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ORGANIZATIONAL JUSTICE AND TURNOVER INTENTION: THE MEDIATION ROLE OF JOB SATISFACTION

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ABSTRACT

This research examines the relationship between the facets of organizational justice namely; distributive justice and procedural justice on turnover intention and determining the mediating role of job satisfaction among IT professionals. The social exchange theory is reviewed in this paper as the theoretical perspectives which guide the development of hypotheses. 550 IT professionals were sampled and survey from the ICT industry in Thailand. Using both SPSS and AMOS packages, the collected data was analyzed using a multivariate technique. This study found a statistically significant relationship between distributive justice, procedural justice and employee turnover intention through the mediating effect of job satisfaction of IT professionals in Thailand. The findings of this study offer a constructive contribution to the understanding of psychological processes of job satisfaction using the paradigm of social exchange theorists (Blau, 1964). The implications of the findings are discussed in details in the study and constructive recommendations are proffered for future researchers.

Keywords: Distributive Justice, Procedural Justice, Turnover Intention, Job Satisfaction

INTRODUCTION

In every organization, the importance of Information Technology's (IT) operatives and personnel cannot be over emphasized. Virtually every sector and all operations in the organization depend on the functionalities of IT and IT professional. In other world, employing the functionalities of IT in an organization offer scores of benefits inter alia, competitive advantage (LeRouge, et al., 2006). Meanwhile, the rate of turnover

intention of IT personnel is increasing alarmingly. This is said to be deterring organizations a smooth developmental flow and incurring unnecessary expenses (McKnight, Philips, & Hardgrave, 2009). For instance, it was estimated that the cost of replacing talented IT workers doubled their annual salaries (Young, 2002). Curbing the exponential rate of turnover intention among IT workers tend to be more challenging because IT professionals possess a strong tendency of changing work than other employees (Korunka, et al., 2008). The fact that IT-based positions are often and always needed in organizations, IT professionals do not always find difficulties in get new job. Meanwhile, retaining IT professionals by satisfying them can also be unbearably demanding for most organizations (McKnight, et al., 2009). Therefore, retaining IT professionals and curbing the high rate of turnover intention among IT workers continue to be a priority to both researchers and employers in the corporate world (Calisir, Gumussoy, Iskin 2011).

Moreover, literature has been replete on issues relating and factors that leads to employee turnover in organizations and different frameworks and variables have been validated in this regard. There have also been some few studies that engage in grasping the peculiarity of IT professionals' turnover intention (Chang 2008; Lacity, et al. 2008). Several studies also found that job satisfaction is one of the most important factors for turnover intention among IT professionals (McKnight et al., 2009; Rutner et al., 2008; Joseph et al., 2007). McKnight et al. (2009) found that turnover intention among IT professionals is defined by job satisfaction. Consistently, Muliawan, & Green, & Robb (2009); Emami, et al., (2012); Falkenburg & Schyns (2007) empirically delved on IT professionals perception and found a negative effect of job satisfaction on turnover intention. Notably, Berry (2010) discovered an insignificant effect of organizational justice and turnover intention in the course of discerning the collectivists' attitude toward job satisfaction. Additionally, understanding the factors responsible for job satisfaction of IT professionals in Thailand and its role in curbing the high rate of turnover intention is still considered as an academic gap that needs to be resolved pronto (Sakchaicharoenkul, 2009).

The importance of employees' job satisfaction is akin to the role of the employees in the organization. If employees are not satisfied, it affects their attitude towards their job negatively. Chang, (2008) found that personal attitudes of the employee and organizational environments have great influences on employee job satisfaction. Role fairness is an example of factors that can affect employee job satisfaction, as many researchers reported from western perspectives. Few studies have delved on the antecedent factors that lead to employee satisfaction or

dissatisfaction in an Asian perspective, particularly in Thailand. Studies have documented that employee perceptions on procedural justice and organizational justice significantly influence both cultural and societal behaviors. It is fair to presume a similar significant influence of fairness in organizational behavioral sphere. For instance Lind & Tyler, (1988) and Tyler, et. al. (1997) opined that cultural background affect employee perception of organizational justice and also admitted that organizational justice is a universal phenomenon. Lam et al. (2002) concluded in their study that most of the studies on distributive and procedural justice do not reveal inter-culturally generalizable conclusions. Consistently, Lam, Schaubroeck, & Aryee (2002) argued that studies of the effects of distributive and procedural justice do not provide consistent and mutually supportive conclusions as to generalizability across cultures. On that account, researchers are challenged to examine the influences of procedural justice and distributive justices on employee attitude and behaviors from different cultural context and backgrounds (e.g., Brockner, et al., 2000; Lind & Earley, 1992; Lind, Tyler & Huo, 1997).

For instance, Sugawara and Huo (1994) reported the role of procedural justice in organization from a collectivists' point of view and reiterated the distinctive experiences of the westerners and collectivists on procedural justice. For instance, Sugawara and Huo (1994) noticed that Japanese are wary of procedural justice only during conflict resolution while Thomas and Nagalingappa (2012) found no significant influence of procedural justice on job satisfaction from a western perspective. Consistently, there are inconsistencies in the current findings on the role of procedural justice in organization. On that note, Elanain, (2010) recommended further examination of work-justice relationships and outcomes from the perceptions of non-westerners. This study is motivated to fill this gap through the account of Thailand perceptive. Thailand is a considered a good example of a collectivists environment and an intrinsic Asian community. Hence, this study provides an empirical analysis of the role of organizational justice on turnover intention through mediating role of job satisfaction among IT professionals in Thailand's ICT industry.

LITERATURE REVIEW

Social Exchange Theory

The social exchange theory proffers solid theoretical backdrop for the presumptions of this study. According to Blau (1964), social exchange theory explain that the relationship between two business entities cannot and should not be limited to economic exchange but social exchange must

be accommodated within their interactions. This infer that corporate organizations interactions with their employee is not limited to impersonal exchange but also includes socio-emotional factors such as approval, respect, recognition and support among others (Eisenberger, et al., 2001). The important gist of the social exchange theoretical perspective is to advocate for a mutual balance of commitment between the two parties (Blau, 1964). For instance, among the employees-employers relationship, it is obvious that employees sacrifice their knowledge, skills, and abilities and motivation for rewards. These rewards can be multifaceted, it can be inform of money and so on or rather something intangible like respect, dignity, charisma and fairness (Blau, 1964). Invariably the employeeemployer relationship will not be flop so far there is a mutual balance between the two parties. Consistently, psychologist believed that fairness is a basic factor for every employee to be satisfied with their job (Blau, 1964). Therefore, it can be deduced from the theoretical perspectives explained above that employees that are treated without prejudice are likely to have positive and high degree of satisfaction and when there is satisfaction, there will be motivation to continue working with their organization.

Perceived Organizational Justice

Organizational justice is defined as the level of fairness, the behavioral justice and the cautiousness of individual personnel in the distribution of employee reward in the organizational system rewarding (Cropanzano & Greenberg, 1997). Theoretically, there are two types of workplace justice which are distributive justice and procedural justice (Prince, 2001). In other words both procedural justice and distributive justice are the most common measurement for organizational justice (Fassina, Jones, & Uggerslev, 2008a).

Distributive Justice

Distributive justice was propounded by Adams (1965). Adams evaluated fairness using a social exchange theory perspective. Operationally, distributive justice is defined as the level of equality and just in the distribution of reward in the organization (Niehoff & Moorman 1993). Folger & Konovsky (1989) opined that distributive justice is referred to as the employee individual judgment and perception towards the distribution of rewards; such as payment and promotion by the management. In other words, DeConinck & Bachmann (2005) added that lack of distributive justice de-motivate and loosen the morale of

4

the employee and resolve to lack of satisfaction. Prince (2001) also corroborated that distributive justice is the conscience and balance in the process of sharing employees' rewards justly and fairly in accordance to their job performance. Distributive justice is simply defined by Cuyper et al. (2011) as the system that ensures highly committed and performing employee get high reward and vice versa.

Procedural Justice

Procedural justice is referred to the procedures and process followed to decide on employee rewards (Thibaut & Walker's 1975). Saks (2006) asserted the procedural justice definition, by adding that it refer to the perception and how fulfill employee feel in terms of organization management decisions and determination of reward distribution and resources distribution. Singh and Loncar (2010) corroborated that the process and the determination of reward distribution a times concerns employee than the distribution itself, as the distribution follows the procedure determined by the organization leadership. higher perceptions of procedural justice by employees are more likely to reciprocate with greater organizational engagement to toward employee intention to stay and an employees' positive evaluation of their supervisor (Saks, 2006; McFarlin & Sweeney, 1992) in turn their unclear of decision making processes to employees violate procedural fairness and loss of trust between the employer and employee relationship leads toward employee job dissatisfaction.

Job Satisfaction

Employee Job Satisfaction is determined by the level of employee morale commitment and involvement with the organization. It is defined as employee behavioral and attitudinal reactions to their organizations. The employee attitudinal reaction can either be evaluative, cognitive or affective response. Job satisfaction is defined in this study as the positive attitude that is implanted through job experience (Locke & Lathan, 1976). Conceptually, job satisfaction can be determined from the employee reaction to the organizational environment and culture, for instance; colleagues, career, managerial skills, leadership style to meets employee's individual expectations. Herzberg, (1968) affirm that employee are positively related and open minded to their organizations if their job and organizations support them to fulfill their personal needs. Additionally, the Maslow theory of management posited that human are naturally selfdirected and every human struggle for self-satisfaction (Maslow, 1943). Therefore, it is safe to deduce that every employee working intention is to achieve satisfaction through developing and elevating their living

standards or attaining personal survival. Reasonably, that explains why every employee takes job satisfaction important and why it remains number priority of every employee.

Turnover Intention

Tett and Meyer (1993) referred to turnover intentions as the deliberate and conscious willingness of the employees to leave their organizations. Theoretically, it is the last in the sequence of withdrawal cognitions, which consists of thinking of quitting and intent to search for alternative employment. Although turnover intentions do not always lead to actual turnover, but Bluedorn (1982) found that turnover intention was highly correlated with actual turnover behavior in thirteen out of fourteen empirical studies. In fact, studies on turnover have shown that turnover intention is the most consistent predictor for voluntary turnover (Griffeth, Hom, & Geatner, 2000; Lambert, Hogan, & Barton, 2001; Price, 2001). A meta-analysis undertaken by Steel and Ovalle (1984) confirmed that intentions always often lead to actual turnover. Since significant positive relationships have been found between turnover intentions and actual turnover (Bluedorn, 1982; Mowday, Porter, & Steers, 1982; Steel & Ovalle, 1984), turnover intentions have been recommended as a correct measurement or factor for determining actual turnover (Price, 2001; Price & Mueller, 1981).

Relationship between Distributive Justice and Job Satisfaction

Lambert, Hogan, & Griffin (2007) found a significant influence of distributive justice on job satisfaction. This connotes that employees that are victim of lack of distributive justice would be dissatisfied about their job. McFarlin and Sweeney (1992) claim that the effects of distributive justice are multidimensional including negative personal and emotional reactions that can result to job dissatisfaction, et al. (2008) found that fairness of rewards, job satisfaction, and perceived work load are antecedent factors to turnover intention among IT professionals. Impliedly, the following hypothesis is constructed for analytical examination;

Hypothesis 1: There is a positive relationship between distributive justice and employee job satisfaction.

Relationship between Procedural Justice and Job Satisfaction

Theorists opined that when organizational procedures are fairly proceed to favor employees to the extent that they are satisfied with it, there will be optimum commitment and satisfaction to their job and by extension, this would also affect their personal intention to quite working with the organization (Koh & Boo, 2004). Lambert, Hogan, & Griffin (2007) found that procedural justice influence job satisfaction. Consistently, Jahangir, Akbar, & Begum (2006) in their study found that the relationship between procedural justice and job satisfaction is significantly and positively related. Inferably, a positive relationship is suggested between employees' perception on procedural justice and job satisfaction (Koh & Boo, 2004). Therefore, the following hypothesis is constructed for analytical examination;

Hypothesis 2: There is a positive relationship between procedural justice and employee job satisfaction

Relationship between Job Satisfaction and Turnover Intention

Employee job satisfaction is not just an employee's concern, it is a priority for serious and objective organizations as well (Lim, 2008). Employees' dissatisfaction is detrimental to the growth of the organization so many ways including employee turnover (Reed et al., 1994). Meanwhile, researchers have found that satisfied employee are rarely and reluctantly change organizations (Beecham et al., 2008). In the same vain, job satisfaction is a significant factors to hinder or reduce any form of turnover intention among employees (Lee, 2000). Literatures on organizational behaviors are replete and unanimous on the significant role job satisfaction plays in employees that harbor turnover intention (McKnight, et al., 2009; Rutner, et al., 2008; Korunka, et al., 2008; Joseph, et al., 2007). Consistently, the following hypothesis is proposed;

Hypothesis 3: There is a negative relationship between job satisfaction and employee turnover intention.

METHODOLOGY

Population and Sampling Method

The findings reported in this study is generalizable on the entire ICT industry in Thailand, hence the population of which the surveyed sample size was surveyed. The Thailand ICT industry consists of four distinctive facets which are; hardware computer, software computer, information technology service and communication (NSO, 2008). Using a multistage sampling technique and a proportional stratified random sampling, 21

ICT companies were sampled from four different regions in Thailand; from the North, South, North-East and Bangkok. The respondents in this study consist of IT professionals that receive technical job demands under a supervisor. This includes entry-level employees, lower-level managers and middle-level managers. The distribution of the sample selection cut across the four arms of the ICT industry of Thailand as according to the list obtained from the Thai Ministry of Information and Communication Technology (MICT) in 2012 and Software Industry Promotion Agency (Public Organization) (SIPA) in 2012. A total number of 550 questionnaires were administered to respondents from 21 different ICT companies who agreed to participate for this study in four regions of Thailand. The questionnaires were administered electronically via mailed to either the HR department or representatives of each company and the representative then distribute the questionnaire to their IT professionals. The questionnaire was enclosed with a cover later explaining the purpose of the study, brief objectives of the study and ensuring the respondents of the confidentiality of their responses. The study received a total number of 342 usable questionnaire representing 62.18% of the entire sample size. Dixon and Schertzer (2005) opined that 60% response rate is considered acceptable for an organizational related study.

Measures

Distributive justice

Employees' perception on distributive justice is measured with five items adopted and adapted from Niehoff & Moorman (1993). All reliability value reported for the adopted items have been tested and reported to be between .72 and .74.

Procedural justice

Employees' perception of procedural justice is measured with four items which was adopted from McFarlin & Sweeney (1992). The reliability value reported for the adopted items in past studies is between .73 and .85.

Job satisfaction

Job satisfaction is measured with the job satisfaction scale developed by Taylor and Bowers (1974). The scale consists of seven items and the reliability of the scale has been tested severally in past studies with common acceptable parameters ranging between .61 and .71.

Turnover intention

Turnover intention is measured with the turnover intention scale developed by Kelloway, Gottlieb, and Barham (1999). The scale consists of four items and the reliability of the scale has been tested severally in past studies and the acceptable results are between .92 and .93.

Method of Analysis

The study adopts a multivariate analytical technique, using the AMOS 2.0 to establish the relationships between the variables (Hair et al., 2006). The variables are measured using seven-point Likert scales from (1) Strongly disagree, (2) Moderately disagree, (3) Slightly disagree, (4) Neither disagree nor agree, (5) Slightly agree, (6) Moderately agree and (7) Strongly agree.

RESULTS

Demographic Profile of the Respondents

The demographic analysis revealed that there more male respondents (78.4%) as compared to females (21.5%). The majority of the respondents are between the age of 31-40 year (46.5%). It was found that most of the respondents are married (50.3%). 58.8% of the respondents are bachelor's degree holder (58.8%). And most of the respondents have a considerably experienced with 45% among them having 4-5 working experience. Finally, the majority of IT position among the respondents is programmer/software developer (19.6%).

Confirmatory Factor Analysis (CFA) Result

Different analytical techniques are employed to determine the construct validity of the data. In order to fulfill the statistical convention of employing a multivariate statistical technique like SEM, it is crucial to conduct a confirmatory factor analysis (CFA). This is done by determining the construct validity of the data set through convergent validity, variance extracted; construct validity and discriminant validity (Arbuckle, 2010; Dimitrov, 2003). Convergent Validity is used to examine the convergence level of indicator variable in a construct. The findings revealed that the data has a significant high loading according. In this

study, the threshold for factor loading is set at .40 and above (Hair, et al. 2006). Average Value Extracted AVE is employed to determine the construct validity of the items.

Table 1 Confirmatory Factor Analysis (CFA) to test the validity and reliability of the instruments results

Constructs	Items	Loading	Cronbach's Alpha	Construct Reliability	AVE
Distributive	DJ1	.822	.947	.948	.784
Justice	DJ2	.928			
	DJ3	.892			
	DJ4	.864			
	DJ5	.918			
Procedural	PJ1	.880	.934	.934	.781
Justice	PJ2	.870			
	PJ3	.905			
	PJ4	.879			
Job	JS2	.808	.911	.911	.630
Satisfaction	JS3	.760			
	JS4	.814			
	JS5	.795			
	JS6	.824			
	JS7	.760			
Turnover	TI1	.859	.895	.895	.682
Intention	TI2	.835			
	TI3	.779			
	TI4	.828			

The results in Table 1 presents that the Cronbach Alpha values of each construct ranged from .895 to .947. This signifies that all construct have acceptable internal consistency. The result of Construct Reliability (CR) values range between .895 and .948, which exceeded the expected threshold .70. The values indicated adequate internal consistency, which means that convergent validity is supported (Hair, 2010) The Average Variance Extracted (AVE) test of distributive justice, procedural justice, job satisfaction and turnover intention construct were .784, .781, .630 and .682, respectively which are all above the recommended value of .50 for discriminant validity of the constructs used in this study (Barclay, Thompson & Higgins, 1995).

Table 2 Discriminates Validity for all Constructs

Variable Name	Procedural justice	Turnover intention	Job satisfaction	Distributive justice
Procedural justice	(.884)			
Turnover intention	197	(.826)		
Job satisfaction	.250	779	(.794)	
Distributive justice	118	405	542	(.886)

The CFA result revealed that all the loadings of the observed variables are acceptable, the values ranges from .760 to .928. The adopted threshold value for loadings is .40 for this particular study because the sample size above 150 as opined by Hair, et al, (2006). The discriminate validity explains the availability of multicollinearity in the variables. Meanwhile, the availability of Multicollinearity explains the relationship or the similarity between the variables (Campbell & Fiske, 1959). Table 1 shows the result of the calculated AVE to support discriminate validity of constructs in this study. According to Fornell and Larcker (1981) the AVE should be greater than the squared correlation to achieved discriminant validity. The procedural justice construct attained the highest discriminant validity among all other constructs. The Square root of AVE for procedural justice is .884 while the correlation between procedural and turnover intention, job satisfaction and distributive justice are -.197, .250 and -.118, respectively (as presented in Table2).

Goodness of Fit Indices

The result of the measurement model revealed that the model has a good fit from the assessment of different criteria such as GFI, CFI, TLI, and RMSEA. Table 3 shows that the goodness of fit generated is better compared to the hypothesized model. However, The CFAs of constructs revealed in the results indicate a relatively good fit as indicated by the goodness of fit of RMSEA of (<0.08); GFI of (>0.90); AGFI of (>0.90). Hair et al. (2010) indicate that TLI of (>0.9) and CFI of (>0.9), and goodness of fit indices such as CMIN/DF ratio (< 3) as according (Byrne, 2001). Hair et al. (2010) indicate that goodness of fit indices such as TLI of (>0.9) and CFI of (>0.9), and CMIN/DF ratio (< 3).

Table 3 Generating model and hypothesized model results

Indicators	CMIN/ DF	GFI	AGFI	TLI	CFI	RMSEA
Hypothesized model (Fit before model revised)	2.031	.909	.885	.966	.970	.055
Generating Model (Fit after model revised)	1.567	.934	.915	.981	.984	.041

Hypotheses Based Results

Table 4 presented that both distributive justice and procedural justice have positive and significant relationship with job satisfaction (H1 and H2 are significant). Meanwhile job satisfaction has a negative relationship with turnover intention (H3). Table 5 shows that both distributive justice and procedural justice significantly mediate job satisfaction (H4 and H5 are significant).

DISCUSSION

This result presented in this study provides empirical justification for the relationship between perceived organizational justices and job satisfaction. Distributive justice and procedural justice are revealed to be significantly related. The findings presented in this study are consistent with the findings presented in McFarlin & Sweeney (1992). Their study found that distributive justice is a significant predictor to pay satisfaction and job satisfaction. Meanwhile, scores of other studies have also reported similar findings with this present study (e.g., Mossholder, Bennett, & Martin, 1998; Wesolowski & Mossholder, 1997). For instance, Couger, Zawacki, & Opperman (1979) found significant relationship between job satisfaction and turnover intention among IS professionals. The findings of this study corroborated the conclusions from past studies (McKnight, Philips, & Hardgrave, 2009; Rutner, Hardgrave, & McKnight, 2008; Korunka, Hoonakker, & Carayon, 2008; Joseph et al., 2007, Calisir, Gumussoy, & Iskin, 2011) on the importance of job satisfaction in IT professionals, with regards to their turnover intentions. Furthermore, Price (2001) also reported the mediating role of job satisfaction in the coaxial relationship that exists between distributive fairness and turnover intention. Additionally, organizational politics researchers (Kacmar, et al., 1999; Poon, 2003; Vigoda, 2000) similarly reported that job satisfaction significantly mediate the relationship between fairness and turnover intention.

Table 4 Direct Hypotheses Results

Support	*** YES	*** YES	*** YES	Indirect Hypothesis Support	.001 YES (Full Mediation)	.002 YES (Full Mediation)
	9.284	3.739	-12.691	Direct	.589	.978
0.00	.048	.040	690.	Two tailed Significant	.002	.002
445		.149	881	То	Turnover intention	Turnover intention
Job	Satisfaction	Job satisfaction	Turnover intention	↑	Job →	Job → satisfaction
ve justice		al justice	action	1	→ Job satis	→ Job satisf
	Distributive justice	Procedural justice	Job satisfaction	From	Distributive justice	Procedural justice
	H1	H2	H3	Hypothesis From	H4	H5

CONCLUSION

This study has found significant relationship between distributive justice, procedural justice, job satisfaction and turnover intention of IT professionals in Thailand. The analysis was done with a multivariate analytical technique using AMOS. The result also shows that the Generating Model (GM) is the best model to explain the distributive justice and procedural justice of IT professional to turnover intention through mediation of job satisfaction as compared to the hypothesized model. Furthermore, this study approaches the development of hypotheses from the theoretical paradigm of Social Exchange Theory (Blau, 1964). The implication of the findings in this study is to explain the antecedent factors that are responsible for the employees' turnover intention amongst IT professional in Thailand's ICT industry.

LIMITATIONS AND RECOMMENDATIONS

The findings reported in this study are invaluable enough for a better understanding of the factors affecting job satisfaction among IT professionals, although several limitations should be highlighted for the purpose of advancing the course of this study. First, future researchers are recommended to explore further by incorporating additional variables, such as work overloads and work family conflict. Second, distributive justice and procedural justice are found to be an important factor influencing employees' turnover intention. However, future researchers should which delve deeper to determine the exact role of either of the variables in relation to IT professionals. Lastly, the study can be replicated in some other contexts that have received little or no attention of the organizational researchers in order to validate the hypotheses tested in this study.

REFERENCES

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (pp. 267-299), New York: Academic Press.
- Arbuckle, J.L. (2010). IBM SPSS Amos 19 User's Guide. Chicago, IL: IBM.
- Barclay D., & Thompson R, H. C. (1995). The partial least squares (PLS) approach to causal modeling: personal computer adoption and use as an illustration. *Journal of Technology Studies*, 2(2), 285-309.

- Beecham, S., Baddoo, N., Hall, T., Robinson, H., & Sharp, H. (2008). Motivation in software engineering: a systematic literature review. *Journal of Information and Software Technology*, 50(9-10), 860-78.
- Berry, M.L. (2010). *Predicting turnover intent: examining the effects of employee engagement, compensation fairness, job satisfaction, and age.* Unpublished PhD thesis, University of Tennessee, Knoxville, TN.
- Blau, P. (1964). Power and exchange in social life. NY: John Wiley & Sons.
- Bluedorn, A.D. (1982). A unified model of turnover from organizations. *Journal of Human Relations*, 35(2), 135-53.
- Brockner, J., Chen, Y. R., Mannix, E. A., Leung, K., & Skarlicki, D. P. (2000). Culture and procedural fairness: When the effects of what you do depend on how you do it. *Journal of Administrative Science Quarterly*, 459(1), 138-159.
- Calisir, F., Gumussoy, C. A. & Iskin, I.(2011). Factors affecting intention to quit among IT professionals in Turkey. *Journal of Personal Review*, 40(4), 514-533.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Journal of Psychological Bulletin*, 56(2), 81-105.
- Chang, S.I. (2008). Work role stressor and turnover intentions: A study of IT personnel in South Korea. *Journal of Zeitschrift fur Personalforschung*, 22(3), 272-290.
- Cropanzano, R., & Greenberg, J. (1997). Progress in organizational justice: Tunneling through the maze. In C. Cooper & I. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 317-372). New York: Wiley.
- Couger, J. D., Zawacki, R. A., & Opperman, E. B. (1979). Motivation levels of MIS managers versus those of their employees. *Journal of MIS Quarterly*, 3(3), 47-56.
- Cuyper, N., Mauno, S., Kinnunen, U., & Mâkikangas, A. (2011). The role of job resources in the relation between perceived employability and turnover intention: A prospective two-sample study. *Journal of Vocational Behavior*, 78, 253-263.

- DeConincka, J., & Bachmannb, D. (2005). An analysis of turnover among retail buyers. *Journal of Business Research*, 58, 874–882.
- Dimitrov, D.M., 2003. Validation of Cognitive Structures: A Structural Equation Modeling Approach. *Journal of Multivariate Research*, 38(1), 1-23.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), 42-51.
- Elanain, H.M.A., (2010). Testing the direct and indirect relationship between organizational justice and work outcomes in a non-Western context of the UAE, *Journal of Management Development*, 29(1), 5 27.
- Fassina, N. E., Jones, D. A., & Uggerslev, K. L. (2008a). Meta-analytic tests of relationships. Report.
- between organizational justice and citizenship behavior: Testing agentsystem and sharedvariance models. *Journal of Organizational Behavior*, 29, 805-828.
- Falkenburg, K., & Schyns, B. (2007). Work satisfaction, organizational commitment and withdrawal behaviors. *Management Research News*, 30(10), 708-723.
- Folger, R., Konovsky, M.A. (1989), Effects of procedural and distributive justice on reactions to pay raise decisions. *Journal of Academy of Management*, 32(1), 115-130.
- Fornell, C. (1992). A national customer satisfaction barometer: the Swedish experience. *Journal of marketing*, 56(1), 6-12.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests and research implications for the next millennium. *Journal of Management*, 26(3), 463-488.
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate Data Analysis*. Seventh Edition. Prentice Hall, Upper Saddle River: New Jersey.

- Hair, J.F., Black W.C., Babin, B.J., Anderson, R.E., & Tatham R.L. (2006). Multivariate data analysis (6Eds). Pearson Prentice Hall: New Jersey.
- Herzberg, F. 1968. One more time: How do you motivate employees?. *Journal of Harvard Business Review* 46, 53–62.
- Jahangir, N., Akbar, M., & Begum, N. (2006). The role of social power, procedural justice, organizational commitment and job satisfaction to engender organizational citizenship behavior. *Journal of ABAC*, 26(3), 21-36.
- Joseph, D., Ng, K., Koh, C., & Ang, S. (2007). Turnover of information technology professionals: a narrative review, meta-analytic structural equation modeling, and model development. *Journal of MIS Quarterly*, 31(3), 547-77.
- Kacmar, K.M., Bozeman, D.P., Carlson, D.S., & Anthony, W.P. (1999). An examination of the perceptions of organizational politics model: Replication and extension. *Journal of Human Relations*, 52(3), 383-416.
- Kelloway, E. K., Gottlieb, B. H., & Barham, L. 1999. The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of Occupational Health Psychology*, 4, 337–346.
- Koh, H.C., & Boo, H.Y. (2004). Organizational ethics and employee satisfaction and Commitment. *Journal of Management Decision*, 42(5), 677-693.
- Korunka, C., Hoonakker, P. & Carayon, P. (2008). Quality of working life and turnover intention in information technology work. *Journal of Human Factors and Ergonomics in Manufacturing*, 18(4), 409-23.
- Lacity, M. C., Iyer, V.V. & Rudramuniyaiah. P. S. (2008). Turnover Intentions of Indian IS Professionals. *Journal of Information Systems Frontiers*. 10, 225-241.
- Lam, S.S.K., Schaubroeck, J. & Aryee, S. (2002). Relationship between organizational justice and employee work outcomes: a cross-national study. *Journal of Organizational Behavior*, 23(1), 1-18.
- Lambert, E., Hogan, N. & Griffin, M.L. (2007). The impact of distributive and procedural justice on correctional staff job stress, job

- satisfaction, and organizational commitment. *Journal of Criminal Justice*, 35, 644-656.
- LaTour, S., Houlden, P., Walker, L., & Thibaut, J. W. (1976). Procedure: Transnational perspectives and preferences. *Journal of Yale Law*, 86, 258-290.
- LeRouge, C., Nelson, A. & Blanton, J.E. (2006). The impact of role stress fit and self-esteem on the job attitudes of IT professionals. *Journal of Information & Management*, 43(8), 928-38.
- Lee, S.H., (2000). A managerial perspective of the objectives of HRM practices in Singapore: An exploratory study. *Journal of Singapore Management Review*, 22(1), 65-82.
- Lim, S. (2008). Job satisfaction of information technology worker in academic libraries. *Library & Information Science Research*, 30(2), 115-21.
- Lind, E. A., & Earley, P. C. (1992). Procedural justice and culture. *Journal of International of Psychology*, 27(2), 227-242.
- Lind, E.A. & Tyler, T.R. (1988). *The social psychology of procedural justice*. N.Y.: Plenum. Translated into Japanese. Tokyo: Tuttle-Mori Publishing.
- Lind, E. A., Tyler, T. R., & Huo, Y. (1997). Procedural context and culture: Variation in the antecedents of procedural justice judgments. *Journal of Personality and Social Psychology*, 73(4), 767-780.
- Locke, E. A. & Lathan, G. P. (1976). Theory of Goal Setting and Task Performance, Englewood Cliffs, N.J: Prentice-Hall.
- Maslow, A. H. (1943). A theory of human motivation. *Journal of Psychological Review*, 50, 370-396.
- McFarlin & Sweeney (1992). McFarlin, D. & Sweeney, P. (1992). Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of Management Journal*, 35(3), 626 637.
- McKnight, D.H., Philips, B., & Hardgrave, B.C. (2009). Which reduces IT turnover intention he most: workplace characteristics or job characteristics?. *Journal of Information & Management*, 46(3), 167-74.

- Ministry of Information and Communication Technology (MICT) (2012). ICT e-Business. Retrieved 9th January 2013, from http://ebiz.mict.go.th/General.
- Mossholder, K. W., Bennett, N., & Martin, C. L. 1998. A multilevel analysis of procedural justice context. *Journal of Organizational Behavior*, 19, 131-141.
- National Statistical Office (2008). Survey Report of Thailand's Information and Communication Technology Industry. Bangkok Block: NSO.
- Niehoff, B.P., & Moorman, R.H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Juournal of Academy of Management*, 36(3), 527-556.
- Poon, J.M.L. (2003). Situational antecedents and outcomes of organizational politics Perceptions. *Journal of Managerial Psychology*, 18(2), 138-155.
- Price, J.L. (2001) *Reflections* on the determinants of voluntary turnover, *International Journal of Manpower*, 22, 7, 600-24.
- Emami, R.,, Moradi E., Idrus, D., Almutairi, O.D., (2012). Investigating the Relationship between Organizational Learning Culture, Job Satisfaction and Turnover Intention in it SMEs. *International Journal of Innovative Ideas (IJII)*, 12(1), 8-23.
- Reed, S.A., Kratchman, S.H. & Strawser, R.H. (1994). Job satisfaction, organizational commitment, and turnover intentions of United States accountants: the impact of locus of control and gender. *Journal of Accounting, Auditing & Accountability*, 7(1), 31-58.
- Rutner, P.S., Hardgrave, B.C., & McKnight, D.H. (2008). Emotional dissonance and the information technology professional. *Journal of MIS Quarterly*, 32(3), 635-652.
- Saks, A. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*. 21(7), 600 – 619.
- Sakchaicharoenkul, R. (2009). *Turnover in formation technology professional in Thailand*. (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3390448).

- Sangroengrob, T. & Techachaicherdchoo T. (2010). The Impact of Employee's Satisfaction, Organization and Work Commitment to Turnover Intention: A Case Study of IT Outsourcing Company in Thailand. *Proceedings of the Business and Information Conference*, 7,1, 17.
- Singh, P., & Loncar, N. (2010). Pay satisfaction, Job satisfaction and turnover intent. *Journal of Relations Industrielles/ Industrial Relations*, 65(3), 470 490.
- Software Industry Promotion Agency (SIPA) (2012). Company Directory. Retrieved 9th January 2013, from http://member.sipa.or.th/company.php
- Sugawara, I., & Huo, Y. J. (1994). Disputes in Japan: A cross-cultural test of the procedural justice model. *Journal of Social Justice Research*, 7,129-144.
- Taylor, J. C., & Bowers, D. G. (1974). *Survey of organizations*. Ann Arbor: University of Michigan, Institute for Social Research.
- Tett, R.P., & Meyer, J.P. (1993). Job satisfaction, organizational commitment, Turnover intention and turnover: path analyses based on meta-analytic findings. *Journal of Personnel Psychology*, 46, 259-293.
- Thibaut, J., & Walker, L. (1975). *Procedural justice: A psychological analysis*. Hillsdale, NJ: Erlbaum.
- Thomas & Nagalingappa (2012). Consequences of perceived organization justice: An empirical study of White-Collar Employees. *International Journal of Refereed Research*, 3(2), 54-63.
- Tyler, T. R., Boeckmann, R. J., Smith, H. J., & Huo, Y. J. (1997). *Social justice in a diverse society*. Boulder, CO: Westview Press.
- Vigoda, E. (2000). Organizational politics, job attitudes, and work outcomes: Exploration and implications for the public sector. *Journal of Vocational Behavior*, 57, 326-47.
- Wesolowski, M. A., & Mossholder, K. W. (1997). Relational demography in supervisor subordinate dyads: Impact on subordinate job

satisfaction, burnout, and perceived procedural justice. Journal of Organizational Behavior, 18(4), 351-362.

Young, D. (2002). Communication, workload balance keys to averting staff Retrieved 8th October 2012, from http://techrepublic. com/article/communication-workload-balance-keys-to-avertingstaff-burnout/.