Role of procedural justice, trust, job satisfaction, and organizational commitment in Organizational Citizenship Behavior (OCB) of teachers: Proposing a modified social exchange model

Hassanreza Zeinabadi*, Keyvan Salehi

*Tarbiat Modarres University of Tehran, Faculty of Education and Psychology, Department of Educational Administration, 15614, Iran
bUniversity of Tehran, Faculty of Education and Psychology, Department of Psychometric and Educational Research, 1445983861, Iran

Abstract

While the literature in non educational organization is extensive, there are very few studies related to social exchange predictors of teacher OCB. Among existing evidence, two of the high cited studies have been implemented by Moorman, Niehoff, and Organ (1993) and Konovsky and Pugh (1994). Although their social exchange models have been cited by different studies, they haven’t attracted the attention of educational researchers. In the present study 3 models generated from their models were examined by structural equation modeling. The sample was 652 teachers and 131 principals. Data were collected through 5 questionnaires. The most important finding of this study is the positive fit indexes of a modified model. According to this model procedural justice has two lines to promote teacher OCB. First through influencing teacher trust and the second line is to influence teacher OCB through job satisfaction and organizational commitment. Since most empirical evidence on the social exchange predictors of OCB are limited to non educational organizations, this study extends this line of inquiry in public schools.

Keywords: Procedural justice, trust, job satisfaction, organizational commitment, OCB, social exchange, teacher

1. Introduction

Nowadays schools are more dependent on teachers who are willing to contribute to successful change and are ready to help students and colleagues voluntarily. Organizational Citizenship Behavior (OCB) is a useful term to illustrate these voluntary teachers’ behaviors that that are not performance expectations of their formal role (DiPaola & Hoy, 2005). In recent years, OCB of teachers have received ample attention. According to previous studies teachers with high citizenship behaviors take it upon themselves to volunteer innovative suggestions, support and...
suggest extra-curricular activities, and serve on new committees. Moreover, teachers help students on their own time, stay after school to help if necessary, and stand firm the temptation to give students active homework and coursework (DiPaola & Tschannen-Moran, 2001; DiPaola & Hoy, 2005; Woolfolk Hoy, Hoy & Kurtz, 2008).

The concept of OCB, derived from Katz and Kahn’s (1966) conception of extra-role behavior, was first comes into view in the literature in a studies by Organ and his colleagues (Bateman & Organ, 1983; Smith, Organ & Near, 1983). According to Organ's (1988) definition, OCB represents "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization" (p.4). Organ (1997) refined this definition, conceptualizing OCB as any form of performance that supports the social or psychological environment in which the work tasks are embedded. These definitions are often used by educational and non educational researchers as a basis to see and measure OCB.

Along with definition, researchers have also developed a variety of classifications to classify citizenship behaviors. For instance Podsakoff, MacKenzie, Paine, and Bachrach (2000) distinguished 30 different types of OCB. A special classification was projected by Williams and Anderson (1991), which distinguished behaviors directed towards individuals (OCBI), and behaviors directed towards the organization (OCBO). Although these classifications have used by many researcher, one of the most common classifications was offered by Organ (1988), who separated five facets of OCB including altruism, courtesy, conscientiousness, civic virtue, and sportsmanship. In contrast to these common classifications, educational researchers (e.g., DiPaola & Tschannen-Moran, 2001; DiPaola & Hoy, 2005) have found that the single facet captured all aspects of OCB in schools. In other words, both of OCBI and OCBO and also all of five facets combined into a single construct.

1.1. Antecedents of OCB: social exchange perspective

Most of the studies in the domain of OCB have focused on the antecedents. According to Podsakoff et al. (2000) these attempts have led to various antecedents including personality traits, characteristics of the tasks, leadership behaviors, and employee attitudes towards the job and organization. Along with these findings, many studies have investigated antecedents of OCB through the lens of social exchange theory. They have begun to question reliance on social exchange as the leading and clarifying framework of OCB.

Social exchange has typically been conceptualized as a type of exchange relationship by OCB theorists (e.g., Organ, 1988). Social exchange perspective proposes that employee's behavior is the result of an exchange relationship. According to Deluga (1994), exchange relationships can be broadly categorized as either economic or social. In economic exchanges the relationship between employee and organization/leader tends to be defined by the employment contract. Social exchanges, on the other hand, go beyond employment contract. In these exchanges employee and organization/leader are loyal to one another and share mutual feelings of liking and respect.

According to previous evidence employee's OCB is motivated in a organization in which social exchanges characterized the quality of relationships (Moorman, Niehoff & Organ, 1993; Deluga, 1994; Konovsky & Pugh, 1994; Pillai, Schriesheim & Williams, 1999; Aryee, Budhwar & Chen, 2002). Social exchange relationship creates obligations on the part of employee to reciprocate through OCBs. In the other word, when the relationship is in a social exchange, employees are more likely to engage in OCBs.

A reliance on social exchange as an explanatory mechanism has led to discovery of several important antecedents of OCB. Previous studies report that OCB is a result of employee's justice perception, especially procedural justice perception (Konovsky & Pugh, 1994; Deluga, 1994; Pillai et al., 1999). Procedural justice as a facet of organizational justice reflects an employee's judgments about the fairness of the process of making outcome allocations decisions (Greenberg, 1990). Specifically, procedural justice reflects the extent to which an employee perceive that outcome allocation decisions have been fairly made according to the organization’s formal procedures and from the treatment given by the organization’s authorities in enacting those procedures (Moorman et al., 1993). Employee, who feel that their organization/leader has, or will, demonstrate fairness in the processes of resources allocation will reciprocate this social reward in the form of OCBs (Deluga, 1994; Konovsky & Pugh, 1994; Pillai et al., 1999).

Along with procedural justice, employee's trust has frequently found as an antecedent of OCB. Result of some studies (e.g., Konovsky & Pugh, 1994; Pillai et al., 1999; Ertürk, 2007) indicates that in a context in which social exchange characterized the quality of relationships, trust is an important mediator of the relationship between procedural justice and OCBs. Trust is a result of fair procedure because the development and use of fair procedures explicitly demonstrates the importance placed on the rights and duties of individual employees. Accordingly, when
there is a trust, the employees are more willing to engage in OCBs. Rotter (1967) defined trust as expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon. Along with this definition trust in leader is generally defined as faith in and loyalty to the leader (Ngodo, 2008).

Together with procedural justice and trust, in their meta-analysis of 55 studies, Organ and Ryan (1995) found that job satisfaction and organizational commitment have the strongest relationships with OCB. These studies indicate that employees with high levels of job satisfaction and organizational commitment generally reciprocate with positive behavior, including OCBs. A commonly accepted definition of job satisfaction is offered by Locke (1976) as “a pleasurable or positive emotional state resulting from the appraisal of one’s job and job experience” (p. 1304). Organizational commitment entails a high level of identification with the organization’s goals and values, a willingness to exert extra effort for the benefit of the organization, and a strong desire to maintain membership in the organization (Mowday, Steers & Porter, 1979).

Like procedural justice and trust, researchers (e.g., Moorman et al., 1993; Pillai et al., 1999) have demonstrated that job satisfaction and organizational commitment are important components of the social exchange relationship in organization. Also previous studies (e.g., Moorman et al., 1993; Pillai et al., 1999) showed that they are possible consequences of procedural justice and trust. Moorman et al. (1993) believe that OCBs, job satisfaction, and organizational commitment may all stem from the positive impressions afforded by fair procedures and that fairness perceptions may impact these outcome variables only through the building of employee trust.

In general social exchange relationship in organizations, as previous studies found, has some important indicators including procedural justice; trust, job satisfaction, organizational commitment, and OCB. Using these indicators many studies in different settings have yield similar and different results.

1.2. Social exchange models of OCB

Moorman, et al. (1993) have proposed a model for predicting OCB. In their study structural equation modeling is used to describe the paths between the three job attitudes and OCB and among procedural justice, job satisfaction, and organizational commitment. Along with nested models analysis, the four hypotheses were supported by individual path analyses. As the result of the first hypotheses procedural justice was found to be related to organizational commitment. Hypothesis 2 stated that procedural justice would be related to job satisfaction and hypothesis 3 suggested that procedural justice would be related to OCB. Finally, Hypothesis 4 suggested that when the relationship between procedural justice and OCB was controlled, the relationship between organizational commitment, job satisfaction, and OCB would not be significant. Result of this hypothesis was also revealed that when paths from procedural justice to OCB were included in the model, the paths from organizational commitment and from job satisfaction to OCB were insignificant. It means that procedural justice has fundamental role in this model. Model 1 is generated from the study of Moorman, et al. (1993) (Figure 1).

Konovsky and Pugh's (1994) have also proposed a structural model for predicting OCB through procedural justice, distributive justice, and trust in supervisor. In this study two hypotheses were tested. The first hypothesis is a comparison between procedural and distributive justice in influencing trust in supervisor and the second hypothesis tests mediating role of trust in supervisor and direct relationship between trust in supervisor and OCB. Results of this study revealed that employee's trust in a supervisor mediated the relationship between procedural justice and employee's OCB. This study found a strong effect of procedural justice on trust in supervisors and also strong effect of trust in supervisors on OCB. Model 2 is also generated from the study of Konovsky and Pugh (1994) (Figure 2).
1.3. Developing a new model

Model 3 can be also formed through merging models 1 and 2 (Figure 3). In this model the path from procedural justice to OCB has been removed because some previous studies (e.g., Moorman et al., 1993; Konovsky & Pugh, 1994; Pillai et al., 1999; Ertürk, 2007; Ngodo, 2008) have found that procedural justice has significant indirect effect on OCB only through the building of their trust. Also in the new model two paths has been included between trust and job satisfaction and between trust and organizational commitment. These hypothesized paths are borne out of previous studies (e.g., Podsakoff, MacKenzie, Moorman & Fetter, 1990; Dirks & Ferrin, 2002; Ngodo, 2008) which have indicated that along with OCB, organizational commitment and job satisfaction all stem from perceptions of procedural justice. Furthermore, these studies have also shown that positive perception of procedural justice impacts organizational commitment and job satisfaction only through building trust. Therefore, as it expected for OCB, it would be also expected that trust would play mediating roles in the relationship between procedural justice and organizational commitment, and job satisfaction.

The final included path is hypothesized between job satisfaction and organizational commitment. This path is also borne out of previous findings (e.g., Shin & Reyes, 1995; Currivan, 1999; Zeinabadi, 2010) which have studied job satisfaction as an antecedent to organizational commitment. These studies indicate that employee orientation toward job necessarily precede orientation toward the entire organization. Commitment is a more global response to an organization and job satisfaction is more of a response to a specific job. Therefore job satisfaction would develop more quickly than organizational commitment.

Although the literature in non educational organization is broad, there are very few studies related to social exchange predictors of teacher OCB. Also there isn't any empirical support related to collectively casual relationship between teacher's OCBs, trust, procedural justice, job satisfaction, and organizational commitment. The existing evidence implies that social exchange variables, especially OCB, are context-specific that is changeable from one type of organization to another. So it is necessary to know about social exchange predictors of teacher OCB.

A review of the OCB literature in schools suggests a growing interest in modeling the antecedents of OCB. Despite of this interest there isn’t any proposed model for predicting teacher OCB through social exchange indicators. Many of scholars have found social exchange theory to be an extremely useful conceptual framework for studying different variables in different organizations. But there is a very scarce evidence surrounding application of this theory in schools.

Although models of Moorman et al. (1993) and Konovsky and Pugh (1994) have been cited by different studies in non-educational organization (e.g., Pillai et al., 1999; Aryee, Budhwar & Chen, 2002) these models have not attracted the attention of educational researchers.

Regarding to this empirical gap, the purpose of the present study is to investigate the casual relation and also to introduce a model for predicting teachers OCB through testing and comparing model generated from the work of Moorman et al. (1993) (model 1), model generated from the work of Konovsky and Pugh (1994) (model 2), and model developed from the merging model 1 and 2 (model 3).

Model 3 is formed on the bases of findings which support direct relationship between trust and job satisfaction and organizational commitment and also previous studies which support direct relationship between job satisfaction and organizational commitment. Because this model contains all mentioned social exchange indicators, therefore its better fit to the data is expected.
2. Methodology

2.1. Sample

This quantitative study is conducted in public primary schools in Tehran. In the beginning 145 principals and 670 teachers participated in study. After elimination of some data (because of the absent or missing responses), the final sample consisted of 131 male principals and 652 teachers. Of those 652 teachers, 54 percent were female and 46 percent were male. Principals have been at their school for at least one year and teachers have worked with their principal for at least one year. In teacher sample, the mean age, the mean of teaching experience, and the mean duration of time in the current school were less than 35, 15, and 3 respectively. Also the mean age, the mean duration of time in the current school, and the mean of administration experience of principals were less than 36, 3 and, 10 correspondingly.

2.2. Measures

Five questionnaires were selected to measure variables. Although 3 of questionnaires are produced by educational researchers but they have been used by educational researchers in context of schools.

The OCB scale (OCBS) developed by DiPaola and Tschannen-Moran (2001) was modified to access principal's beliefs about teacher’s OCB at individual level. This questionnaire is a commonly used measure of OCB in schools. The OCBS is 12 items scale which measures the degree to which the teachers engage in OCBs. This instrument was initially tested in elementary, middle, and secondary schools by DiPaola and Tschannen-Moran (2001). In their study the reliability of OCBS as a measure of organizational level citizenship was consistently high the single factor structure was also supported in two factor analysis. According to Woolfolk Hoy, et al. (2008), OCBS as a measure of individual level citizenship has also a high reliability.

Colquitt's (2001) measure of organizational justice was used to collect data for teacher perception of procedural justice. This questionnaire has four subscales including distributive, procedural, interpersonal, and informational justice. For the purpose of this study only the seven items procedural justice subscale was selected. Colquitt (2001) specifically reported high alpha coefficient for this subscale.

Teacher trust was measured by eight items of Omnibus T-Scale developed by Hoy and Tschannen-Moran (2003). These items were used to specifically measure the level of teacher trust in principal. Omnibus T Scale contains 26 items with 3 subscales including trust in colleagues, client (students and parents) and principal. The third subscale was selected for the analytical purposes of this study. Hoy and Tschannen-Moran (2002) tested the entire questionnaire for reliability and validity and specifically reported satisfactory alpha coefficient for trust in principal subscale.

Job satisfaction of teachers was measured with 20 items of the shortened Minnesota Satisfaction Questionnaire (MSQ) developed by Weiss, Dawis, England, and Loftquist (1967). MSQ is considered a global measure of job satisfaction. This questionnaire has been shown to have generally good psychometric properties by educational researchers (e.g., Ngunia, Sleegers & Denessen, 2006).

Finally, organizational commitment of teachers was measured using the short form of Organizational Commitment Questionnaire (OCQ) developed by Mowday, at al., (1979). This form measures organizational commitment by 9 items. The reliability of the OCQ has been found to be satisfactory by previous studies (e.g., Ngunia, et al., 2006).

2.3. Data collection procedure

In the present study all the questionnaires were adopted from existing measures. Because the original versions were developed in English, the English versions were translated into Persian and then back translated into English by two bilingual (English and Persian) scholars so that cross-linguistic comparability of the questionnaire-item contents would be ensured. Subsequently pilot surveys were administrated to a sample of teachers and principals, in order to confirm that the questionnaires are easily understood by them. In this study All of items rated on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Teachers responded to procedural justice, trust, job satisfaction, and organizational commitment questionnaires and principals responded to the OCB questionnaire. All of self administered questionnaires were completed by respondents during a separate faculty meetings with teachers and principal. Before the teachers and principal complete the questionnaires, they were encouraged to participate and the researcher explained the purpose of the study and obtained their informed consent. If the teachers or
principals wanted to receive a copy of the results, the researcher asked them to provide their mailing address on the consent form.

2.4. Data analysis

PASW Statistics 18 was utilized to perform following statistical analyses. Cronbach’s alpha was calculated to confirm the reliability of each survey instrument. In addition, principle component analysis utilizing with Oblimin rotation, was used to determine the factor structure of each of the constructs. Descriptive statistics (mean and standard deviation) were calculated for each variable. Correlation analysis was utilized to identify the nature of the relationships between variables. Kolmogorov-Smirnov test was used to test normality of variables. Using LISREL 8.8 structural equation modeling (with maximum likelihood estimation) was used to test model 1, 2, and 3. As suggested by Anderson and Gerbing (1988), two-step analytic procedure was employed to examine measurement models (using confirmatory factor analysis) and structural models respectively. In order to evaluate measurement and structural models several fit criteria are usually used. A fit index exceeding 0.90 and higher suggested by Adjusted Goodness of Fit Index (AGFI), Goodness of Fit Index (GFI), and Comparative Fit Index (CFI), less than 0.05 suggested by Root Mean Square Error of Approximation (RMSEA) and less than 2 suggested by Chi-square on degree of freedom ratio ($X^2/df$) were considered as an adequate to good fit.

3. Results

Table 1 represents mean, standard deviation, alpha, and inter correlation between variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>$\alpha$</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCB</td>
<td>3.84</td>
<td>0.51</td>
<td>0.92</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural justice</td>
<td>3.86</td>
<td>0.74</td>
<td>0.82</td>
<td>0.18**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust</td>
<td>3.97</td>
<td>0.75</td>
<td>0.93</td>
<td>0.17**</td>
<td>0.53**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>3.86</td>
<td>0.73</td>
<td>0.90</td>
<td>0.23**</td>
<td>0.26**</td>
<td>0.18**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Organizational commitment</td>
<td>4.07</td>
<td>0.84</td>
<td>0.84</td>
<td>0.20**</td>
<td>0.10**</td>
<td>0.15**</td>
<td>0.26**</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: **Correlation is significant at the 0.01 level (2-tailed)

Table 1 indicates that all of questionnaires were reliable (alphas ranged from 0.85 to 0.97). Also all of predictor variables has significant correlation with OCB (ranging from $r = 0.17$ to $r = 0.23; p < 0.01$). The highest correlation was found between trust and procedural justice ($r = 0.53; p < 0.01$), whereas the lowest correlation was found between procedural justice and organizational commitment ($r = 0.10; p < 0.01$). Before implementing two-step analytic procedure, principal component analysis determined single factor structure for each of variables. Prior to examining measurement models, item parcels were randomly formed for all of variables on the basis of the result of Kolmogorov-Smirnov tests. 3 parcels were formed for procedural justice and organizational commitment and 4 parcels were formed for other variables. The use of item parcels has become common in recent years. Parceling involves summing or averaging item scores from two or more items and using these parcel scores in a structural equation modeling analysis. This procedure is often used for conditions in which the data to be analyzed are nonnormally distributed (Hall, Snell & Singer Foust, 1999).

3.1. Measurement and structural models

Prior to evaluating structural models, a confirmatory factor analysis was conducted to assess measurement properties of the variables. The results show that all goodness of fit indexes were met on the OCB ($X^2/df = 1.03, GFI = 1, AGFI = 0.99, CF1 = 1, RMSEA = 0.008$), trust ($X^2/df = 1.39, GFI = 0.99, AGFI = 0.97, CF1 = 1, RMSEA = 0.049$) and job satisfaction ($X^2/df = 1.56, GFI = 1, AGFI = 0.98, CF1 = 1, RMSEA = 0.045$). For the procedural justice and organizational commitment the measurement model was saturated and the fit was perfect. In structural model step three models were tested and direct and indirect effects and also fit indexes o them were analyzed. Table 2 presents direct and indirect effects and also fit statistics.

Standardized coefficients ($\beta$) and $t$ values in table 2 represent that in model 1 and 2 all of direct and indirect effects are statistically significant. As this table shows in model 3 the indirect effect of procedural justice on job satisfaction ($\beta = 0.05, p > 0.05$) and the direct effect of procedural justice on organizational commitment ($\beta = 0.01, p > 0.05$) are not significant. In addition direct effect of trust on job satisfaction ($\beta = 0.01, p > 0.05$) and organizational
commitment ($\beta = 0.01, p > 0.05$) and indirect effect of trust on organizational commitment ($\beta = 0.01, p > 0.05$) are not also significant.

Fit indexes of models indicate that model 1 and 2 has better fit than model 3. This result is not expected. This situation represents that this model needs to modification. If the fit of a model is not as strong as one would like, then the next step is to modify the model and subsequently evaluate the new modified model. In order to determine how to modify the model, there are a number of methods. An obvious intuitive method is to consider the statistical significance of each parameter estimated in the model. One specification strategy would be to fix parameters that are not statistically significant (Schumacker & Lomax, 2004). In the present study the third model was modified through this method.

A modified model was tested after fixing the direct effect of procedural justice and trust on organizational commitment and the direct effect of trust on job satisfaction. Elimination of these effects has its empirical support (e.g., Pillai et al., 1999). According to Schumacker and Lomax (2004) in model modification it is important that the modifications also make theoretical and empirical sense. After fixing non significant parameters, result of evaluating modified model showed that this model has the best fit with observed data and all of direct and indirect effects in it are statistically significant. Table 3 presents direct and indirect effects, and fit statistics of modified model.

Table 2. Direct/indirect effects and fit statistics of model 1, 2, and 3

<table>
<thead>
<tr>
<th>Effects in model</th>
<th>Direct</th>
<th>Indirect</th>
<th>Effects in model</th>
<th>Direct</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td></td>
<td></td>
<td>Model 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural justice to organizational commitment</td>
<td>0.09</td>
<td>2.05*</td>
<td>0.56</td>
<td>13.49*</td>
<td></td>
</tr>
<tr>
<td>Procedural justice to job satisfaction</td>
<td>0.29</td>
<td>6.75*</td>
<td>0.24</td>
<td>4.55*</td>
<td>0.05</td>
</tr>
<tr>
<td>Procedural justice to OCB</td>
<td>0.13</td>
<td>2.78*</td>
<td>0.06</td>
<td>3.66*</td>
<td></td>
</tr>
<tr>
<td>Job satisfaction to OCB</td>
<td>0.15</td>
<td>3.52*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational commitment to OCB</td>
<td>0.19</td>
<td>4.50*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural justice to trust</td>
<td>0.56</td>
<td>13.50*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust to OCB</td>
<td>0.19</td>
<td>4.47*</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Procedural justice to OCB</td>
<td>0.11</td>
<td>4.27*</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Notes: * value is significant at the 0.05 level.

Fit indexes of model 1: ($X^2/df = 2.46, GFI = 1, AGFI = 0.99, CFI = 1, RMSEA = 0.041$)

Fit indexes of model 2: ($X^2/df = 3.03, GFI = 1, AGFI = 0.99, CFI = 1, RMSEA = 0.048$)

Fit indexes of model 3: ($X^2/df = 4.49, GFI = 0.91, AGFI = 0.89, CFI = 0.93, RMSEA = 0.089$)

A modified model was tested after fixing the direct effect of procedural justice and trust on organizational commitment and the direct effect of trust on job satisfaction. Elimination of these effects has its empirical support (e.g., Pillai et al., 1999). According to Schumacker and Lomax (2004) in model modification it is important that the modifications also make theoretical and empirical sense. After fixing non significant parameters, result of evaluating modified model showed that this model has the best fit with observed data and all of direct and indirect effects in it are statistically significant. Table 3 presents direct and indirect effects, and fit statistics of modified model.

Table 3. Direct/indirect effects and fit statistics of modified model

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<th>Direct</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedural justice to trust</td>
<td>0.57</td>
<td>13.58*</td>
</tr>
<tr>
<td>Procedural justice to job satisfaction</td>
<td>0.30</td>
<td>6.91*</td>
</tr>
<tr>
<td>Procedural justice to Organizational commitment</td>
<td>0.06</td>
<td>3.27*</td>
</tr>
<tr>
<td>Procedural justice to OCB</td>
<td>0.13</td>
<td>4.93*</td>
</tr>
<tr>
<td>Trust to OCB</td>
<td>0.13</td>
<td>3.16*</td>
</tr>
<tr>
<td>Job satisfaction to organizational commitment</td>
<td>0.19</td>
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<td>Job satisfaction to OCB</td>
<td>0.16</td>
<td>3.75*</td>
</tr>
<tr>
<td>Organizational commitment to OCB</td>
<td>0.18</td>
<td>4.30*</td>
</tr>
</tbody>
</table>

Notes: * value is significant at the 0.05 level.

Fit indexes of modified model: ($X^2/df = 1.62, GFI = 1, AGFI = 0.99, CFI = 1, RMSEA = 0.032$)
Taken together the results suggest that the modified model is an adequate model. Supporting the argument that social exchange indicators are provide positive outcomes in form of teacher OCB. Figure 4 illustrates this model.

4. Discussion

Along with results which are congruent with previous findings, the most important finding of this study is the positive fit indexes of modified model in the context of schools. Result of testing model 1 and 2 showed that these models which have generated from the study of Moorman at al. (1993) and Konovsky and Pugh (1994), are better than model 3 in predicting teachers OCB. Furthermore modified model is a final model of the study which extends previous knowledge when it highlights specific paths between social exchange variables. In general modified model represents that procedural justice has two lines to promote teacher OCB. First through influencing teacher trust and the second line is affecting OCB through mediating role of job satisfaction and organizational commitment. These results coupled with the previous findings in non-educational organizations which proposed social exchange model in order to predicting OCB. These findings provide new support for the claim that procedural justice, trust, job satisfaction and organizational commitment are important social exchange indicators when predicting teacher OCB. Since most empirical evidence on the social exchange predictors of OCB are limited to non educational organizations, this study, therefore, extends this line of inquiry in public schools.

This study has also two important results. While some previous studies reported significant direct effect of procedural justice on organizational commitment (e.g., Moorman et al., 1993; Pillai et al., 1999) this study found this effect non significant (model 3). Although direct effect of procedural justice on job satisfaction was significant but its direct effect on organizational commitment was removed because of non significant standard coefficient. This result shows important position of job satisfaction and initially confirms the result of overwhelming previous studies which they have studied job satisfaction as an antecedent to organizational commitment (e.g., Shin & Reyes, 1995; Currivan, 1999) and OCB (e.g., Ngunia et al., 2006; Zeinabadi, 2010). Generally this finding indicates that along with mediation of trust, procedural justice can influence teacher commitment and OCB only through teacher job satisfaction. In fact using fair procedure in schools promotes teacher job satisfaction. Teachers, who are satisfied from their job, are more committed to school and subsequently are more engaged in citizenship behaviors. This result is also congruent with previous studies (e.g., Moorman et al., 1993; Clay-Warner, Reynolds & Roman, 2005) which they have found procedural justice as an important antecedent of job satisfaction.

Another important result of this study based on the non significant direct effect of trust on job satisfaction and organizational commitment is similar to the Pillai et al. (1999) and is contradictory with Podsakoff, at al. (1990) and Dirks and Ferrin (2002). According to Pillai et al. (1999) employees’ trust is reciprocated only by OCB, and that trust may not necessarily translate into greater commitment to the organization or job satisfaction. Based on this rationalization it can be concluded that the use of fair procedures in the relationship between principals and teachers
would normally lead to high teacher trust in principal and this variable has teacher-specific outcomes in form of citizenship behaviors.

The results of this study have several implications for principal, policy makers, and researchers. Principals are influential in motivating social exchange indicators in schools. They should equip themselves with qualities which promotes such indicators. Involving teachers in decision making procedures and treating fairly with them attracts their trust and also motivates their job related attitudes. Principal who have shared managerial style can develop and create high quality teachers which are willing to engage in OCBs. According to existing literature (e.g. Pillai et al., 1999; Ngodo, 2008; Zeinabadi & Rastegarpour, 2010) transformational leadership is the most important predictor of social exchange indicators. Therefore, this study suggests policy makers that schools could particularly benefit from developing principal training programs that focus on developing transformational leadership qualities.

Pertaining to some limitations, this study has also suggestions for educational researchers. In this study, some variables were reported by teachers themselves and this might lead to same source bias. Further, principal evaluation of teacher OCB can also produce bias because principals may not be able to understand or observe all teachers behaviors and especially OCBs. These limitations could be avoided in future research. This study is implemented in public primary schools. A similar study should be implemented in private primary school or in public and private high schools to compare the findings. Possible effect of the teacher’s gender on the relationship between variables is another important limitation. As previous studies (e.g. Sweeney & McFarlin, 1997; Kidder & McLean Parks, 2001) explained females might be expected to exhibit more OCBs and to place more value on procedural fairness. Therefore, researchers should take into account the moderate effect of the gender of teachers on the relationship between social exchange variables.

5. References


