DETERMINANTS OF TURNOVER INTENTION IN INFORMATION TECHNOLOGY WORKERS

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Abstract

This study examined the relationship between IT training, burnout, job satisfaction, and turnover intentions in IT workers. We chose examine these because we have not seen any research on IT training associated with burnout, job satisfaction and turnover intentions. Cases became gap in this study is that we have not seen any research that specifically addresses the training of IT (Information Technology) in Indonesia. One hundred and fifty information technology professionals from various companies in Jakarta participated in the study. Structural Equation Modeling (SEM) otherwise known as Analysis of Moment Structures tested the hypotheses. We was found that there is no correlation between IT training and turnover intentions also between burnout and turnover intentions in this study. A positive significant correlation was found between IT training and job satisfaction supporting hypothesis 1. A negative significant correlation was found between burnout and job satisfaction also between job satisfaction and turnover intentions supporting hypothesis 3 and 5. The research had several important conclusions that the job satisfaction is very important for IT workers in efforts to reduce turnover intentions.

Keywords: Burnout, Job Satisfaction, Training, Information Technology, Turnover intentions

INTRODUCTION

In today's digital era, development of information technology is very rapid. All kinds of existing products on the market are almost all using information technology. Information technology industry sped quickly like an arrow which are carried by the wind. Behind it all, there is a component of human resources that contribute to the development of information technology, namely information technology workers. But the last few years the industry of information technology (IT) cracked the top five industries with a high turnover rate Boatright (2014). A very high turnover in the IT profession is the result of the selling power of the IT job skills, such as network, database of management skills and enterprise resource planning (ERP) system skills Moore and Burke (2002). High turnover will undermine the performance of an organization and in the long run can make a decrease in profit a company if not handled properly.

To cope with these turnover intentions, usually the company gave the IT training and development to the workers. Training and development for the workers who made their living in the field of information technology is very different from workers in General, because training and development of information technology professional is always followed by the certification process. Certificates obtained as a result of the certification process by the IT workers who have passed the training is very important and valuable in the labor market. The training and certifications that they get directly increase their ability and confidence in the workforce so that it increases their tendency to seek better job opportunities (turnover intentions).

The profession of information technology is prone to burnout because they are faced with high levels of stress Longenecker, Schaffer, and Scazzero (1999). The worker with profession in the field of information technology (IT) reported that more pressure and stress at this time than in the past. A lot of IT workers who have suffered for so long and continuously stress can produce burnout. This can lead to reduced job satisfaction and eventually can lead to intentions to quit (turnover intentions) of their job Hadfield (2005). Mattila (2006), in his research, explains the existence of a relationship between burnout with turnover intentions. He also discovered the IT workers who are experiencing burnout will tend to feel that he is in a bad work environment, lack of appreciation, and bad management that will contribute to a fall in job satisfaction.

Many factors affect job satisfaction, including training and burnout. Workers who were satisfied on the task and environment will feel any similarities with the Organization and engage in the activities of the organization. Workers who were satisfied with his job have high performance and productivity. Some previous research including Cheng and Waldenberger (2012) that get the findings that training affected the turnover intentions through job satisfaction mediation. And then Subawa and Utama (2013) who stated that job training effect on job

satisfaction. In addition Supatmi, Nimran, and Utami (2013) concluded the training effect on job satisfaction. Then Maslach and Schaufeli (1993) who found a relationship between burnout and job satisfaction as if burnout increased, then job satisfaction decreased.

Based on the background that has put forth above, we do this research to gain an understanding of the influence of the IT training and burnout against turnover intentions through job satisfaction on the IT workers in Jakarta, Indonesia. Jakarta is the capital city of Indonesia where there are a lot of companies from a variety of fields using the services of the IT workers. We therefore conducted a research on the IT workers from various fields of the company in Jakarta, Indonesia. Another issue that makes We chose the above title is because we have not seen any research on IT training associated with burnout, job satisfaction and turnover intentions. Furthermore, the gap in this study is that the authors have not seen any research that specifically addresses the training of IT (Information Technology) in Indonesia. In a previous study by Saeed and Shabir (2011) and then Subawa and Main (2013) and then Supatmi, Nimran, and Utami (2013) only covered training in general, whereas in this study discussed was the training that is devoted to IT workers and training IT will typically result in a certificate. Next thing into the gap between research authors with previous studies, namely, turnover in previous research studies conducted by Moore and Burke (2002) and Joseph et al. (2007) and then Quan and Cha (2010) conducted in the USA, in addition to the research Waldenberger and Cheng (2012), which conducts research on turnover in China. Meanwhile, research by the author are now housed in Jakarta, Indonesia. The author believes there will be many related differences between studies conducted in the USA with research conducted in Indonesia. Research on the influence of the IT training and burnout toward turnover intentions on the IT workers is in mediation by the job satisfaction variable. Therefore, this research will be analyzed using Structural Equation Modeling (SEM) which is expected to be able to model against mediation variable.

LITERATURE STUDY

Information Technology Training

In the field that is continuously validated, skill is indispensable. Acquire training allows IT workers to remain competitive and to demonstrate proficiency with current technology. Information technology training helps in developing the skills needed by the IT workers and entrepreneurs. The College gives training to students at the end of the study period to prove completion of courses. However, representatives of some professions, such as IT, nursing, and accounting, require certification as additional evidence to validate the acquired skills and competencies (Microsoft, 2005; Rubenstein, 2003). A number of factors including which has

presented above are the cause of some of the companies and organizations become IT training provider. In addition to this technological advancement, the introduction of the latest computer products, the influx of new vendors into computer technology, and the rapid increase in the number of professionals who work in jobs related to the computer are also factors which made the information technology training develops rapidly (Lim, 2008). Microsoft is one of the main providers of IT training, along with Cisco Systems and CompTIA. The IT training provider has empowered IT workers by providing training, which is considered to help build the skills needed by IT workers and employers for several years (Hunsinger and Smith, 2009).

Burnout

Burnout is the result of prolonged stress and occurs when the demands that are made from time to time are without remuneration or lightening Maslach and Schaufeli (1993). According to Kreitner and Kinicki (1992) burnout is the result of prolonged stress and occurs when a person began to question his personal values. Cherniss (1987) says that burnout is a change in attitude and behavior in the form of reaction to withdraw psychologically from a job, such as keep distance from others or being sarcastic with them, ditching, often being late and the desire of moving (work) is very strong. According to Poerwandari (2010) burnout is a condition of a person who is impoverished and losing physical as well as psychic energy. Usually burnout is in the form of physical, mental, and emotional fatigue that is continuously. Because of the nature of psycho-biological (psychological burden was moved to physical appearance, such as dizziness, hard to concentrate, easily sick) and usually it is cumulative, so sometimes the issue is not so easily resolved. Burnout is a psychological condition experienced by the individual as a result of the onset of stress in a long period of time and with a high enough intensity, marked by physical, mental, and emotional fatigue, as well as low self esteem which resulted in the individual feels detached from its surroundings. Therefore it needs to be a reaction to deal with it, because otherwise it will appear physical or psychological disorders.

Job Satisfaction

Job satisfaction according to Martoyo (1992), is primarily one of the psychological aspects that reflect a person's feelings towards their job, they will be satisfied with the congruency between the abilities, skills and expectations with the job they faced. This attitude is reflected by the working morale, discipline and work achievement. Job satisfaction is enjoyed in the job, out of work, and a combination of inside and outside jobs Hasibuan (2001). Job satisfaction is a general attitude towards the job, the difference between the number of rewards accepted by an employee and the amount that they believe what they are supposed to receive Robbins (1996).

Job satisfaction is employee satisfaction toward their job among what is expected by them from their job/Office Davis (1995). Handoko (2001) says that job satisfaction is an emotional response to show the pleasant feeling related to the IT work.

Turnover Intentions

Turnover intentions are the desire to leave the Organization and have been described as the last order of withdrawal cognitions Tan and Tan (2000). Fang and Baba (1993) stated that turnover intentions are a consequence of stress. According to Harninda (1999) turnover intentions is basically the same as with desire of employees to move from one workplace to another workplace. The opinion pointed out that turnover intentions is the desire to move, not yet to come to the stage of realization i.e. make movement from one workplace to another workplace. Harnoto (2002) stated the turnover intentions is the level or intensity of the desire to get out of the company, many reasons that cause the onset of these turnover intentions and among them is the desire to get a better job. Turnover intentions are a tendency or intention of the employee to quit from his job Zeffane (1994). Turnover according to Cotton and Tuttle (1986) is interpreted as an estimate of the likelihood of an individual will remain in an organization. Robbins (2006) defines turnover as a permanent employee dismissal from the company either by employees themselves (voluntarily) or performed by the company. Werther and Keith (1993) elaborated definition of turnover as "the willingness of employees to leave one organization for another".

Hypothesis Development

The training that is done aims to get results in the form of certificates to prove the competence of IT workers. To get the IT training certificate, a heavy training and difficult exams are required, both of which will give rise to a perception within the IT workers. Some previous researches including Batilmurik (2010) with his research which concluded that there is a relationship between training with job satisfaction of employees that also supports research of Choo and Bowley (2007) which concluded that there is a relationship between training towards job satisfaction of employees. In addition, Cheng and Waldenberger (2012) who get the findings that training affected the turnover intentions through job satisfaction intermediaries. And then Subawa and Utama (2013), who stated that job training effect on job satisfaction. In addition, Supatmi et al (2013) concluded the training effect on job satisfaction. Based on the literature above, the hypothesis that may be filed:

H_1: the higher the ability of the IT workers seen from their training, the higher the level of their job satisfaction will be.

A very high turnover in the IT profession is the result of the selling power of the IT job skills, such as network, database of management skills and enterprise resource planning (ERP) system skills Moore and Burke (2002). These skills are the result of IT training. Theory of Planned Behavior argues that three main variables can be used to predict whether a person intending to do something, one of them is behavioral control perceived by that person. Perceived behavioral control refers to individuals' perception of "the presence or absence of the necessary resources and opportunities "to perform the behavior. Next in the research of McKenzie (2006) which indicates that many IT workers that connect salary increases with the kind of and the number of IT training they have. Then if we connect what McKenzie explain with the theory of planned behavior, training can be considered as an enabler for the holder to identify the presence of one of the resources that are needed to improve the marketability of the holder and mobility, and therefore can be used as predictors of turnover intentions. Based on the literature above the hypothesis that may be filed:

H_2: the higher the ability of the IT workers seen from their training, the higher the turnover intentions rate will be.

Several researches support negative relationship between burnout and job satisfaction. This study shows that when burnout increases, job satisfaction decreases (Wolpin, Burke and Greenglass, 1991; Arie and Yoram, 1993; Maslach and Schaufeli, 1993). Burnout related to the job dissatisfaction is that they tend to exaggerate the negative thoughts (Maslach, Schaufeli and Leiter, 2001). Burnout is likely increasing pessimistic thoughts such as fear of outsourcing, and job uncertainty on IT workers. Thus, it seems that the IT workers who are exposed to burnout will tend to be dissatisfied with their job. Koeske (1993) and Koeske's stress-strain-outcomes (SSO) burnout model suggests relations between stress, strain (burnout), and outcomes (job satisfaction). In the SSO model, burnout caused a decrease in the job satisfaction Um and Harrison (1998). Based on the literature above the hypothesis that may be filed:

H_3: high Burnout will decrease job satisfaction.

Burnout model of Schaufeli, Leiter and Kalimo (1995) has three components: exhaustion, cynicism, and loss of professional self-efficacy. The IT workers who have exhaustion may feel they not have enough energy to face the next day. Finally, with the fatigue that continues they will start looking for a solution to reduce the fatigue which may include the possibility of leaving their jobs. The IT workers can also experience increased cynicism that manifests them spiritually away from work. As an individual who is spiritually away and indifferent towards their job, it seems to make sense that they would consider leaving their jobs. The last component of

the model of Schaufeli et al., (1995) includes the decrease in professional self-efficacy. The IT workers who have burnout may experience a decrease in professional self-efficacy in the form of a reduction in the perceived effectiveness and accomplishments. The decline of professional self-efficacy can lead to negative feelings because IT workers who repeatedly failed to produce positive results they will stop trying in the end. After they stop trying they will probably not see a reason to stay in their jobs that can eventually lead to turnovers. Based on the literature above the hypothesis that may be filed:

H_4: high Burnout will increase the turnover intentions

Model of satisfaction-to-commitment mediation shows that job satisfaction has a direct influence on turnover intentions, Tett and Meyer (1993). Also, social exchange theory states that job satisfaction affects turnover by influencing job commitment Hendrix, Robbins, Miller and Summers (1998). Some studies have shown a relationship between job satisfaction and turnover intentions (McMurtrey et. al., 2002; Niederman and Sumner, 2004; Thatcher et. al., 2003; Grover, Tenge and Lightner, 2002; Thatcher, Stepina and Boyle, 2003). Difference theory says the results of job dissatisfaction of alienation from the Organization in the form of reduced organizational commitment and increased turnover intentions Abraham (1999). Based on the literature above the hypothesis that may be filed:

H_5: low job satisfaction would increase turnover intentions

RESEARCH METHOD

Population and Sampling Technique

In this study, population that we examine is information technology workers from various fields of company in Jakarta. In accordance with the analytical tools that we use i.e. Structural Equation Models (SEM) then the determination of minimum sample amount representative according to Hair et al. (2008) is the number of samples must have five times of number of questions that are analyzed. In this present research questionnaire there are 26 statements, thus a minimum amount of sample needed is 130 respondents. In this research we take the total number of respondents as many as 150 information technology workers. We used cluster random sampling method to select respondents. The research first identifies boundaries, in case of our example; information technology workers in Jakarta. We randomly select a number of identified IT companies. It is important that all IT companies within the population be given equal chances of being selected. Then we can either include all the individuals within the selected companies or he can randomly select subjects from the identified companies.

Measurement

In our research, there are two free variables (exogenous) which are information technology training and burnout, then there are two attached variable (endogenous) i.e. job satisfaction and turnover intentions. We measure information technology training using indicators of Supatmi et al. (2013) which consisted of 4 indicators. Job satisfaction and turnover intentions in this study used indicators of Michigan Organizational Assessment questionnaire (MOAQ) Cammannet al. (1979), each of which consists of 3 indicators. While, for burnout we measure using dimension of Maslach Burnout Inventory General Survey (MBENI-GS) obtained from the Consulting Psychologist Press and is the scale of burnout which is independent of the vocational aspects, and can be used in the job of the non human services Bakker, Demerouti and Schaufeli (2002) in which the dimensions consist of exhaustion, cynicism, and professional efficacy. Furthermore from the measurements of dimensions shown in the form of a questionnaire, we did validity and reliability tests.

The validity test was done with Confirmatory Factor Analysis, by looking at the value of Kaiser-Meyer-Olkin Measure of Sampling (KMO) and Measures of Sampling Adequacy (MSA). In this test the value obtained must be greater than 0.5 which means that analysis of the factors is proper or suitable for use, and can be further processed (Malhotra, 2004). The scale of information technology training consists of 4 statements and all valid, burnout scale consists of 16 statements and all valid, job satisfaction scale consists of 3 statements and all valid, then the last turnover intentions scale consist of 3 statements and all valid. Reliability test of Alpha Cronbach value is greater than >0.6 which means reliable (Anindita and Hasyim, 2009), that can be indicators that information technology training, burnout, job satisfaction, and turnover intentions can be said to be reliable as a means of collecting data in research. The next phase, we manage the data by using SEM (Structural Equation Modeling) analysis method. SEM is capable of explaining the variable relationship in complex as well as the effects directly or indirectly from one or multiple variables against other variables (Hairet al, 2008).

ANALYSIS AND RESULTS

We focus this research on the influence of information technology training and burnout against turnover intentions with mediation of job satisfaction and the results showed that of the five hypotheses posed, three data results obtained support the hypothesis and two data do not support the hypothesis. As the SEM testing we've done, it can be seen in Figure 1 below:

Figure 1. Path Diagram T-Value


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Chi-Square=1182.65, df=293, P-value=0.00000, RMSEA=0.143
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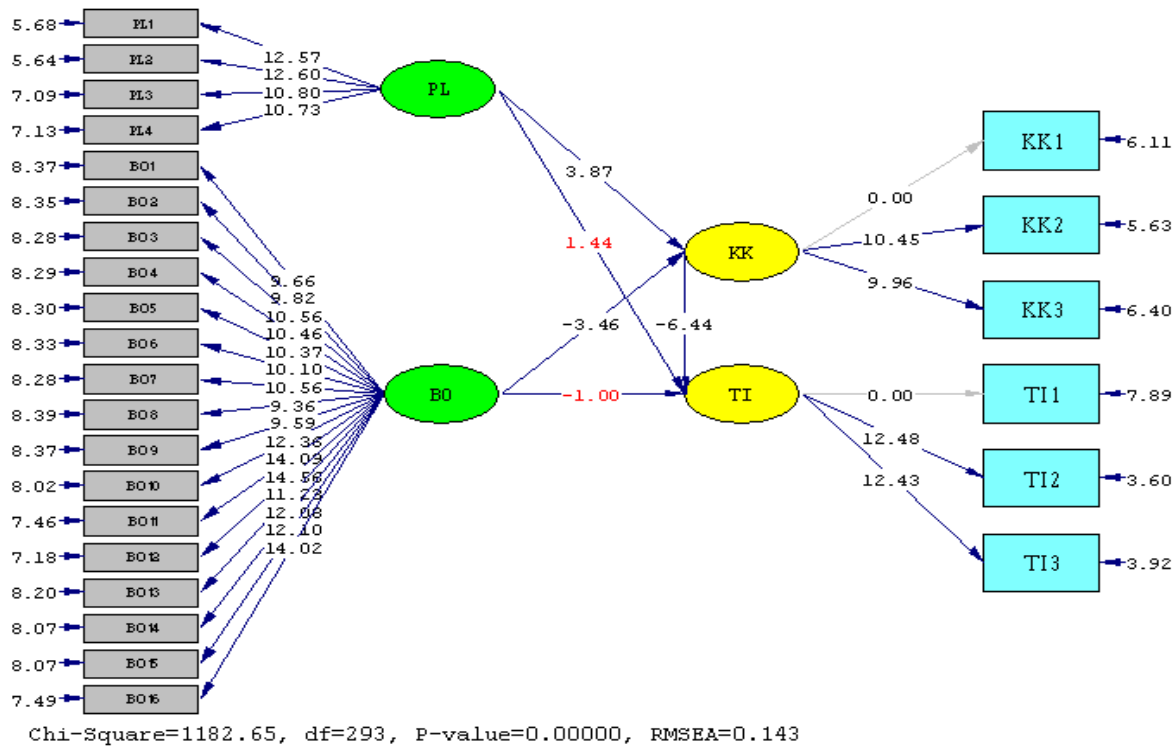
Note: PL (Information Technology Training), BO (Burnout), KK (Job Satisfaction), and TI (Turnover intentions)

Based on the Figure 1 Path Diagram T-Value above which is the hypothesis in this study, it is presented in the following structural equations:

Table 1. The Structural Relationship of Test Results

Hypothesis	Statement of the Hypothesis	Value of the T-Value	Description
H_1	The higher the ability of the IT professional seen from the training, the higher the level of job satisfaction will be.	3,87	The data support the hypothesis
H_2	The higher the ability of the IT professional seen from the training, the higher the level of turnover intentions will be.	1,44	The data do not support the hypothesis
H_3	A high burnout will lower job satisfaction	-3,46	The data support the hypothesis
H_4	A high Burnout will increase turnover intentions	-1,00	The data do not support the hypothesis
H_5	Low job satisfaction will increase turnover intentions	-6,44	The data support the hypothesis

DISCUSSIONS

Managerial Implications

IT workers with a high exhaustion will be easier to be cynical about the job and the people around them. The IT workers, who have the exhaustion and cynicism, tend to be not focused in the jobs, experiencing stress even will experience less good relationships between employers and co-workers then resulted in decrease of professional efficacy. Managerial implications suggested to reduce exhaustion of IT workers can be done with the participation of employers through policies that view that IT workers are not just company assets, but also the IT workers are individuals who have other roles in life. One of the most sensible policies that can be done by employers is to provide duties and authority to the IT workers in accordance with the concept of the Information Technology Infrastructure Library (ITIL) and what has become their job description. This policy aims to provide a more focused job and prevents the occurrence of bias in jobs. So, with the existence of job description clarity and implementation of the appropriate ITIL concepts then it is expected to minimize exhaustion. The second managerial implication of burnout dimensions is cynicism. Cynicism which is characterized by an attitude of cynical tends to withdraw from in the job environment. The suggested managerial implications to reduce cynicism on the IT workers can be done by arranging events such as outing or family gathering outside the Office, dinner with the employers and the IT workers or may be doing sports together after work. The employers should also provide a moment to their subordinates to socialize with fellow IT workers, even a good employer should have often communicate with their subordinates, in order to understand the problems that plagued them related to the job.

The last managerial implication which is suitable for to the burnout dimensions is the professional efficacy. The IT workers whose efficacy professional are dropped will have a less good performance. They are difficult to solve the problem in the job, they do not want to contribute to the Organization, they work less well, working with glum face, they don't feel confident toward their job, and there is no achievement in their job. Professional efficacy is a form of reduced effectiveness and achievements. Managerial implications which are suggested to improve professional efficacy of IT workers is by lowering the levels of cynicism and exhaustion on the IT workers. A highscore on exhaustion and cynicism will have an impact on a low professional efficacy score. Job satisfaction is very important. Since it started from the satisfaction then an employee can work as good as possible. If employees are satisfied then the happy feelings will arise, and with this happy feelings, it will bring up the enthusiasm to work and produce the best for the organization. The first managerial implication on indicators of job satisfaction is satisfied with the job, by providing appropriate compensation. This compensation is not just the amount of salary, but also the employers should be able to give appreciation for

the job achievements of the IT workers. The project that has been completed and successfully implemented should get appreciation in the form of bonuses or awards. The awards proved to be able to motivate the employees in order to continue to improve their job accomplishment. By the existence of compensation, then the job that has been done is not felt hopeless and raises satisfaction towards that work.

The second managerial implication on indicators of job satisfaction is to love the job one of them is by the existence of office promotion opportunities. With the office promotion policy for employees' career then IT workers will be motivated to further excel in achieving fixed targets. IT workers who are motivated directly or indirectly will love their job because the job done will obviously bring them to a higher position. Supervision, control and good communication from the employers that is felt by the IT workers is a form of the employer's attention to their subordinate and it can also be a factor that causes the IT workers to love their job. The third managerial implications that can be applied in improving job satisfaction of employees in accordance with the indicators are to love the workplace by creating conducive working condition. Conducive working condition occurs if there is a good relationship between employers and also fellow co-workers. With this condition, the IT workers should further enhance the cooperation between fellow co-workers one to another. Besides the employers should also be regularly organize coordination meetings at each work unit to which in the meeting should occur the disclosure of problems faced so that the best solution can be found. This will facilitate the coordination between one section and another section. Convenient organization conditions can also be created from the availability of adequate and sufficient facilities, which will sustain and encourage employees to work better.

CONCLUSION

This research tested the influence of the IT training and burnout toward turnover intentions on the IT workers with job satisfaction mediation. This research uses the Structural Equation Models (SEM) analysis. The results that can be concluded from this research are: (i) the IT training is significantly positive to affect the IT workers' job satisfaction, which means more and more of the IT training that has been obtained will increase job satisfaction of IT workers (the first hypothesis is supported); (ii) the IT training does not significantly affect the turnover intentions, it means the more IT training that has been obtained, will not significantly increase the turnover intentions (the second hypothesis is not supported); (iii) burnout is significantly negative to affect job satisfaction. High burnout will decrease job satisfaction (the third hypothesis is supported).(iv) burnout does not affect the turnover intentions. High burnout will not increase the turnover intentions (the fourth hypothesis is not supported). And (v) job

satisfaction is significantly negative to affect the turnover intentions. Low job satisfaction will increase the turnover intentions (the fifth hypothesis is supported).

SUGGESTIONS

Based on the above matters, we can put forth a few suggestions that are expected to be able to lower the turnover intentions of the IT workers in Jakarta, for example by organizing trainings and keeping the level of burnout remain low in order to increase job satisfaction which will affect on the turnover intentions. The Organization should also able to provide space for the IT workers to express their problem, emotions and other interests for IT workers as long as it doesn't interfere with the job. By having a more familial policy then the IT workers will get a better job satisfaction because they felt that the Organization have attention to employees in their role of running business processes as IT workers. In addition it should still be done other policies by looking at various aspects to improve job satisfaction. The IT workers who feel cared by the Organization certainly will be more loyal and do not feel the desire to resign (turnover intentions) from the organization where they work. Surely the all the thing above is inseparable from the role of employers in the achievement of low turnover intentions. As employers, they should be able to give attention, a great sense of empathy and caring to his subordinates. Thus, their job satisfaction will increase and they also will feel more appreciated and enthusiast in motivating the IT workers to be able to continue providing the best for the organization. This research is still very limited because it only examined the extent of the influence of training, burnout, job satisfaction and turnover intentions. For the research development it is suggested that the future research can look for other variables that affect job satisfaction and turnover intentions so that the more objective and representative results with a wider coverage will be obtained.

RESEARCH LIMITATIONS

This research has some limitations that can be consideration for further research. This research uses the questionnaire as a measurement tool because of the purposes of saving time and effort. However, the questionnaire has limitations such as bias in filling out the questions. There is a possibility that the respondents do not fill with real answer or just fill based on ideal conditions expected and not the actual conditions that is taking place. This can cause the measurement used does not describe real variables. In addition, the limitation of the number of samples and variables that affect turnover intentions or that affect job satisfaction as well as a number of its analysis led the researchers to not be able to dig deeper on other factors affecting turnover intentions.

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