Intentions among Permanent Workers Working in the Area of Eastern Industrial Estate, Thailand



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Abstract: The purpose of the study is to identify the factors affecting the turnover intention of permanent workers in the Eastern Industrial Estate of Thailand. Sequential mixed method was employed. The study started with collecting qualitative data by using focus group discussion and interviews with private sector workers in the Eastern Industrial Estate, Thailand. A questionnaire was then developed. The data was collected from survey and quantitative analysis to indicate a causal relationship between factors affecting turnover intention. The initial findings revealed that the factors that influence job turnover intentions could be categorized in to 3 themes: 1) dissatisfaction with current job; 2) individual needs which can not be gained from the current job, such as needs for career advancement opportunity and higher payment by shifting jobs; and 3) feeling factors of not having either the organizational affiliation or commitment. The results from the qualitative study were used in a quantitative study to make a questionnaire which was tested for validity and reliability. Eighteen manifest variables from 4 latent variables were measured to find the causal relationship, and then collected data from 360 samples were analyzed by structural equation modeling. A statistical test of the goodness of fit between the hypothetical model and the empirical data followed the accepted standards levels. Analysis results indicated that employee's needs, organizational commitment, and job satisfaction had directly affected turnover intentions. Moreover, the employee's needs had indirectly affected turnover intention through job satisfaction and organizational commitment. Variables in the model show the variance of turnover intentions at 65%.

Keywords: Turnover, Turnover Intention, Human Resource Development, Human Resource Management

Introduction

It is widely known that organization administrators give importance to employees as valuable assets of organizations (Bassi & McMurrer, 2007). Human resources investment is a strategy for success of organizations. Policies have been made on human resources development, especially for permanent workers with different positions and career paths. This has also been made as the strategy for worker retention. Whereas the consequences of the employee retention practices are the organization performance (Shaw, Duffy, Johnson, & Lockhart, 2005)

On the contrary, previous studies on failure in personnel retention (Dalton, Krackhardt, & Porter, 1981) categorized employee turnover as functional and dysfunctional voluntary turnover. Functional voluntary turnover is when low performing employees leave and there is no impact on the organizations. Dysfunctional voluntary turnover is when valuable employees leave and there is some serious impact on the organizations.

In any organization, the investment in human resources ends with the employee's withdrawal from the organization as dysfunctional voluntary turnover, especially when it is not planned. There will be no benefits gained from the investment. A number of permanent workers also withdraw from organizations before the traditional age of retirement. There are varied ways of withdrawing from an organization, such as dismissal from work, early retirement, turnover, and others. However, voluntary turnover seemed to be important because the situation may depend on the



employee's demands.

Turnover means leaving the company to find a new job that is consistent and different from the original career. Consequences of employee turnover increase costs for organizations. Not only are costs in recruitment and training made but also the costs of productivity losses from tacit knowledge of the leavers and time lost in training new employees. Furthermore, the relationship between employees and customers which are constantly developed to promote a continuously trading environment could be lost with the loss of employees. Job withdrawal can also have a demoralization effect on the remaining employees and spiral into more leavers. The resignation of one employee could be felt by the other employees in the organization, and might create a sluggish attitude, laziness or negative rumors which affect the morale at work and may lead to more leaving (Emad & Siva, 2008).

Turnover intentions are acknowledged as a strong predictor of an employee's actual behavior (Mobley, 1982). This is because intention is the most immediate determinant of actual behavior. As a result, a number of studies have employed the turnover model with intention to leave attitudes, not the actual behavior of retention or withdrawal. Previous studies indicate many factors that are considered as determinants of one's intention to turnover such as: demographic factors both personal and work related factor, organizational conditions (Barak, Nissley, & Levin, 2000) perceived lack of opportunities for advancement and personal reasons (Selden & Moynihan, 2000)

Understanding the cause behind the employees' decision to withdraw from the organization can reduce dysfunctional voluntary turnover, help in planning proper manpower, and create effective retention strategies for prevention. It also helps in cost reduction, effective personnel replacement and life career planning. In Thailand, only in-depth studies of high turnover among nurses have been conducted; however, there are no studies that cover private sector employees, which are the majority in the country.

Purposes of the Study

1. To identify the factors affecting the turnover intentions of permanent workers in the Eastern Industrial Estate of Thailand
2. To find causal relationships of job satisfaction, organizational commitment, and other factors toward turnover intention of permanent workers in the Eastern Industrial Estate of Thailand

Research Questions

1. What are the variables that influence the turnover intentions among permanent workers in the Eastern Industrial Estate of Thailand?
2. What are the causal relationships of job satisfaction, organizational commitment, and other factors toward turnover intentions of permanent workers in the Eastern Industrial Estate of Thailand?

Literature Review

Previous Important Studies on Turnover

An early study on turnover was that of Mobley, Horner and Hollingworth (1978, cited in Muchinsky, 1993). They investigated the process of employees' turnover and found a correlation between job satisfaction and job withdrawal intentions at -.54. Mobley, Griffeth, Hand and Meglino (1979) later presented the expanded model with the scopes in economic, individual, environmental, and organizational variables. Price and Mueller (1986) proposed the causal model of turnover which revealed that job satisfaction and organizational commitment led to turnover. The above studies show that researchers have tried to find the variables to explain turnover intentions in different contexts. This is because job satisfaction and organizational commitment are two main attitudes toward work in which managers and researchers were interested (Quick & Nelson, 2009: 122).

The studies of turnover have been conducted with various groups of personnel, i.e., managerial (Birdir, 2002; Porter, Crampon, & Smith, 1976; and Udo, Guimaraes, & Igbaria, 1997), nurses (Borda & Norman, 1997; Karsh, Booske, & Sainfort, 2005; Parasuraman, 1989) financial analysts



(Emad et al., 2008) and warehouse employees (Min, 2007). Also, there are studies related to turnovers in various areas, such as reduction of turnover through human resources management (Bonn & Forbringer, 1992), and the costs of turnover (Hinkin & Tracey, 2000).

Organizational Commitment and Intention to Turnover

Bearse (1984: 5-6) stated that organizational commitment is an attitude or behavior which might not be represented, but the indirect results are very important to the enterprise. Organizational commitment will reduce the rate of changing jobs and absenteeism, and at the same time, will increase loyalty to the organization. Strong commitment will increase the desire to stay with the organization and work to achieve the organization's goal. A number of studies (Angle & Perry, 1981; Mowday, Steers, & Porter, 1979) showed that organizational commitment and employee turnover have a strong correlation in opposite directions. The study of Udo et al. (1997) indicated that organizational commitment explained 8 percent of the variance in intention to stay.

Job Satisfaction and Intention to Turnover

Although commitment is an affective response to the entire organization, job satisfaction represents an affective response to more specific aspects of the job (Porter, Steers, Mowday, & Boulian, 1974). Employees can be satisfied and unsatisfied with some elements of the job. So, overall job satisfaction is a combination of the employee's feelings toward the facets of the job (McShane & Glinow, 2000).

Much literature supports the relationship between job satisfaction and lower turnover rates, such as the research of Cotton and Tuttle (1986), Dickter, Roznowski, & Harrison (1996), Porter and Steers, (1973) and Vidal, Valle, & Aragon (2007). The study of Igarria and Greenhaus (1992) claims job satisfaction and organizational commitment as antecedents to turnover intention and found job satisfaction has a much stronger relationship to turnover intention than organizational commitment.

For satisfied and unsatisfied facets of works, Booth & Hamer (2007) found that if employees perceived their pay was fair, the turnover rate was low. Moreover, the overall work environment in a firm has an influence in the decision of staying in a pleasant employment as accountants (Ang, Goh, & Koh, 1994). Social cohesion or good relationships with colleagues have a substantial importance related to withdrawal behavior (Carmeli & Gefen, 2004). The lack of opportunity for development might lead to turnover (Selden & Moynihan, 2000)

Research Design

The mixed method design used in this study is a sequential exploratory design that means using quantitative results to assist in the interpretation of qualitative findings (Creswell, Plano Clark, Gutmann & Hanson, 2003). The study comprises both the collection of qualitative data by a focus group discussion and interviewing technique, and structural equation modeling analysis as a quantitative technique in determining direct and indirect effects of the variables on turnover intentions.

Data Collection and Analysis

Qualitative Study

The qualitative study was conducted to elicit factors influencing job turnover intentions. Data were collected from a focus group discussion of five permanent workers, aged 25 years and above, who intended to turnover in the future or had intended to leave; and in-depth interviews of three people. There are 16 cases of data of turnover intentions from the past and the present.

Quantitative Study

Although a qualitative method will help in obtaining data details in order to understand the situation of a much smaller number of people and cases, it can also reduce generalizability (Patton, 1990: 14) due to the fact that it limits the study to samples of small interest groups only. Therefore, a



quantitative method with the appropriate sampling design after focus group is utilized for generalization.

In this phase, the technique used to collect data is a survey with a questionnaire. The population of the study is permanent employees in companies located in the Eastern Industrial Estate of Thailand. They are aged 25 and above. Questionnaires were composed of 5 sections: personal data, job satisfaction, organizational commitment, needs causing job leave, and turnover intentions. The opinion part is on a five-point Likert scale. All the items of the qualitative study are derived from the categories of the focus group, interviews, and the literature review.

The sample size used for the study was set based on the number of observed variables of the study, thus sample sizes of 20 were required for each manifest variable to be used for analysis with structural equation modeling (SEM) (Wiratchai, 1999).

Quality of the Articles

Qualitative Data

Using the mechanics of registration (Nueman, 1997), a tape recorder was used to ensure correct presentation. Interviews and the focus group were tape recorded with the participants' permission. The transcribed interviews and focus group were read and reread until the sense of totality was obtained as a triangulation technique.

Quantitative Data

The questions used in the collection of data were checked for content validity by five experts to find the agreement of items and the measured issues. The items with the index of item objective congruence I.O.C. > .5 were used. Try-outs of the questionnaire with a similar group of people were conducted to measure the internal consistency or reliability. Cronbach's alpha coefficient of each item was higher than .7.

Ethical Protocol

This study has also taken into consideration issues concerning ethical research, such as respondents are informed about the objectives of the study through a letter, participation was voluntary and anonymity was guaranteed, no misrepresentation or distortion in reporting the data collected and not reporting any findings that could be linked to an individual respondent.

Findings

Qualitative Study Results

Data from eight informants with turnover intentions in the past and present can be categorized into 16 cases. The age range of turnover intention periods is 25-39 years. The education levels are of bachelor's and master's degrees. The informant with the highest turnover intentions indicated 5 cases. Secondly, there were two informants individually indicating turnover intentions of three cases. The rest of the informants just indicated one case of turnover intention each. A complete summary of information given by the informants is shown in Table 1.

Table 1. Backgrounds of the informants with turnover intentions

Informant (age)	Gender	Case no.	Age	Education	Positions
1. JW (35)	Female	T1	35	Master's degree	Sales Executive
		T2	33	Master's degree	Department head
		T3	29	Master's degree	Supervisor
		T4	28	Bachelor's degree	Supervisor
		T5	27	Bachelor's degree	Officer



Informant (age)	Gender	Case no.	Age	Education	Positions
2. SV (44)	Male	T6	38	Bachelor's degree	Supervisor
3. KN (38)	Female	T7	25	Bachelor's degree	Deputy Manager
4. KJ (34)	Female	T8	31	Bachelor's degree	Assistant Manager
5. PP (36)	Male	T9	33	Bachelor's degree	Deputy Manager
		T10	30	Bachelor's degree	Officer
		T11	27	Bachelor's degree	Senior officer
6. SG (36)	Male	T12	33	Master's degree	Officer
7. BP (53)	Female	T13	39	Master's degree	Officer
8. PL (54)	Male	T14	37	Master's degree	Factory manager
		T15	27	Bachelor's degree	Officer
		T16	25	Bachelor's degree	Officer

From the findings, factors of job withdrawal intentions can be divided into three themes. These factors are complementary to each other and can cause turnover intentions. The first theme is dissatisfaction with the current job. The second theme is needs implemented by new jobs, not the current ones. The third theme is lack of feelings as a part of the organization or lack of organizational commitment.

The first theme: Dissatisfaction with the current job

Dissatisfaction with current job can lead to turnover intention. Job facets causing dissatisfaction are:

Lack of job advancement opportunity

The case of PL, the reason for his job change was no opportunity for advancement at work. He thought to shift from a factory that is a family business to working in a public company, when he got a master's degree. He said *"When I graduated with a master's, it was an advantage. It is easy to get a job. But if I had a master's and still worked here, there is less advancement...."* For the same reason, PP left a previous job that is a family business because of his job advancement limitation as he said *"Here is my beginning but not the final. In family businesses the descendants are the chief executives. I keep looking for my place."*

No payment increase and lack of required service

Many job shifts relate to payments. These are either the desire for higher payment or the current low payment. Most all job changes lead to higher payments. In the case of PP, a factor in job shift was his dissatisfaction with the salary payment. The annual bonus was fixed at 1.5, and there were not any benefits though he had worked there for three years and had been promoted. He said, *"I had evaluated myself. There was nothing gained, only the higher position without a higher income. So I quit."* This case of PP ended with a new job in a lower position but with a higher salary. *"It was just an officer; but the salary was double."* he said.

In case of SG, he had shifted his job to a similar position in another company in a nearby area. The only reason for this shift was transportation service; he had to spend on commuting to work. SG said, *"The reason was very simple. ... It's far and I had to commute from my home to the workplace. There was no transportation service. I had to spend about six to seven thousand baht a*



month on transportation. Also I had to change buses.” From the case of SG, welfare is, therefore, seen as a factor to be investigated in the study.

Lack of respect and authority

In management, a duty has to compose of responsibility and authority. Lack of one of these can cause dissatisfaction. This is a factor that PL who has worked in management position indicated his intention to leave in two previous workplaces. He said *“The authority on decision making was quite low. ... the budget limit for ordering or repairing was under 50,000 baht which I thought it was illiquid. ... How could you be a management executive with many responsibilities but have limited authority?”* PL had also confronted with unbalance of authority and responsibility of the position in the other workplace. He said *“I was not happy as I knew that I could not work as I had planned or hoped. I had to manage with difficulty.”* That was the reason why he had left his job.

In case of JW, she became a head of a department when she was 32. She realized that she was not respected. Her underlings were 43-44 years old. She could not direct them. JW narrated the words from her underlings, *“No need to direct us. We know it all. We’ve been working here for over ten years.”* Their words pierced through her mind. They even said, *“They hired you for what!”* The experience as a department head was a failure. She said, *“I was very tired of managing people ... it’s difficult ... I couldn’t handle it.”* She, then, decided to leave when she had a chance.

Lack of utilization of knowledge and abilities

One reason to turnover for JW who had shifted from other organization was working without any utilization of knowledge. This was not what she had expected in a new workplace as she thought of being able to fully apply her knowledge into practice. She said, *“I was not really working because the factory had not been completed. I was just hanging around day by day.... I felt like I was only using 30% of my knowledge and ability.”* Therefore, she decided to leave. The company had tried to keep her with the reason that when the company became bigger, the volume would be more then she would be able to work more with her knowledge. However, she did not think it was worth waiting. She said, *“I felt like I couldn’t wait any more, so I left.”*

Dissatisfaction with management and peers

Dissatisfaction with his manager had occurred when PP was an assistant manager. He was unhappy and decided to leave. He talked about the performance assessment by his boss: *“Only the manager had got an ‘A’ in the department. The rest had got ‘D’. What an assessment!”* Not only PP but all the underlings also were dissatisfied. He said, *“When I left, four of my underling also quit. The whole team left.”*

In addition, dissatisfaction with peers can be a cause of turnover. For case of PP, he had poor collaboration with colleagues and partisanship at workplace. There was a partisanship on educational institutes and the countries they graduated from. This matter led to misery at work. He said, *“We are in the same office. Sitting in the same room, but you don’t know what your colleagues are thinking or doing.”* It was a lot of pressure at work for PP which happened in an organization with good benefits and pay. However, he finally decided to change jobs.

Dissatisfaction with management policies and procedures

Dissatisfaction existed when company policies and procedures were not concerned with morals. These were reasons for leaving a job. For KN, even though she was an auditor of a company of a certified body business, she was assigned to check ISO 14000 which was not in her field. She said, *“It was like selling unqualified products.”* The negative feeling towards her company was expressed obviously in the group interview. She had mentioned the consequence of *“selling unqualified products”*. She said, *“What are they doing with the country? They told me not to check on an environmental issue. If the government finds out, they’ll pay for it.”* This caused a negative feeling



and led to her resignation. She said, *"I felt like if I still worked there, it meant I was willing to be a tool in deceiving customers. So I just decided to leave. ... the morning talk, the afternoon leave. That's it."*

Moreover, changing management policies and procedures caused employee dissatisfaction. For the case of BP, changes in the share holders of the company had affected management. Work policies had been changed. This change caused dissatisfaction. The previous job nature of BP in HR was nothing in the factory and only on weekdays. When the company policies changed, he had to work around the factory at 7 A.M. and be on duty some weekends. A strange work culture was made into practice. She said, *"There was a meeting at eight in the CEO's office. Everybody, males and females, had to hug each other. It was a weird culture at work, especially, hugging strong odored foreigners"*. These changes, for BP, did not make the job more effective and were wastes of her working time. She said, *"Some jobs had to be done on a continuous basis, but at eight I had to be present to the new boss for hours. It was such a waste of time, and it was my routine. It was really boring."* Finally, she changed jobs.

Unsafe and threatening conditions caused by work

Moral practices make practitioners feel unsafe and threatened at work and lead to them leaving. This had happened in the case of PL. When he was 26-27 years old, he had just shifted to a new job with a double payment. While purchasing raw material, he found out raw material (cassava) was mixed with tinge (sand), so he rejected them. He said, *"I was still young and straightforward. When finding out there was corruption under my responsibility, I couldn't stand it."* Consequently, he was threatened. He did not think it was worth working there because of his morals. He, then, decided to change jobs to stop what had been happening. He said, *"They had a man waiting for me who was showing a gun. Finally, I thought I was not worthy and decided to shift my job."*

No private time

A factor encouraging turnover for BP is the change in company policies on work days that gave her no private time. She had to work on weekends when she had classes for her master's degree. Working and studying could not be coordinated. She said, *"I had to work on weekends. Managers had to be on board every second weekends. So I had a problem with my studies."* BP, then, chose to spend her time studying not working.

Table 2. Factors on turnover intentions for dissatisfaction with the current job

Sub-themes of dissatisfaction with current job	Case no.
Lack of job advancement opportunity	T16
No increase in salary and lack of required service	T5, T11, T12
No utilization of knowledge in working	T4
Lack of respect and authority	T2, T14
Dissatisfaction with management and peers	T9, T10
Dissatisfaction with management policies and procedures	T7, T13
Unsafe and threatening conditions caused by work	T15
No private time	T13

The Second theme: Needs implemented by new jobs, not the current ones

Job dissatisfaction is just one reason for people to change employers. Some people are satisfied with their jobs, but there are some needs for job shifts, then turnover intentions will follow. For the case of JW, she mentioned about her organization that, *"... It's a good organization. Good benefits. Everything is perfect. But not enough. I'm ready to take a step up. I'm ready to be at a higher position, so I've planned that would be for next March or April ..."*



From the interviews, needs implemented by new jobs leading to turnover intention are gathered as follows:

Need for career advancement and challenge

The case of JW showed that turnover intention may not be caused by job dissatisfaction or private reasons. She expressed her feelings toward the company she had worked for as, *"The day I left, I was really sad. I still love the place, but I just couldn't stick to only one place. It's time."* It may be caused by the perception of shifting job to be a head of a section as challenging. She said, *"At that time, at that moment, being a head was really challenging."* The need for challenging job leads to her decision of job shift. For the same reason as PP, a factor that influenced his intention was that he desired to perform challenging work. He said, *"One thing that I'd never done was to start in the first place. The thing I wanted to change at that time was that I dared to do."*

For the case of PL, the attraction of a job shift was also career advancement and success in life. He said, *"The attraction was advancement opportunities, both the position and the salary."*

Need for higher payment and fringe benefits

Salary is a basic factor for job taking. Continuously working for the same organization will not double the salary. Job shifting, therefore, is considered for gaining expected higher payment as mentioned in the case of PL who had a Master's degree. He perceived that his degree in business administration meant a higher salary when changing jobs. He said, *"At that time, I just wanted to change my job. It was an educational advantage. It's easier to get a job and a higher salary."* This perception led to his job shift and finally his turnover.

For case of PP who needed the advancement both in the position and salary. When he was 27, he agreed to shift to the lower position, from a senior officer to an officer. It was just because of the double payment, *"From fifteen thousand to thirty thousand"*. According to his words, *"I don't care about the job title. I don't mind being called a manager, a senior or what. After thinking carefully, my salary and my income must be up to the minimum requirement, I'll change jobs. He even pointed out that on payment, "Call me a driver or whatever if the salary is increased."* This case of PP ended with a new job in a lower position but higher salary. *"It was just an officer, but the salary was double,"* he said.

Need for more time off

The other cases are for more time for their families. For KN, she decided to shift her job to decrease her work load, not about her salary. She said, *"I've changed jobs without any salary increase, but having less work days. It's really joyful."* For BP, she needed time for her children who were studying away from home. The cases show that the informants start from need for more time off and lead to have intention to turnover.

Need for employment stability

The cases of KN and KJ have nearly the same experience in leaving their first jobs. In the economic crisis, their jobs lack of stability and intent to reduce workforce or cease operation. KJ said *"It was necessary to change. The company would close down. We have to prepare. It was sad, so sad."* KN mentioned about the advantages of the old workplace and the reasons to have work changed. *"Here sets people up. The culture teaches us to love each other and work in teams. I was lucky to met good colleagues. If the company did not close down, I would still work there. It was warm and happy."* The company helped the employees to find new work. *"When the company would be closed down, the executives took good care of employees, even packages (sums of money given when leaving). HR contacted all connections in other companies. The job interviews were done here....."* So, although there is current job satisfaction, but the stability would make the informant intend to shift her job and finally quit her job.



Need for desirable working conditions and comfort

Job shift can be caused by need of the change of workplace sites in many cases such as the desires to be in a beach environment such as Chonburi province made JW shift her job. She said, *"I just wanted to move here. I told myself that I wanted to stay here until the end. I really like the place, so I bought a house and have lived here."* Though her reason was different than the others, it was possible as all were individuals. JW gave a reason that *"Staying here, I can quickly drive to the beach whenever I'm stressed out or bored. Staying there in the city, I did not know where to go. It's a city, and I don't like Bangkok."*

For SV, he had to change his job to be with his wife as she had shifted prior. He said, *"There was a family crisis. My wife wanted to move there. What could I do? I had to follow her, move to this area."*

Table 3. Factors on turnover intentions concerning needs from job shifts

Sub-themes of needs from job shifts	Case no.
Need for career advancement and challenge	T1, T9, T14, T16
Need for higher payments and better fringe benefits	T1, T10, T11, T14, T16
Need for more time off	T7, T13
Need for employee stability	T7, T8
Need for desirable working conditions and comfort	T3, T6

The Third theme: No organizational affiliation and commitment

One reason supporting PL's turnover intention was he did not have organizational commitment. For him, he could work in any place. He said, *"Organizational commitment is not that important. I give more importance to my colleagues and staff."* His relationship with his staff was shown on the evening of the interview; his staff would visit him and have dinner together. He regularly had appointments with his staff for dinner. So, neither working nor leaving, the attachments with underlings had existed.

Quantitative Study Results

From the focus group, interviews, and literature review; questionnaires for employees working in the private sector in an industrial estate were developed. These 360 employees would, then, be the sample for analysis in the quantitative study. Prior to the analysis, levels of internal consistency or reliability among all multi-item scales were tested, and the calculation of the alpha coefficient was between .707- .917. Table 4 provides means, standard deviations, and correlation of the studied variables.

The Causal Model of Turnover Intention

Three latent variables had been identified as influencing turnover intentions: (a) job satisfaction, (b) needs implemented by a new job, and (c) organizational commitment.

The goodness of fit statistics revealed that the model did not provide a good fit to the empirical data. Therefore, the model had to be improved. The model modification process of LISREL indicated modification indices suggested adding an error covariance. The results indicated that an adjusted model is regarded as the acceptable fit with RMSEA = .052, Root Mean Square Residual (SRMR) = .032, Standardized Root Mean Square Residual (SRMR) = .045, Goodness of Fit Index (GFI) = .93, Adjusted Goodness-of-Fit Index (AGFI) = .90, Comparative Fit Index (CFI) = .98 and Critical N = 233.49. The goodness of fit statistics of the adjusted model are shown in Table 5. Table 4 Mean, standard deviations, and correlation of variables in studying the causal model of turnover intention (N=360)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1) TURN1	1.00																	
(2) TURN 2	.81*	1.00																
(3) TURN 3	.69*	.82*	1.00															
(4) NEED1	.44*	.35*	.32*	1.00														
(5) NEED2	.52*	.35*	.30*	.73*	1.00													
(6) NEED3	.34*	.36*	.31*	.28*	.33*	1.00												
(7) NEED4	.39*	.42*	.39*	.37*	.40*	.57*	1.00											
(8) NEED5	.29*	.25*	.27*	.40*	.53*	.40*	.52*	1.00										
(9) SAT1	-.41*	-.41*	-.33*	-.19*	-.20*	-.14*	-.15*	-.12*	1.00									
(10) SAT2	-.40*	-.38*	-.30*	-.20*	-.26*	-.11*	-.14*	-.07	.62*	1.00								
(11) SAT3	-.30*	-.33*	-.27*	.01*	-.05*	-.13*	-.10*	-.01	.59*	.46*	1.00							
(12) SAT4	-.29*	-.30*	-.23*	-.14*	-.12*	-.15*	-.15*	-.08	.66*	.47*	.68*	1.00						
(13) SAT5	-.32*	-.35*	-.28*	-.07*	-.11*	-.17*	-.16*	-.07	.61*	.61*	.61*	.63*	1.00					
(14) SAT6	-.29*	-.31*	-.26*	-.01	-.09	-.08	-.08	-.07	.59*	.63*	.51*	.49*	.59*	1.00				
(15) SAT7	-.25*	-.24*	-.23*	-.14*	-.14*	-.06*	-.12*	-.05	.33*	.44*	.37*	.29*	.48*	.37*	1.00			
(16) SAT8	-.29*	-.30*	-.21*	-.11*	-.20*	-.12*	-.06	-.05	.32*	.37*	.34*	.39*	.33*	.33*	.17*	1.00		
(17) COM1	-.37*	-.40*	-.29*	-.03	-.09*	-.18*	-.11*	-.04	.38*	.38*	.38*	.33*	.39*	.37*	.25*	.27*	1.00	
(18) COM2	-.38*	-.43*	-.34*	-.01	-.11*	-.22*	-.17*	-.05	.48*	.42*	.48*	.46*	.41*	.40*	.23*	.30*	.75*	1.00
Mean	2.95	2.70	2.62	3.84	3.97	3.25	3.31	3.80	3.35	3.29	3.58	3.52	3.41	3.29	3.23	3.21	3.71	3.78
SD	1.21	1.22	1.26	.69	.84	.80	1.01	.83	.64	.70	.56	.63	.62	.60	.73	.88	.63	.60

Note * Correlation is significant at the .05 level

TURN1=frequent thinking about turnover, TURN2=intend to turnover in the near future, TURN3=planning to turnover, NEED1=career advancement, NEED2= higher payment and better fringe benefits, NEED3= freedom and private time even work, NEED4=employment stability, NEED5=desirable working conditions and comfort, SAT1=job advancement opportunities, SAT2=compensation, SAT3=recognition, SAT4=utilization of knowledge, SAT5=relationship with other colleagues, SAT6=company management policies and procedures, SAT7=work environment, SAT8=personal life, COM1=willingness to put in a great deal of effort on the job, COM2=acceptance of organizational goals and values.



Table 5. The Results of the goodness of fit test

Investigated statistics	Criterion	Before model adjusting	After model adjusting
RMSEA	equal or lower than .08	.098	.052
Chi-square/df	equal or less than 2	4.437	1.956
RMR	equal or lower than .05	.048	.032
SRMR	equal or lower than .05	.063	.045
GFI	over .90	.85	.93
AGFI	over .90	.80	.90
CFI	over .90	.94	.98
CN	not less than 200.00	116.79	233.49

Path Coefficient in the Causal Model

Analysis on the correlation matrix of ETA and KSI found the relationships between exogenous variable and endogenous variables at about -.26 to .65. The relationship between exogenous variable and endogenous variables can be demonstrated in the following equation:

$$\text{SAT} = -.29*\text{NEED}, \text{Errorvar} = .58, R^2 = .064 \dots\dots\dots(1)$$

(.082) (.068)

-3.55 8.44

$$\text{COM} = .64*\text{SAT} - .019*\text{NEED}, \text{Errorvar} = .42, R^2 = .37 \dots\dots\dots(2)$$

(.068) (.073) (.052)

9.30 -.26 8.13

$$\text{TURN} = -.29*\text{COM} - .23*\text{SAT} + .84*\text{NEED}, \text{Errorvar} = .31, R^2 = .65 \dots\dots(3)$$

(.070) (.075) (.11) (.051)

-4.19 -3.09 7.60 6.10

Note: the values in parentheses are the standard errors of estimation
the value on the third line of the equation is the t-value

Equation 1 shows that employees' needs met by a new job is an antecedent and positively influences job satisfaction. Whereas the employees' needs and job satisfaction are the antecedents of organizational commitment (equation 2). However, only the coefficient of job satisfaction (SAT) is significant while the coefficient of employees' needs (NEED) is not. Equation 3, results from the study support the argument that employee's needs implemented by a new workplace, organizational commitment and job satisfaction are the antecedents of turnover intention. The employees' needs for a new job positively affect turnover intention. On the other hand, organizational commitment and job satisfaction negatively affect turnover intention. The variables in the model explain the variance of turnover intention by 65%.

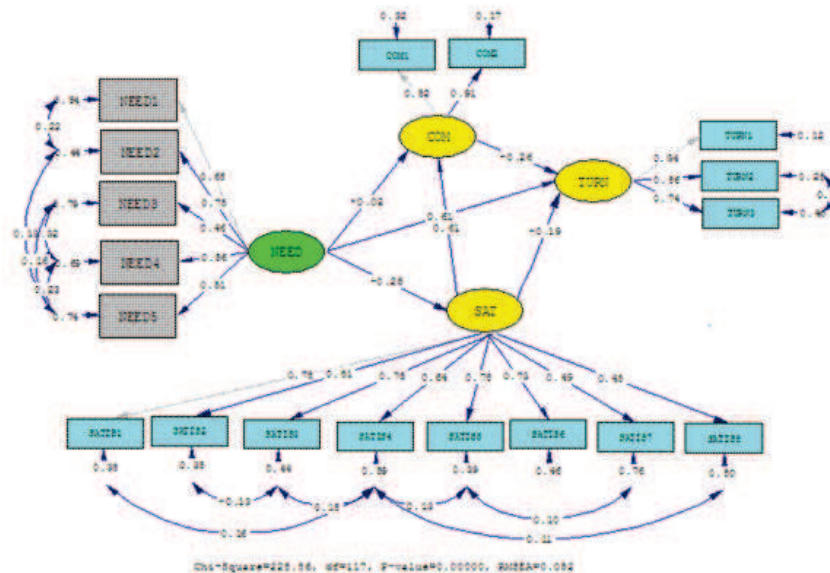


Figure 1. The results of structural equation modeling (standardized solution)

Discussion

The qualitative study in the beginning of this study helps to determine important latent variables affecting turnover intentions. The initial results reveal that the factors causing employee intention to turnover are categorized into 3 themes that: 1) are dissatisfaction of current job, 2) no organizational commitment and 3) employee's needs implemented by new jobs, not by the current ones.

The results revealed that job satisfaction/dissatisfaction affected intention to quit which was in line with the past employee's turnover process research, such as Mobley et al. (1978 cited in Muchinsky, 1993), which found that job satisfaction was inversely related to consideration to change jobs. The facets of job with cause of satisfaction/dissatisfaction from this study is comprised of 8 categories including career advancement opportunities, compensation, recognition, utilization of knowledge, relationship with others in the organization, company management policies and procedures, work environment, and personal life. The results were in line with facets of job satisfaction in the Job Descriptive Index (JDI) developed by Smith (1985) that was widely used to measure job satisfaction with 5 facets that are pay, work itself, promotions, supervision and co-workers. In addition, the obtained results of facets of job satisfaction in this study were in line with the Minnesota Satisfaction Questionnaire (MSQ) created by Weiss, Dawis, England and Lofquist in 1967 (Muchinsky, 1993) which is widely used in measuring job satisfaction from 20 facets.

The qualitative study found that organizational commitment causes intention to quit which was in line with many others studies such as Angle & Perry (1981), Mowday et al. (1979) that found the organization's commitment had strong correlations with turnover but in opposite directions.

For the final themes, employee's needs met by new jobs, not the current ones, was explained by various compatible results from previous studies. For example, in the study of Chen, Chang, & Yeh (2003) a gap was found between a career development program of an organization and employee career needs, leading to job dissatisfaction and turnover intentions. Ryan & Sagas (2009)



found that work-family conflicts related to absenteeism, lower job satisfaction, lower job performance, and higher turnover intentions. For the present study, these factors are included in employee's needs.

The quantitative study to examine the causal model of turnover intention revealed that job satisfaction, employee's need and organizational commitment directly affected turnover intention. Moreover, job satisfaction indirectly affected turnover intentions through organizational commitment. It was in line with the study of Sourdif (2004). When total influences on variables of turnover intentions were examined, organizational commitment had the greatest negative influence which was in line with the study of Adams and Beehr (1998). Needs implemented by new jobs directly affected turnover intentions at a statistically significant level, influences through other variables were not found in the study.

Implications and Recommendations for Further Studies

Job withdrawal behavior is highly related to turnover intentions (Mobley, 1982). This study found that employee needs positively related to employee turnover intentions, though organizational commitment and job satisfaction are negatively related to turnover intentions. For this reason, only creating employees' job satisfaction does not mean that there will not be any turnover intentions and the HR plans will be implemented. As a result, the organization should have plans to address the turnover intentions of valuable employees as their needs are also not fulfilled.

Recommendations for further studies are:

1. Other groups of employees should be investigated, such as government and state enterprise officers to find factors of job shifts and turnover as the nature of the jobs and management are different from the private sector organizations studied in this research.

2. Examine the relationships among various factors in this study: intention to turnover, work satisfaction, organizational commitment, employee's needs using structural equation modeling in multiple groups to analyze the possible effects of personal factors, e.g., gender, age, education, and other factors such as comparing high performing employees with low performing employees in order to define further possible relationships.

3. From the findings, employee's need is the main factor that makes employees intend to leave. Thus, a qualitative study should be done to better understand employee's need which makes employees intend to withdraw.

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References

- Adams, G.A., & Beehr, T.A. (1998). Turnover and retirement: A comparison of their similarities and differences. *Personnel Psychology*, 51, 643-665.
- Ang, A.B., Goh, C.T., & Koh, H.C. (1994). An employee turnover prediction model: A study of accountants in Singapore. *Asian Review of Accounting*, 2(1), 121-138.
- Angle, H.L., & Perry, J.L. (1981). An empirical assessment of organizational commitment and organizational effectiveness. *Administrative Science Quarterly*, 26, 1-13.
- Barak, M. E., Nissley, J. A., & Levin, A. (2001). Antecedents to retention and turnover among child welfare, social work, and other human service employees: What can we learn from past research?. A review and meta-analysis. *The Social Service Review*, 75(4), 625-661.



- Bassi, L., & McMurrer, D. (2007). Maximizing Your Return on People. *Harvard Business Review*, 85(3), 115-123.
- Bearse, L.N. (1984). *A development of measures of job, organization and professional commitment and the evaluation of their relationship with performance*, Doctoral dissertation, Bowling Green State University.
- Birdir, K. (2002). General manager turnover and root causes. *International Journal of Contemporary Hospitality Management*, 14(1), 43-47.
- Bonn, M.A., & Forbringer, L.R. (1992). Reducing turnover in the hospitality industry: An overview of recruitment, selection and retention. *International Journal of Hospitality Management*, 11(1), 47-63.
- Booth, S., & Hamer, K. (2007). Labour turnover in the retail industry: Predicting the role of individual, organizational and environmental factors. *International Journal of Retail & Distribution Management*, 35(4), 289-307.
- Borda, R.G., & Norman, I.J. (1997). Factors influencing turnover and absence of nurses: A research review. *International Journal of Nursing Studies*, 34, 385-94.
- Carmeli, A., & Gefen, D. (2004). The relationship between work commitment models and employee withdrawal intentions. *Journal of Managerial Psychology*, 20(2), 63-86.
- Chen, T.Y., Chang, P.L., & Yeh, C.W. (2004). A study of career needs, career development programs, job satisfaction and the turnover intentions of R&D personnel. *Career Development International*, 9(4), 424-437.
- Cotton, J.L., & Tuttle, J.M. (1986). Employee turnover: A meta-analysis and review with implications for research. *Academy of Management Review*, 11, 55-70.
- Creswell, J.W., Plano Clark, V.L., Gutmann, M., & Hanson, W. (2003). Advances mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of Mixed Methods in Social and Behavioral Research*. (pp. 209-240). Thousand Oaks, CA: Sage.
- Dalton, D.R., Krackhardt, D.M., & Porter, L.W. (1981). Functional turnover: An empirical assessment. *Journal of Applied Psychology*, 66, 716-721.
- Dickter, D.N., Roznowski, M., & Harrison, D.A. (1996). Temporal tempering: An event history analysis of the process of voluntary turnovers. *Journal of Applied Physiology*, 81, 705-16.
- Emad, M., & Siva, N. (2008). Antecedents and consequences of financial analyst turnover. *Review of Accounting and Finance*, 7(4), 355-371.
- Hinkin, T. R., & Tracey, J.B. (2000). The cost of turnover. *Cornell Hotel & Restaurant Administration Quarterly*, 41(3), 14-21.
- Igbaria, M., & Greenhaus, J. (1992). Determinants of MIS employees' turnover intentions: A structural equation model. *Communications of the ACM*, 35(2), 35-49.
- Karsh, B., Booske, B.C., & Sainfort, F. (2005). Job and organizational determinants of nursing home employee commitment, job satisfaction and intent to leave. *Ergonomics*, 48, 1260-81.
- McShane, S.L., & Glinow, M.A.V. (2000). *Organization behavior*. Boston: McGraw-Hill.
- Min, H. (2007). Examining sources of warehouse employee turnover. *International Journal of Physical Distribution & Logistics Management*, 37(5), 375-388.
- Mobley, W.H. (1982). *Employee Turnover: Causes, Consequences, and Control*. MA: Addison-Wesley Publishing.
- Mobley, W.H., Griffeth, R.W., Hand, H.H., & Meglino, B.M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 86(3), 493-522.
- Mowday, R.T., Steers, R.M., & Porter, L.W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14, 224-247.
- Muchinsky, P. (1993). *Psychology applied to work: An introduction to Industrial / organizational psychology*. L.A: Brooks/Cole.



- Nueman, W.L. (1997). *Social Research Methods*. USA: Allyn and Bacon.
- Parasuraman, S. (1989). Nursing turnover: An integrated model. *Research in Nursing and Health*, 12, 267-77.
- Patton, M.Q. (1990). *Qualitative evaluation and research methods*. (2nd ed.). Newbury Park, CA: Sage.
- Porter, L.W., Crampon, W.J., & Smith, F.J. (1976). Organizational commitment and managerial turnover: A longitudinal study. *Organizational Behavior and Human Performance*, 15, 87-98.
- Porter, L.W., & Steers, R.M. (1973). Organizational, work and personal factors in employee turnover and absenteeism. *Psychological Bulletin*, 80(2), 151-76.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59, 603-609.
- Price, J.L., & Mueller, C.W. (1986). Absenteeism and turnover of hospital employees. In: Bacharach, S.B. Editor, 1986. Monographs in organizational behavior and industrial relations 5 JAI Press, Greenwich, CON.
- Quick J.C., & Nelson, D.L. (2009). *Principles of Organizational Behavior: Realities and Challenges*. (6th ed.). Cengage Learning.
- Ryan, T.D., & Sagas, M. (2009). Relationships between pay satisfaction, work-family conflict and coaching turnover intentions. *Team Performance Management*, 15, 128-140.
- Shaw, J.D., Duffy, M.K., Johnson, J.L., & Lockhart, D.E. (2005). Turnover, social capital losses, and performance. *Academy of Management Journal*, 48, 594-606.
- Selden, S.C., & Moynihan, D.P. (2000). A model of voluntary turnover in state government. *Review of Public Personnel Administration*, 20(2), 63-74.
- Smith, P.C., Kendall L.M., & Hulin, C. L. (1969). *The Measurement of Satisfaction in Work and Retirement: A Strategy for the Study of Attitudes*. Chicago: Rand McNally.
- Sourdif, J. (2004). Predictors of nurse, intent to stay at work in a university health center. *Nursing and Health Sciences*, 6, 59-68.
- Udo, G.J., Guimaraes, T., & Igbaria, M., (1997). An investigation of the antecedents of turnover intention for manufacturing plant managers. *International Journal of Operation & Production Management*, 17(9), 912-930.
- Vidal, E.S., Valle, R.S., & Aragon, I.B. (2007). Antecedents of repatriates' job satisfaction and its influence on turnover intentions: Evidence from Spanish repatriated managers. *Journal of Business Research*, 60, 1272-1281.
- Weiss, D.J., Dawis, R.V., England, G.W., & Lofquist, L.H. (1967). Manual for the Minnesota Satisfaction Questionnaire, Minnesota Studies in Vocational Rehabilitation, XXII. Retrieved May 30, 2010, from <http://www.psych.umn.edu/psylabs/vpr/>
- Wiratchai, N. (1999). *LISREL Model- Analytical Statistic for Research*. (3rd ed.). Bangkok: Chulalongkorn University Press. [in Thai]