Presenting a Casual Model in Organizational Citizenship Behavior using Structural Equition Model

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Abstract

Organizational citizenship behaviour (OCB) is one of the extra-role behaviours that served as importance aspect of the organizational effectiveness. In the long-term, OCB would affect the sustainability of organizations, particularly in the turbulent environment. The main goal of this research is to test the models of causal relationship of organizational justice, job satisfaction, and OCB. In addition, the research going to test the effect of organizational justice on job satisfaction and OCB, and the effect of job satisfaction on OCB. Data analysed using Structural Equation Modelling (SEM) by LISREL 8.45. As expected, result showed that the causal relationship among organizational justice, job satisfaction, and OCB has the acceptable goodness-of-fit. In addition, result also show that organizational justice affected job satisfaction and OCB; and job satisfaction affected OCB.

Keywords: casual model, Organizational Justice, Job Satisfaction, Organizational Citizenship Behavior

Introduction

Organizational citizenship behavior (OCB) is one of the extra-role behaviors that served as importance aspect of the organizational effectiveness. In the long-term, OCB would affect the sustainability of organizations, particularly in the turbulent environment (Konovsky and Pugh, 1994). Organ (Paille, 2009) defined OCB as Individual's behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization. Discretionary means that the behavior is not an enforceable requirement of the role or the job description, that is, the clearly specifiable terms of the person's employment contract with the organization; the behavior is rather a matter of personal choice, such that its omission is not generally understood as punishable. According to Podsakoff *et al.* (2000), OCB would affect the organizational effectiveness for specifics reasons. *First*, OCB could help extent the peer performance. *Second*, OCB could improve the managerial productivities. *Third*, OCB would help improve the use of organizational resource for productive reasons in the efficient manner. *Fourth*, OCB could decrease the need of organizational resources for the employee maintenance. *Fifth*, OCB may serve as effective basis for the coordination of the activities among team members and work groups. *Sixth*, OCB could improve the organizational ability for hiring and keeping qualified employees by promote that the organization is the interesting place to work. *Seventh*, OCB could improve the stability of organizational performance. *Finally*, OCB could improve the organization ability to adapt with changes in the business environment.

The importance of OCB has attracted the attention and long debate among researchers and academicians (Bettencourt *et al.*, 2001; Rioux and Penner, 2001; Bachrach *et al.*, 2001; Podsakoff *et al.*, 2000; Van Dyne *et al.*, 1994; Konovsky and Pugh, 1994). As a result, OCB has continuously been an important issue for almost three decades (Torlak and Cok, 2007). Podsakoff *et al.* (2000) pointed out that more than 150 articles have been published in the scientific journals a long 1997 to 1998. However, the field still to be interesting to investigated, particularly, on what factors that might cause it? In addition, does its determinats also affect each to another? Two constructs predicting OCB are the organizational justice (Dolan et al., 2005; Chiaburu and Marinova, 2006; Ball, 2006) and job satisfaction (Parnell and Crandall, 2003; Kuehn and Al-Busaidi, 2002). Organizational justice construct was derived from equity theory literatures (Kosgaard *et al.*, 1995; Skarlicki and Folger, 1997; Schminke *et al.*, 1997), is an important determinant of OCB (Muhammad, 2004; Dolan *et al.*, 2005; Alotaibi, 2001; Donovan and Hocutt, 2002; Chiaburu and Marinova, 2006; Alotaibi, 2001; Ball, 2006). Justice research is undertaken to explain and predict the elements of a practice or policy that contribute to an individual's perception on justice (Forray, 2006). Another construct that predict OCB is job satisfaction (Clugston, 2000; Igalens and Roussel, 1999). According to Witt and Nyee (1992), almost all the researches on job satisfaction based on the two assumptions, *first*, job satisfaction is the potential determinant to predict the absenteeism, employee turnover, performance, and extra role behavior. *Second*, the main antecedents of job attitude were determined by the ability of management. Beside the effect of Organizational justice and job satisfaction on OCB, prior researchers found that organizational justice was also find as determinant of job satisfaction (Pillai *et al.*, 2001; Fields *et al.*, 2000; Lam *et al.*, 2002). Therefore, the present research conducted

to investigate the structural relationships of organizational justice, job satisfaction, and OCB.

Organizational Justice

Justice aspects have a very important role in the organizational life, because of some negative impacts, if it is absence. For instance, if the organization perceived unjust (unfair) by it members, the employee's commitment and OCB tend to be low, as well as the increasing of crimes and intention to protest (Skitka and Bravo, 2005). According to Greenberg (2001), everyone believes that being fairness or justice, depend on shared consensus about the way to distribute organizational results and the way of treating somebody else. Skarlicki (2001) argued that researches on organizational justice have conducted for more than 3 decades, almost of them were in Northern America. According to Bierhoff *et al.* (in Gilliland, 1993), and Folger and Konovsky (1989), debate on organizational justice theory stressed heavily on the distributive justice aspect. However, current researches on procedural justice aspects begin to take more attention from scholars. Distributive and procedural justice is derived from equity theory literatures (Korsgaard *et al.*, 1995; Cowherd and Levine, 1992; Skarlicki and Folger, 1997; Schminke *et al.*, 1997). The Other researches on organizational justice used three-factors constructs, consisted of distributive, procedural, and interactional justice (i.e. Yilmaz and Tasdan, 2009; Martinez-tur *et al.*, 2006; Ball, 2006). From work of Colquitt (2001), organizational justice dimensions going further with 1 added dimension, namely informational justice, derived from interactional justice.

Researches in this field have concluded the impact of organizational justice on employee's attitudes and behaviors, such as supervisory commitment and employee turnover (Belanger *et al.*, 2006); OCB (Wat and Shaffer, 2005; Williams, *et al.*, 2002; Colquitt *et al.*, 2001); job satisfaction (Colquitt *et al.*, 2001); consumer satisfaction (Martinez-tur *et al.*, 2006); work deviation (Henle, 2005); trust to supervisor and psychological empowerment (Wat dan Shaffer, 2005); organizational commitment, social behavior, and team loyalty (Murphy *et al.*, 2006); performance (Colquitt *et al.*, 2001); satisfaction with performance appraisal (Pareke (2005).Previous researches provided empirical evidents about the effect of organizational dimensions (distributive and procedural justice) on employee's job satisfaction (Fields *et al.*, 2000; Lam *et al.*, 2002). Pareke (2005) found that distributive and procedural justice affected employee's satisfaction. Samad (2006) concluded that prosedural and distributive justice affected job satisfaction. While Martinez-tur *et al.* (2006) concluded that distributive justice is the main determinant to predict customer satisfaction, followed by procedural, and interactional justice, respectively. Therefore, there is no serious debate among researchers and academicians about effect of organizational justice on job satisfaction. Even in the cross-cultural study, Pillai *et al.* (2001) concluded that USA samples, as well as Germany, India, and Hong Kong reported higher job satisfaction when respondents perceived justice presence in their organization. Thus, the hypothesis being tested:

Hypothesis 1: Organizational justice affects job satisfaction

The absence of justice in the organization, drive the employees to do the retaliatory behaviors, such as breaking the job facilities or processes, taking organizational resources without permition, etc. (Skarlicki dan Folger, 1997). Otherwise, if the employee feel the fairness in their organization, they tend to show positive reactions, such as satisfaction, commitment, and involvement. Tang dan Sarsfield-Baldwin (1996) found that justice affected the pay satisfaction, promotion satisfaction, sperformance appraisal satisfaction, employee commitment, and involvement.

Another explanation provided by Skitka dan Bravo (2005) about the important of justice perception in the organization. If the organization, or who are representing them, perceived being unjustice, the employees would have low commitment and low OCB, as well the increasing of crimes, and intention to camplain (Skitka dan Bravo, 2005). Employee intention to show OCB would increase by some situations, fairnes treatments from supervisor (Williams, *et al.*, 2002); procedural justice (Muhammad, 2004; Dolan *et al.*, 2005; Alotaibi, 2001; Donovan and Hocutt, 2002); distributive justice (Chiaburu dan Marinova, 2006; Alotaibi, 2001); interactional justice (Ball, 2006); participation (Muhammad, 2004) organizational trust (Dolan *et al.*, 2005); trust to manager (Chiaburu and Marinova, 2006). Therefore, the hypothesis is:

Hypothesis 2: Organizational justice affects OCB

Job Satisfaction

Job satisfaction refers to an individual's positive emotional reactions to a particular job. It is an affective reaction to a job that resulted from the person's comparison of actual outcomes with those that are desired, anticipated, or deserved (Oshagbemi, 1999). Job satisfaction resulted from so many factors, such as personality traits (Chang and Lee, 2006; Okpara, 2006); job characteristics (Chang and Lee, 2006); organizational orientation and priorities (Beam, 2006); recognition, team orientation, inovation, and stability (McKinnon *et al.*, 2003); autonomy and participatory leadership (Cohrs *et al.*, 2006); organizational culture (Kirkman and Shapiro, 2001); gender (Zgheib *et al.*, 2006). Empirical evidents also stated that job satisfaction would affect turnover, absenteeism, and performance (Castle, 2007); OCB (Gonzalez and Garazo, 2006); organizational commitment

(Cetin, 2006).

According to Podsakoff *et al.* (2000), employee satisfaction is the important determinant of extra-role behaviors, including OCB. Employees who have satisfaction from their job tend to value their task and assignment, responsibly and dedicatedly. Therefore, almost no doubt about the relationship between job satisfaction on OCB. Parnell and Crandall (2003) found that employee who participated in managerial decision making process would have high job satisfaction and frequently show OCB. Others finding also consistent with the conlussion (Murphy *et al.*, 2002; Wagner and Rush, 2000; Kuehn and Al-Busaidi, 2002). Therefore, the hypothesis being tested:

Hypothesis 3: Job satisfaction affects OCB

Organizational Citizenship Behavior

OCB include those behaviors exhibited by employee that are characterized by extra-role, or discretionary in nature, and thus, not formally defined or rewarded by organization (Kuehn and Al-Busaidi, 2002). OCB represents behavior above and beyond those formally prescribed by an organizational role, is discretionary in nature, is not directly or explicitly rewarded within the context of the organization's formal reward structure, and is important for the effective and successful functioning of an organization (Kim, 2006). Although the construct have investigated extensively in USA, OCB has less attention in others international context (Lievens and Anseel, 2004). According to Schnake and Dumler (2003), OCB dimensions that most use frequenty in the empirical work are altruism, conscientiousness, civic virtue, sportsmanship, and courtesy. Other conclusion made by Paille (2009), agreed that US conceptualization developed in the previous researches may be generalized and applied to the French cultural context Theoretically, the relationship between OCB and satisfaction have received good explanation. The satisfied employee would show OCB more frequently than unsatisfied one (Kuehn and Al-Busaidi, 2002). After more than 20 years research in the fields of OCB, the evident still the same, job satisfaction is the good predictor of OCB (Chien, 2004). According to Chiaburu and Lim (2008), when deciding to be good organizational citizens or not, employees engage in more complex sense making processes, where fairness might be only one of the factors considered. Farh *et al.* (1997) concluded that job satisfaction and organizational justice were predicted OCB, and the effect of job satisfaction is stronger than organizational justice. Based on equity theory, Williams *et al.* (2002) also prove that distributive justice affect citizenship behavior. Beyond the empirical evident concluded that job satisfaction affect OCB (Podsakoff *et al.*, 2000; Parnell and Crandall, 2003; Murphy *et al.*, 2002; Wagner and Rush, 2000; Kuehn and Al-Busaidi, 2002), the more interesting finding by Gonzalez and Garazo (2006), job satisfaction served as mediator variable on the relationship between OCB and its predictors. The relationship among human resource practices and OCB mediated by job satisfaction, and job satisfaction also mediates the effect of grievance procedure with OCB. Therefore, the main model being tested as a hypothesis is:

Hypothesis 4: Structural relationship among organizational justice, job satisfaction, and OCB fit the data well

Method

Sample and procedure

Two-hundred and seventy-seven faculty members from 3 large universities participated in the study as respondents. Respondents were teaching various courses, in various departments, and in differences faculties. Thirty-five percent respondents were women, and average age is 42.58 years old. Eighty-three percents respondents have completed Master Degree, and the rest 17 percent have completed Doctoral degree. Sample was chosen randomly, proportionate to the numbers of employees of each department of the universities. Data were collected through questionnaires, consisted of 57 self-report responses. The questionnaires were distributed to 321 respondents, chosen from 1.042 academicians using stratified random sampling. The researchers employed 4 enumerators who are bachelor students in management department where the researchers work for. The enumerators distributed the questionnaires through the department office were the respondents work for. Two-hundreds and seventy-seven completed and returned the questionnaires to the enumerator.

Measure

Following Colquitt (2001), organizational justice measured using 17 items self-measure, consisted of 4 items for each dimensions. The items questionnaire including "my reward reflects the effort I have put in to my work; the procedures used in my organization have been applied consistently" Five-point Likert scale were used, 5 = strongly agree to 1 = strongly disagree. Job Satisfaction measures consisted of 5 dimensions, i.e pay, promotion, peer, supervisor, and work itself. This variable was measured using 20 items self-mesured adopted from Celluni dan DeVries work (in Mas'ud, 2004). Five-point Likert scale were used, 5 = strongly agree to 1 = strongly disagree. Based on Konovsky dan Organ (1996), 20 items applied to measure the OCB. Consisted of 5 dimensions, which is *altruism, courtesy, sportmanship, conscientousness,* dan *civic virtue*. Five point *Semantic Differential Scale* (Sekaran, 2000: 198-199) used, 1 = never to 5 = always.

Data Analyses

Structure Equation Modelling (SEM) employed using LISREL 8.54 to test the hypothesized model. Following Clugston (2000), single indicator latent variables analysis was used to estimate the relationship between the various constructs within the hypothesized model. The single indicator latent variables analysis done by reducing the number of indicator variables which load on their latent constructs to one by averaging items of each scale to create one indicator variable for each latent construct (Clugston, 2000). For evaluating the goodness-of-fit of the model resulted from LISREL, 9 fit indices were used. The fit indices are Chi-Square (χ^2), Chi-Square to degree of freedom ratio (χ^2/df), root mean square error of approximation (RMSEA), goodness-of-fit Index (GFI), Adjusted goodness-of-fit Index (AGFI), Normed Fit Index (NFI), Non-normed Fit Index (NNFI), Comparative Fit Index (CFI), and Incremental Fit Index (IFI).

Results

Result of SEM for the model of relationship among organizational justice, job satisfaction, and OCB is depected in figure 1. The hypothesized structural model displayed in Figure 1 fits the data well, 9 criterions for evaluating the goodness-of-fit along with cut-off value are showen in table 1.

Chi-Square statistics (Normal Theory Weighted Least Squares Chi-Square) has value of 149.59. Compare to the χ2 table (df= 56, α = 0.05) generated value for 34.76, then χ2 = 149.59 more than table value. It means that χ2 parameter not fit the data. The ratio of Chi-Square to Degree of Freedom (X2/df) is 231.23/91 = 2.67, less than cut-off model fit recommended by Wheaton (in Ghozali and Fuad, 2005: 315) had more than suggested by Carmines and Melver (in Ghozali and Fuad, 2005: 315). Therefore, by controlling the complexity of the model (being froxed by sum of degree of freedom), the model is fit the data well.

RMSEA value 0.078 indicated that the model is reasonable enough and excluded from rejected category (Browne and Cudeck, in Ghozali and Fuad [2005: 315]). In addition, 90 Percent Confidence Interval for RMSEA = (0.063; 0.093) is also indicated that RMSEA value for the model have the good accuracy, which is confidence interval value is quite low, so as RMSEA value has good accuracy in evaluating the model fit.

According to Hair *et al.* (1998: 655), GFI is a nonstatistical measure ranging in value from 0 (poor fit) to 1.0 (perfect fit), representing the overall degree of fit (the squared residual from prediction compare with the actual data), but is not adjusted for the degree of freedom. GFI value 0.93 indicated that the model has the fit to the actual data. AGFI is an extension of the GFI, adjusted by the ratio of degree of freedom for the null model (Hair et al., 1998: 657). Based on the reccomended value more than 0.9, the model tested was un fit.

Any model is fit if it has NFI value more than 0.9 (Ghozali and Fuad, 2005: 316). NFI is a relative comparison of the proposed model to the null model (Hair et al., 1998: 657). NFI value model is 0.92, therefore the model considered fit to the actual data. NNFI is used to cover the problem of complexity of the model.

The next measure of goodness of fit used is CFI, represent comparison between estimated model and null model. NFI values lie between 0 and 1.0, and larger values indicate higher level of goodness-of-fit (Bentler, in Ghozali and Fuad [2005: 316]). CFI value 0.95 indicate that the model has a good fit. In addition, the model has IFI's value 0.95, is fit with the actual data. According to Byrne (in Ghozali dan Fuad, 2005: 316), the limit of cut-off goodness of fit is 0.9.

Seven out of 9 measures goodness-of-fit used for evaluating the model were fit. Therefore, the model of the relationship among organizational justice, job satisfaction, and OCB as a whole, can be considered fit with the actual data, supporting hypothesis 4. In another word, estimated population covariance matrix was consistent with the covarians matirix (covariance matrix resulted by data sample). All hypotheses about direct relationship are supported. Hypothesis 1 predict organizational justice affects job satisfaction was supported, (*t= 4.12*). Hypothesis 2, organizational justice affect OCB was also supported (*t= 6.39*). Finally, the hypothesis job satisfaction affect OCB supported as well (*t= 3.03*).

References

Alotaibi, A. G. (2001). Antecedents of organizational citizenship behavior: A study of public personnel in Kuwait. *Public Personnel Management*, 30 (3): 363-376.

Bacharch, D.G., Bendoly, E., & Podsakoff, P.M. (2001). Attribution of the "causes" of group performance as an alternative explanation of the relationship between organizational citizenship behavior and organizational performance. *Journal of Applied Psychology*, 86 (6): 1285-1293

Ball, K. T. (2006). LMX-citizenship behavior relationship: Justice as a mediator. *Leadership & Organization Development Journal*, 27 (2): 106-117

Beam, R. A. (2006). Organizational goals and priorities and the job satisfaction of U.S. Journalists. *Journalism and Mass Communication Quarterly*, 83 (1): 169-185

Belanger, I., McNally, J., & Flint, D. (2006). Models of the effects of monitoring perception of trust, organizational justice and organizational outcomes. *The Business Review*, 6 (1): 51-55

Bettencourt, L.A., Gwinner, K. P., & Meuter, M.L., (2001). A comparison of attitude, personality, and

knowledge of service oriented organizational citizenship behavior. *Journal of Applied Psychology,* 86 (1): 29-41

Castle, N. G. (2007). Assessing job satisfaction of nurse aides in nursing homes: The nursing home nurse aide job satisfaction questionnaire. *Journal of Geontological Nursing*, 33 (5): 41-47

Cetin, M. O. (2006). The relationship between job satisfaction, occupational and organizational commitment of academics. *Journal of American Academy of Business, Cambridge*, 8 (1): 78-88

Chang, S., & Lee, M. (2006). Relationship among personality traits, job characteristics, job satisfaction, and organizational commitment: An empirical study in Taiwan. *The Business Review*, 6 (1): 201-207

Chiaburu, D. S., & Lim, A. S. (2008). Manager trustworthiness or interactional justice? Predicting organizational citizenship behaviors. *Journal of Business Ethics*, 83(?): 453–467

Chiaburu, D. S., & Marinova, S. V. (2006). Employee role enlargement: Interactions of trust and organizational fairness. *Leadership & Organization Development Journal*, 27 (3): 168-182

Chien. M. (2004). An Investigation of the Relationship of Organizational Structure, Employee's personality and organizational citizenship behavior. *Journal of American Academy of Business, Cambridge,* 5 (1/2) 428-431

Clugston, M. (2000). The mediating effects of multidimensional commitment on job satisfaction and intent to leave. *Journal of Organizational Behavior,* 21 (4): 477-486

Cohrs, J. C., Abele, A.E., & Dette, D. E. (2006). Integrating situational and dispositional determinants of job satisfaction: finding from three samples of professional. *The Journal of Psychology,* 140 (4): 363-395

Colquitt, J. A. (2001). On dimensionality of organizational justice: a construct validation of a measure. *Journal of Applied Psychology*, 86 (3): 386-400

Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y (2001). Justice at the millennium: a meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86 (3): 425-445

Cowherd, D. M. and D. I. Levine. (1992). Product quality and pay equity between low level employees and top management: an investigative of justice theory. *Administrative Science Quarterly*, 37: 302-320.

Dolan, S. L., Tzafrir, S. S., & Baruch, Y. (2005). Testing the causal relationships between procedural justice, trust and organizational citizenship behavior. *Revue de Gestion Des Ressources Humaines*, 57: 79-89

Donovan, D. T., & Hocutt, M. A. (2002). Exploring the relationship between the service worker's organizational citizenship behaviors and perceived justice: The impact of customer orientation. *American Marketing Association. Conference Proceeding*, 13: 319-320

Farh, J., Zhong, C., & Organ, D. W. (2004). Organizational citizenship behavior in the People's Republic of China. *Organization Science*, 15 (2): 241-253

Farh, J., Earley, P. C., & Lin, S. (1997). Impetus for action: a cultural analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly*, 42 (3): 421-444

Fields, D., Fang, M., & Chiu, C. (2000). Distributive and procedural justice as predictor of employee outcomes in Hong Kong. *Journal of Organizational Behavior*, 21: 547-562

Folger, R. and M. A. Konovsky. (1989). Effects of distributive and procedural justice on reaction to pay raise decisions. *Academy of Management Journal*, 32 (1): 115-130.

Forray, J. M. (2006). Sustaining fair organization: an interpretive view of justice in organizational life. *Group & Organization Management,* 31 (3): 359-387

Ghozali, I., & Fuad. (2005). *Structural Equation Modeling: Teori, Konsep, & Aplikasi dengan LISREL 8.54*. Semarang. Badan Penerbit Universitas Diponegoro.

Gonzalez, J. V., & Garazo, T. G. (2006). Structural relationship between organizational service orientation, contact employee job satisfaction and citizenship behavior. *International Journal of Service Industry Management*, 17 (1): 23-50

Greenberg, J. (2001). Studying organizational justice cross-culturally: Fundamental challenges. *The International Journal of Conflict*, 12 (4): 365-375

Hair, Jr. J. F, Aderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis*. United States. Prentice-Hall International, Inc.

Henle, C. A. (2005). Predicting workplace deviance from the interaction between organizational justice and personality. *Journal of Managerial Issues*, 17 (2): 247-263

Igalens, J., & Roussel, P. (1999). A study of relationships between compensation package, work motivation and job satisfaction. *Journal of Organizational Behavior*, 20: 1003-1999.

Kim, S. (2006). Public service motivation and organizational citizenship behavior in Korea. *International Journal of Manpower*, 27 (8): 722-740

Kirkman, B. L., & Shapiro, D. L. (2001). The impact of cultural values on job satisfaction and organizational commitment in self-managing work teams: The mediating role of employee resistance. *Academy on Management Journal*, 44 (3): 557-569

Konovsky, M. A., & Organ, D. W. (1996). Dispositional and contextual determinants of organizational citizenship behavior. *Journal of Organizational Behavior*, 17: 253-266

Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal.* 37 (3) : 656-669

Korsgaard, M. A., D. M. Schweiger and H. J. Sapienza. (1995). Building commitment, attachment, and trust in strategic decision-making teams: the role of procedural justice. *Academy of Management Journal*, 38 (1): 60-84.

Kuehn, K. W., & Al-Busaidi, Y. (2002). Citizenship behavior in a non-western context: An examination of the role of satisfaction, commitment and job characteristics on self-reported OCB. *International Journal of Commerce & Management*, 12 (2): 107-125

Lam, S. S. K., Schabroeck, J., & Aryee, S. (2002). Relationship between organizational justice and employee work outcomes: a cross-national study. *Journal of Organizational Behavior*, 23: 1-18

Lievens, F., & Anseel, F. (2004). Confirmatory factor analysis and invariance of an organizational citizenship measure across samples in a Dutch-speaking context. *Journal of Occupational and Organizational Psychology*, 77: 299-306

Martinez-Tur, V., Peiro, J. M., Ramos, J., & Moliner, C. (2006). Justice perception as predictors of customer satisfaction: The impact of distributive, procedural, and interactional justice. *Journal of Applied Social Psychology*, 36 (1): 100-119

Mas'ud, F. (2004). *Survai Diagnosis Organisasional: Konsep dan Aplikasi*. Semarang. Badan Penerbit Universitas Diponegoro.

McKinnon, J. L., Harrison, G. L., Chow, C. W., & Wu, A. (2003). Organizational culture: Association with commitment, job satisfaction, propensity to remain, and information sharing in Taiwan, *International Journal of Business Studies*, 11 (1): 25-44

Muhammad, A. H. (2004). Procedural justice as mediator between participation in decision-making and organizational citizenship behavior. *International Journal of Commerce & Management*, 14 (3/4): 58-68

Murphy, G., Athanasou, J., & King, N. (2002). Job satisfaction and organizational citizenship behavior: A study of Australian human service professionals. *Journal of Managerial Psychology,* 17 (4): 287-297

Murphy, C., Ramamoorthy, N., Flood, P. C., & MacCurtain, S. (2006). Organizational justice perceptions and employee attitudes among Irish blue collar employees: An empirical test of the main and moderating role of individualism vs. collectivism. *Management Revue*, 17 (3): 328-343

Okpara, J. O. (2006). The relationship of personal characteristics and job satisfaction: A study of Nigerian managers in the oil industry. *Journal of American Academy of Business, Cambridge*, 10 (1): 49-58

Oshagbemi, T. (1999). Academics and their managers: a comparative study in job satisfaction. *Personnel Review*, 28 (1/2): 108-123.

Paille, P. (2009). Assessing Organizational Citizenship Behavior in the French Context: Evidence for the Four-Dimensional Model. *The Journal of Psychology,* 143(2): 133–146

Pareke, F. Js. (2005). Employee perception of justice in the performance appraisal process: evidence from small business in DI Jogjakarta Province, Indonesia. *Prasetya Mulya Management Journal*, 10 (2): 68-84

Parnell, J. A., & Crandall, W. (2003). Propensity for participative decision-making, job satisfaction, organizational commitment, organizational citizenship behavior, and intention to leave among Egyptian managers. *Multinational Business Review*, 11 (1): 45

Pillai, R., Williams, E. S., & Tan, J. J. (2001). Are the scales tipped in favour of procedural or distributive justice? An investigation of the U.S., India, Germany, and Hong Kong (China). *The International Journal of Conflict Management*, 12 (4): 312-332

Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behavior: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26: 513-563

Rioux, S. M., & Penner, L. A. (2001). The causes of organizational citizenship behavior: a motivational analysis. *Journal of applied Psychology.* 86 (6): 1059-1074

Samad, S. (2006). Procedural and distributive justice: Differential effects on employees' work outcome. *The Business Review*, 5 (2): 212-218

Schminke, M., M. L. Ambrose and T. W. Noel. (1997). The effect of ethical frameworks on perception of organizational justice. *Academy of Management Journal*, 40 (5): 1190-1207.

Schnake, M. E., & Dumler, M. P. (2003). Level of measurement and analysis issues in organizational behavior research. *Journal of Occupational and Organizational Psychology*, 76: 283-301

Skarlicki, D. P. (2001). Cross-cultural perspectives of organizational justice. *The International Journal of Conflict Management*, 12 (4): 292-294

Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: the role of distributive, procedural, and

interactional justice. *Journal of Applied Psychology*, 82 (3): 434-443

Skitka, L. J., & Bravo, J. (2005). An Accessible identity approach to understanding Fairness in Organizational Settings. What Motivates Fairness in Organizations? 105–128. *Accessed from www.tigger.uic.edu May 20th, 2007*

Tang, T. L. and L. J. Sarsfield-Baldwin. (1996). Distributive and procedural justice as related to satisfaction and commitment. *SAM Advanced Management Journal*, (?): 25-31.

Torlak, O., & Koc, U. (2007). Materialistic attitude as an antecedent of organizational citizenship behavior. *Management Research News*, 30 (8): 581-596

Van Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organizational citizenship behavior: construct redefinition, measurement, and validation. *Academy of Management Journal.* 37 (4): 765-802

Wagner, S. L., & Rush, M. C. (2000). Altruistic organizational citizenship behavior: Context, disposition, and age. *The Journal of Social Psychology*, 140 (3): 379-391

Wat, D., & Shaffer, M. A. (2005). Equity and relationship quality influences on organizational citizenship behaviors: The mediating role of trust in the supervisor and empowerment. *Personnel Review*, 34 (4): 406-422

Williams, S., Pitre, R., & Zainuba, M. (2002). Justice and organizational citizenship behavior intentions: fair rewards versus fair treatment. *The Journal of Social Psychology,* 142 (1): 33-44

Witt, L. A., & Nye, L. G. (1992). Gender and the relationship between perceived fairness of pay or promotion and job satisfaction. Journal of Applied Psychology, 78 (5): 744-780

Yilmaz, K., & Tasdan, M. (2009). Organizational citizenship and organizational justice in Turkish primary schools. *Journal of Educational Administration*, 47 (1): 108-126

Zgheib, N., Zgheib, P. W., & Usta, J. (2006). Comparison of job and career satisfaction between women physicians and women academicians at the American University of Beirut. *Journal of Health and Human Services Administration*, 29 (1/2): 26-50.

Table 2
***Goodness of Fit* Value for Model**

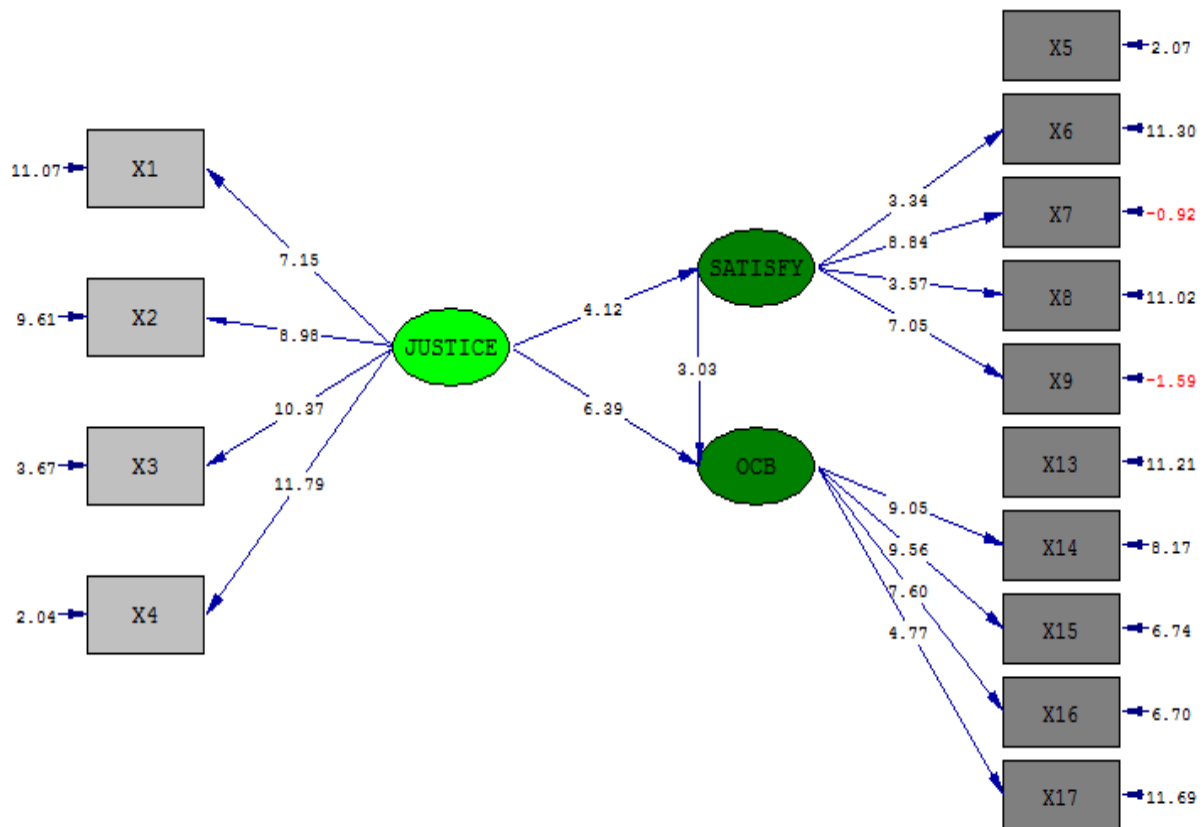| Goodness of fit index	Cut -Off Value	Result	Interpretation
χ2 - Chi-Square		149.59	Unfit
χ2/df	> 2 and < 5	149.59/56	Fit
RMSEA	≤ 0.08	0.078	Fit
GFI	approach 1	0.93	Fit
AGFI	≥ 0.90	0.87	Unfit
NFI	≥ 0.90	0.93	Fit
NNFI	≥ 0.90	0.92	Fit
CFI	≥ 0.90	0.95	Fit
IFI	≥ 0.90	0.95	Fit

Figure 1
Structural Equation Modelling of the Relationships among Organizational Justice, Job Satisfaction, and OCB