

# **LEADER-MEMBER EXCHANGE AND ATTITUDINAL OUTCOMES: THE MEDIATING IMPACT OF PROCEDURAL JUSTICE CLIMATE<sup>1</sup>**

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## **ABSTRACT**

Building upon the "fair exchange in leadership" notion (Hollander, 1978; Scandura, 1999), we hypothesized the mediating impact of procedural justice climate on the relationship between the quality of leader-member exchange (LMX) and two attitudinal outcomes: organizational commitment and turnover intentions. Whereas organizational commitment and LMX were conceptualized as 3- and 4-dimensional constructs, respectively, procedural justice climate and turnover intentions were each treated as unidimensional constructs. Two hundred twenty-four managers from nine diverse multinational manufacturing companies in northern Malaysia voluntarily participated in the study. Hypotheses for direct effects were by and large supported, but the mediation hypothesis received substantial support only in the case of professional respect dimension of LMX. Procedural justice climate did act as a linking mechanism of the relationship between LMX-Respect and both attitudinal outcomes—organizational commitment and turnover intentions. Implications of the study, potential study limitations, and directions for future research are suggested.

A review of the literature (see, e.g., Gerstner & Day, 1997; Liden, Sparrowe, & Wayne, 1997; Schriesheim, Castro, & Cogliser, 1999) indicates that leader-member exchange (LMX) significantly relates to a number of attitudinal outcomes. While a great deal of research has studied the link between LMX and commitment, surprisingly few researches have attempted to examine the relationship between LMX and turnover intentions (Liden et al., 1997). Recent research has also found that perceived fairness of organizational practices has positive impact on organizational commitment (Daisy, Ansari, & Aafaqi, in press) and strong negative impact on turnover intentions (Ansari, Daisy, & Aafaqi, 2000). But, relatively little is known about the relationship between LMX and procedural justice climate. Also, it is not known what mechanism operates between LMX and attitudinal outcomes—commitment and turnover intentions (Scandura, 1999). Thus, we designed this study to understand how procedural justice climate mediates the relationship between LMX and attitudinal outcomes. This study is a follow-up to the research on the LMX-attitudinal outcomes relationship and makes several contributions to this literature. (a) Based on the existing literature, we identify a possible antecedent (mediator)--procedural justice climate--of attitudinal outcomes,

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borrowed from organizational justice and organizational climate literature. This antecedent represents an assessment by the individual employees about the fairness of their work environment. (b) We follow up on the research of attitudinal outcomes by introducing the mediating effect of procedural justice climate on the relationship between two attitudinal outcomes (organizational commitment and turnover intentions) and LMX. (c) Most previous studies have treated LMX and organizational commitment as unidimensional constructs. We conceptualize them as multi-dimensional constructs. Given the multi-dimensionality of the constructs, we contrast the effect of different dimensions. (d) Most studies on LMX, procedural justice, organizational commitment, and turnover intentions have been conducted in the West. This study adds to the literature by testing the mediation model in the Malaysian context.

The LMX theory states that leaders develop different kinds of relationships with different subordinates within work groups and therefore they exhibit different styles of leadership (Dansereau, Graen, & Haga, 1975; Graen, Novak, & Sommerkamp, 1982). The exchange relationships are characterized by mutual trust, respect, liking, and reciprocal influence (Dansereau et al., 1975). These relationships become increasingly vital for organizations to learn how to build mutual subordinates-supervisor interpersonal trust and support relations in order to achieve greater commitment from the subordinates. We anticipate LMX to be an important antecedent of the construct of employees' perception of procedural justice, which in turn acts as an antecedent of attitudinal outcomes. Past research has shown that LMX is positively related to organizational commitment, satisfaction with supervision, supervisory ratings of job performance, satisfaction with work, and frequency of promotions (Daisy et al., in press; Duchon, Green, & Taber, 1986; Liden et al., 1997; Schriesheim et al., 1999; Wayne, Shore, & Liden, 1997). On the other hand, LMX negatively relates to turnover intentions (Ansari et al., 2000; Wayne et al., 1997).

However, in most of the studies cited above, LMX and organizational commitment have been treated as unidimensional constructs. Based on the past studies (e.g., Bhal & Ansari, 1996; Dienesch & Liden, 1986; Liden & Maslyn, 1998), the present study treats LMX as a 4-dimensional construct: (a) *Affect* (the mutual affection members of the dyad have for each other based on interpersonal attraction), (b) *Loyalty* (the expression of public support), (c) *Contribution* (perception of the current level of work-oriented activity each member of the dyad puts forth), and (d) *Professional Respect* (perception of the degree to which each member of the dyad has built a reputation of work-related activity) (Liden & Maslyn, 1998). Liden and colleagues (Liden & Maslyn, 1998; Liden et al., 1997) suggest that the effect of one LMX dimension can be distinguished from another dimension.

Like LMX, based on the recent work by Meyer and colleagues (Meyer & Allen, 1991; Meyer, Stanley, Herscovitch, & Topolnytsky, 2001), we treated organizational commitment as a 3-dimensional construct: (a) *Affective* (emotional attachment to, identification with, and involvement in the organization), (b) *Continuance* (perceived costs associated with leaving the organization), and (c) *Normative* (perceived obligation to remain in the organization) (Meyer et al., 2001). According to Meyer et al., the three components are related yet distinguishable from one another on organizationally relevant and employee-relevant outcomes. Thus we make the following predictions for empirical verifications:

*Hypothesis 1a. Leader-member exchange has a significant positive relationship with organizational commitment. Specifically, affect and professional respect dimensions of LMX will be more strongly correlated with affective and normative commitment than with continuance commitment.*

In the relative paucity of empirical research, we make no specific predictions about the contribution and loyalty dimensions of LMX (As per the prediction of Liden & Maslyn (1998), these LMX currencies may be more relevant for work outcomes such as performance).

*Hypothesis 1b. Leader-member exchange has a significant negative relationship with turnover intentions. Specifically, affect and professional respect dimensions of LMX will have stronger impact on turnover intentions.*

Initially, researchers conceptualized fairness in terms of two broad justice categories: procedural justice and distributive justice. Research conducted over the past two decades indicates that individual's perception of the fairness of the procedure--procedural justice--has stronger effects than the equity of the outcome in the process (Greenberg, 1990). Thus, procedural justice may have far-reaching impact on attitudes such as organizational commitment and turnover intentions (Folger & Konovsky, 1989; Lind & Tyler, 1988; McFarlin & Sweeny, 1992).

According to Tyler and Lind (1992), procedural fairness might be used as the basis by which employees establish longer relationship with their employers, enhancing their loyalty toward the organization. Several studies supported the notion that perceptions of procedural justice positively correlate with organizational commitment (Folger et al., 1989; Masterson, Lewis, Goldman, & Taylor, 2000; McFarlin & Sweeney, 1992). And negatively correlate with intentions to quit (Dailey & Kirk, 1992; Masterson et al., 2000). Thus we offer the following hypotheses:

*Hypothesis 2a. Procedural justice climate has a significant positive relationship with organizational commitment. The relationship is likely to be stronger with affective and normative commitment than with continuance commitment.*

*Hypothesis 2b. Procedural justice climate has a significant negative relationship with turnover intentions.*

Leader-member exchange has been found to be positively associated with perception of organizational climate (Dunegan, Tierney, & Duchon, 1992; Kozolowski & Doherty, 1989). In order to test if procedural justice climate mediates the relationship between LMX and outcomes, it is essential to show that LMX correlates with procedural justice climate (Baron & Kenny, 1986). Based on Hollander's (1978) notion of "fair exchange in leadership," Scandura (1999) recommends that LMX be studied in the organizational justice perspective. According to Scandura, previous research findings concerning the relationship between LMX and organizational outcomes are equivocal. This could largely be attributed to the neglect of the moderator or mediating role of other variables, such as organizational fairness. Although little is known about the relationship between LMX and justice, the study by Manogran, Stauffer, and Conlon (1994) indicates that LMX is positively related to procedural justice. Thus, we state the following hypothesis:

*Hypothesis 3. Leader-member exchange has a positive relationship with procedural justice climate. Specifically, affect and professional respect components of LMX will have stronger relationship than the other two dimensions of LMX.*

Previous research has viewed the construct of procedural justice both as the individual- and the group-level phenomena (Lind & Tyler, 1988). The individual-level phenomenon is based

on the “self-interest” or “instrumental” model that suggests, “which is fair is that which benefits the individual” (Naumann & Bennett, 2000: 881). In contrast, the group-level phenomenon is based on the “relational model” that suggests that groups specify norms concerning fairness (Tyler & Lind, 1992). Group membership is a powerful aspect of social life because group offers more than material rewards. People are strongly affected by identification with groups—even when that identification is based on minimal common circumstances (Brewer & Kramer, 1986). Thus, this conceptualization links procedural justice to its social context. While the self-interest model has received adequate attention in the organizational literature and recognized the importance of relational model (Lind, Kray, & Thompson, 1998), researchers have begun to conceptualize procedural justice as a climate construct (Mossholder, Bennett, & Martin, 1998; Naumann & Bennett, 2000).

According to Schneider, Bowen, Ehrhart, and Holcombe (2000: 22), “the sense people make of the patterns of experiences and behaviors they have, or other parties to the situation have, constitutes the climate of the situation.” It follows that individuals observe their other group members and form an overall impression about how procedures experienced by the other group members influence them (James & Cropanzano, 1990). Thus, procedural justice climate has been conceptualized as “distinct group-level cognition about how a work group as a whole is treated” (Naumann & Bennett, 2000: 882). Past research (Schneider et al., 2000) indicates that many different climates may exist in a single organization, such as climate for service, climate for safety, or climate for innovation. Given this conceptualization, Naumann and Bennett (2000) argued that the climate for procedural justice might exist as well. Stated differently, people form an overall judgment about the procedures experienced by the group members that affect them—based on their day-to-day exchanges between them and their supervisor. Thus, the perception of the quality of interpersonal relationships leads to a group-level cognition. In turn, this cognition (or procedural justice climate) triggers individuals to be committed or not committed, and to stay or quit the organization.

Vecchio, Griffeth, and Hom (1986) recommended that LMX-turnover relationship should not be abandoned but should be examined more closely by searching for mediators or moderators of this process. In addition, Scandura (1999) strongly felt that search for mediator (e.g., procedural justice) must continue to understand the relationship between LMX and various organizational outcomes. We are aware of no research that examines the impact of procedural justice climate on the relationship of LMX with attitudinal outcomes. Thus, we conjecture the following:

*Hypothesis 4a. Procedural justice climate mediates the positive relationship between LMX and organizational commitment in such a way that the direct effect of LMX will weaken after procedural justice climate is considered.*

*Hypothesis 4b. Procedural justice climate mediates the negative relationship between LMX and turnover intentions in such a way that the direct effect of LMX will weaken after procedural justice climate is considered.*

## METHOD

### Sample and Procedure

Two hundred twenty-four managers voluntarily participated in the study. They were randomly drawn from nine diverse, multinational companies in northern Malaysia. Majority of them (62.5%) held lower-level management position and were in the age range of 25 to 35 years ( $M = 29.62$ ;  $SD = 5.18$ ). Over half of them were male (54.5%), their average organizational tenure was 3.71 years ( $SD = 3.11$  years), and they had been with their current immediate superior for an average of 2.38 years ( $SD = 1.82$  years).

### Measures

Except for demographic data (such as age, sex, job level, and length of service), all other measures employed a 7-point (1 = *strongly disagree*; 7 = *strongly agree*) scale.

A 12-item LMX scale (Liden & Maslyn, 1998) assessed the quality of leader-member exchange. It consisted of four dimensions--contribution, loyalty, affect, and professional respect--each with three items. A specified principal components analysis followed by a varimax rotation constrained to four neat factors, as expected, accounting for a total of 80.48% of the variance. The factor loadings ranged between .62 and .85. The coefficients alpha for the LMX dimensions ranged between .80 and .92. As expected, the four subscales were interrelated (average  $r = .64$ ).

We used a 9-item scale (Naumann & Bennett, 2000) to assess the procedural justice climate perceived by individual managers. The analysis confined to just one factor, as expected (Eigenvalue = 4.17; Percentage of Variance = 52.09)—with factor loadings ranging between .57 and .82. The estimated coefficient alpha was .86.

We employed Meyer and Allen's (1991) 18-item scale to assess the three components of organizational commitment: affective, continuance, and normative. Each component consisted of six items. A principal components analysis with equamax rotation confined to three neat factors--with factor loadings ranging between .64 and .89. The three factors--Normative Commitment (4 items), Affective Commitment (3 items), and Continuance Commitment (6 items)--together explained a total of 60.93% of the variance, and documented fairly adequate reliability coefficients of .84, .89, and .82, respectively. The three were significantly correlated.

Finally, to tap turnover intentions, we employed a 5-item scale recently developed by Wayne et al. (1997). Our analysis confirmed the unidimensionality of the scale (coefficient alpha = .88).

## RESULTS AND DISCUSSION

To demonstrate that procedural justice climate acts as mediator, the following conditions must be examined (Baron & Kenny, 1986): (a) LMX must significantly predict organizational commitment and turnover intentions (Hypotheses 1a and 1b); (b) Procedural justice climate must significantly predict attitudinal outcomes--organizational commitment and turnover intentions (Hypotheses 2a and 2b); (c) LMX must significantly predict procedural justice climate (Hypothesis 3); (d) After controlling for procedural justice climate, the power of LMX to predict organizational commitment and turnover intentions should

become significantly smaller (partial mediation) or non-significant (full mediation) (Hypotheses 4a and 4b). Given the high interdependence of LMX factors, for each regression equation, we entered the three LMX factors at the first step. In this way, we computed incremental contribution of a focal LMX factor to the criterion variable--thus controlling for the effect of other LMX dimensions. The summary of regression analysis is depicted in Table 1. The mediating role of procedural justice climate is shown on Figure 1.

**TABLE 1**  
**Hierarchical Regression Analysis Results**

<i>Variable</i>	<i>Criterion Variable</i>								
	<i>Procedural Justice</i>	<i>Affective Commitment</i>	<i>Affective Commitment</i>	<i>Normative Commitment</i>	<i>Normative Commitment</i>	<i>Continuance Commitment</i>	<i>Continuance Commitment</i>	<i>Turnover Intentions</i>	<i>Turnover Intentions</i>
LMX-Loyalty	.15	.08	.04	.04	.00	.21*	.17	-.02	.02
LMX-Affect	.10	.23**	.20*	.25**	.22**	-.27**	-.29**	-.27**	-.24**
LMX-Contribution	-.02	.11	.12	.24**	.24**	.23**	.23**	-.17*	-.18**
LMX-Respect	<b>.36**</b>	<b>.22**</b>	<b>.12</b>	<b>.16*</b>	<b>.04</b>	<b>.25**</b>	<b>.15</b>	<b>-.22**</b>	<b>-.12</b>
Procedural Justice	--	--	<b>.31**</b>	--	<b>.34**</b>	--	<b>.28**</b>	--	<b>-.27**</b>
<i>R</i> <sup>2</sup>	.29**	.32**	.38**	.36**	.45**	.16**	.22**	.36**	.40**
LMX-Respect	.36**	.22**	.12	.16*	.04	.25**	.15	-.22**	-.12
LMX-Affect	.10	.23*	.20*	.25**	.22**	-.27**	-.29**	-.27**	-.24**
LMX-Contribution	-.02	.11	.12	.24**	.24**	.23**	.23**	-.17*	-.18**
LMX-Loyalty	.15	.08	.04	.04	.00	.21*	.17	-.02	.02
Procedural Justice	--	--	.31**	--	.34**	--	.28**	--	-.27**
<i>R</i> <sup>2</sup>	.29**	.32**	.38**	.36**	.45**	.16**	.22**	.36**	.40**

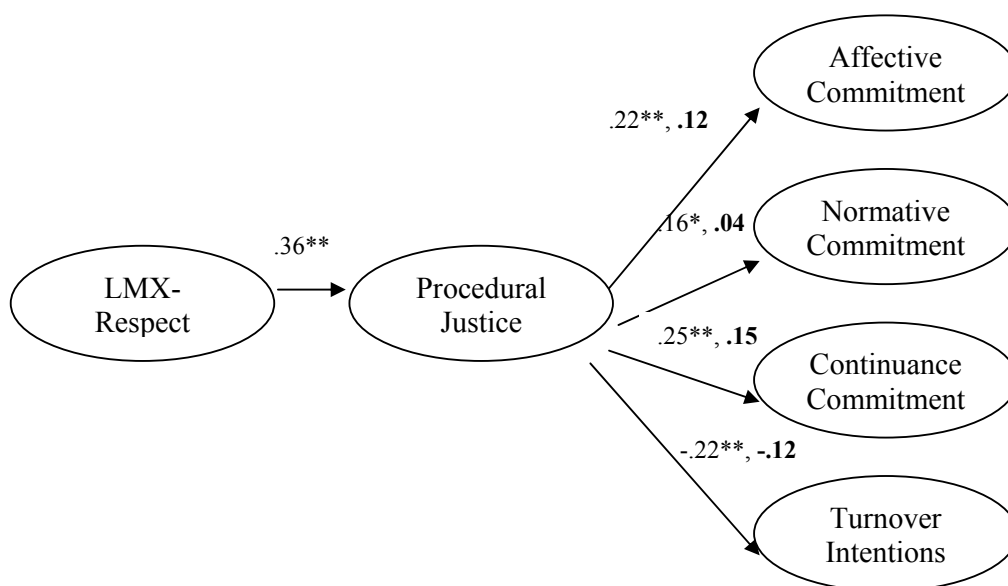
Variable	Criterion Variable								
	<i>Procedural Justice</i>	<i>Affective Commitment</i>	<i>Affective Commitment</i>	<i>Normative Commitment</i>	<i>Normative Commitment</i>	<i>Continuance Commitment</i>	<i>Continuance Commitment</i>	<i>Turnover Intentions</i>	<i>Turnover Intentions</i>
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LMX-Contribution	-.02	.11	.12	.24**	.24**	.23**	.23**	-.17*	-.18**
LMX-Affect	.10	.23*	.20*	.25**	.22**	-.27**	-.29**	-.02	.02
Procedural Justice	--	--	.31**	--	.34**	--	.28**	--	-.27**
<i>R</i> <sup>2</sup>	.29**	.32**	.38**	.36**	.45**	.16**	.22**	.36**	.40**
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LMX-Affect	.10	.23*	.20*	.25**	.22**	-.27**	-.29**	-.27**	-.24**
LMX-Contribution	-.02	.11	.12	.24**	.24**	.23**	.23**	-.17*	-.18**
Procedural Justice	--	--	.31**	--	.34**	--	.28**	--	-.27**
<i>R</i> <sup>2</sup>	.29**	.32**	.38**	.36**	.45**	.16**	.22**	.36**	.40**

Note. *N* = 224; \**p* < .05; \*\**p* < .01.



FIGURE 1

LMX-Commitment Relationship: The Mediating Role of Justice Climate



*Note.* Numbers represent standardized betas; betas in bold are based on regression equation including the mediator, i.e., the third equation as suggested by Baron & Kenny, 1986; \* $p < .05$ ; \*\* $p < .01$ .

We first examined the first three conditions for mediation hypothesis to be true. Table 1 reveals that Hypotheses 1a and 1b are by and large substantiated. LMX-Respect appeared to be the strongest predictor of all three components of commitment and turnover intentions, but LMX-Contribution turned out to be the least predictive. While Hypotheses 2a and 2b received full support, Hypothesis 3 received partial support: only LMX-Respect had the significant positive impact on procedural justice climate. Thus, we tested mediation hypothesis only for LMX-Respect (see Table 1). The analysis indicated that procedural justice climate played a key mediating role in the relationship between LMX-respect and attitudinal outcomes: full mediation for normative and continuance commitment and partial mediation for affective commitment and turnover intentions—see Figure 1. The findings suggest that LMX-Respect—defined as interpersonal attraction, faithfulness, and respect—is critical to attitude-related outcomes. This might be possible because the Malaysian culture is characterized as a collectivist society (Hofstede, 1991) with strong preference for hierarchy and relationships (Abdullah, 1996; Ansari, Ahmad, & Aafaqi, in press). However, that does not undermine the salience of other LMX dimensions. For example, LMX-contribution may be crucial to organizationally-relevant outcomes such as performance (Liden et al., 1997).

Future research could benefit from identifying the major potential limitations of this research. First, our data are correlational in nature. As such we cannot make a tall claim about causality, nor can we discount reverse causality. There is a strong possibility that committed workers are the ones who perceive their organizational procedures as fair. Thus, future field experimental research should systematically manipulate the antecedent and mediator

variables—LMX and procedural justice climate--and observe their impact on organizational commitment and turnover intentions. Since LMX and procedural justice climate both are developmental in nature, only can future longitudinal investigations uncover the stage at which employees develop organizational commitment or withdrawal cognition.

A data limitation aside, the present research does have some obvious implications. From a theoretical standpoint, we added a new perspective of looking at LMX research. Identifying procedural justice climate as a mediator should be considered an extension of LMX research. Future research should focus on additional dimensions of justice (distributive, interpersonal, and informational) as mediator to examine the predictive strength of various LMX currencies on organizationally- relevant and employee-relevant outcomes. Practically, our findings show that if the quality of exchange (in terms of professional respect) between the leader and members is good, the subordinates are likely to develop positive procedural justice climate that in turn will inculcate organizational commitment and they will be less likely to develop withdrawal cognition. Thus, it has become increasingly vital for modern organizations to learn how to build mutual leader-member interpersonal trust and support in order to achieve maximum business results. Managers need to maintain positive perceptions of fairness at reasonably high levels in order to facilitate positive justice climate, which in turn leads to increased employee commitment and decreased turnover intentions.

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