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

Ali Faez
Department of Management and accounting, Semnan Branch, Islamic Azad University, Semnan, Iran

Masoud Lajevardi
PHD student of marketing management, Department of Management and accounting, Semnan Branch, Islamic Azad University, Semnan, Iran

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 determinants 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 procedural 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 debat 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 permission, 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 unjust, 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, fairness 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.
job satisfaction and organizational justice were predicted OCB, and the effect of job satisfaction is stronger than 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 conclusion (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 frequently 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 job 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 percent 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-measured 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, sportsmanship, conscientiousness, 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 ($\chi^2$), Chi-Square to degree of freedom ratio ($\chi^2/df$), 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 depicted 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 shown in table 1.

Chi-Square statistics (Normal Theory Weighted Least Squares Chi-Square) has value of 149.59. Compare to the $\chi^2$ table ($df= 56, \alpha = 0.05$) generated value for 34.76, then $\chi^2 = 149.59$ more than table value. It means that $\chi^2$ parameter not fit the data. The ratio of Chi-Square to Degree of Freedom ($X^2/df$) is 231.23/91 = 2.67, less than cut-off parameter fit model 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 matrix (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 ($t= 3.03$).

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<table>
<thead>
<tr>
<th>Goodness of fit index</th>
<th>Cut-Off Value</th>
<th>Result</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2$ - Chi-Square</td>
<td>$&gt; 2$ and $&lt; 5$</td>
<td>149.59</td>
<td>Unfit</td>
</tr>
<tr>
<td>$\chi^2$/df</td>
<td>$\leq 0.08$</td>
<td>0.078</td>
<td>Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>Approach 1</td>
<td>0.93</td>
<td>Fit</td>
</tr>
<tr>
<td>AGFI</td>
<td>$\geq 0.90$</td>
<td>0.87</td>
<td>Unfit</td>
</tr>
<tr>
<td>NFI</td>
<td>$\geq 0.90$</td>
<td>0.93</td>
<td>Fit</td>
</tr>
<tr>
<td>NNFI</td>
<td>$\geq 0.90$</td>
<td>0.92</td>
<td>Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>$\geq 0.90$</td>
<td>0.95</td>
<td>Fit</td>
</tr>
<tr>
<td>IFI</td>
<td>$\geq 0.90$</td>
<td>0.95</td>
<td>Fit</td>
</tr>
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Figure 1
Structural Equation Modelling of the Relationships among Organizational Justice, Job Satisfaction, and OCB