

**Fairness of HRM Practices and Organizational Commitment:
The Impact of Procedural Justice Climate**

Mahfooz A. Ansari

Faculty of Management
University of Lethbridge, Canada

Daisy Kee Mui Hung

School of Management, Malaysia

Rehana Aafaqi*

Faculty of Management
University of Lethbridge, Canada

We hypothesized the mediating role of procedural justice climate in the relationship between perceived fairness of human resource management (HRM) practices and organizational commitment. Two hundred twenty-four managers, from nine diverse multinational companies located in northern-Malaysia, voluntarily participated in the study. Fairness perceptions of HRM practices was composed of four factors (fairness in employee relations and compensation, performance management and promotions, overall evaluation, and training), organizational commitment consisted of three components (affective, normative, and continuance), and procedural justice climate was treated as a unidimensional construct. The hierarchical multiple regression analysis--following the Baron and Kenny (1986) procedure--provided substantial support for the mediation hypothesis in that fairness perception of organizational practices leads to procedural justice climate, which in turn leads to organizational commitment. Key implications of the study findings both for theory and for practice are discussed, potential limitations are specified, and directions for future research are suggested.

Human resource management (HRM) is considered one critical area that influences a number of employees' attitudes and behavior, such as turnover intentions, job satisfaction, and organizational commitment (Lee & Heard, 2000). Previous research has issued several testimonials to the value of progressive HRM practices and systems of such practices (Delaney & Huselid, 1996). Stated differently, HRM issues have been important since the scientific management era, but they have never been as crucial and challenging as they are today

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Correspondence concerning this article should be addressed to Mahfooz A. Ansari, Faculty of Management, University of Lethbridge, Alberta T1K 3M4, Canada; E-mail: mahfooz.ansari@uletha.ca

(Aghazadeh, 1999). Given the growing importance of HRM practices in modern era, additional research is needed to explore the impact of fairness perceptions of HRM practices on individual employees' attitudes and behaviors (Dailey & Kirk, 1992). Previous research (e.g., Ansari, Kee, & Aafaqi, 2000; Delaney & Huselid, 1996) has been successful at demonstrating the impact of HRM practices on organizational commitment. While these studies provide useful information about the relationship between fairness perceptions of organizational practices and organizational commitment, additional work is needed. No study to our knowledge has yet to consider the linking mechanism that operates between fairness perceptions of HRM practices and organizational commitment. This is precisely the objective of the present study that has been designed to bridge this gap in the existing HRM literature. Individuals differ in their perception of HRM practices. Evidence (e.g., Leigh, Lucas, & Woodman, 1988) exists that employees focus on the broader organizational environment in attributing their attitudinal outcomes. We believe that it is that broader organizational environment pertaining to fairness that acts as a linking mechanism (i.e., mediator) between organizational practices and organizational commitment. That is, we conceptualize "procedural justice climate" as a broader organizational environment that is perceived by individual employees.

Thus, the present study is a follow-up to the research on organizational practices, justice climate, and organizational commitment and contributes to the existing HRM literature in three important ways. First, based on the existing literature, the present study examines a possible antecedent (mediator)--procedural justice climate--of organizational commitment, borrowed from the organizational justice and organizational climate literature. This antecedent represents an assessment by the individual employees about the overall fairness of their work environment. Second, this study is a follow up on the research of organizational commitment by examining the mediating effect of procedural justice climate on the relationship between fairness perceptions of organizational practices and organizational commitment. Third, most studies on fairness perceptions of organizational practices, procedural justice, and organizational commitment have been conducted in the West. This study adds to the literature by testing a mediation model in the Malaysian context. It would be interesting to examine the fairness perceptions of HRM practices in the Malaysian context, because this context is unique in the sense that it is high on power distance and high on collectivism orientations (Hofstede, 1991), and high on humane orientation (Gupta, Surie, Javidan, & Chhokar, 2002).

Theoretical Bases and Development of Hypotheses

A comprehensive review of the organizational literature (e.g., Masterson, Lewis, Goldman, & Taylor, 2000) indicates that organizational fairness is an

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important antecedent of organizational commitment. Procedural justice and distributive justice have been found to positively predict employees' organizational commitment (Kee, Ansari, & Aafaqi, 2004; Beugre, 1998; Bies & Tyler, 1993; Folger & Konovsky, 1989; Masterson, 2001; McFarlin & Sweeney, 1992). Beugre (1998) reports a direct link between procedural justice and affective commitment. In addition to the above findings, between distributive and procedural justice, it is the latter that has been found to relate more strongly to organizational commitment (Folger & Konovsky, 1989; McFarlin & Sweeney, 1992). It is this finding that prompted us to conceptualize procedural justice as a climate construct.

In recent years, a sizeable number of studies have appeared on organizational justice (see Beugre, 1998; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Liao & Rupp, 2005; Tangirala & Ramanujam, 2008). Organizational justice has been considered one of the most widely used but frequently debated constructs in the organizational science literature--particularly about its impact on organizational commitment (Bradfield, 1999). Past research (Lind & Tyler, 1988) has viewed the construct of procedural justice both as the individual- and the group-level phenomena. The individual-level phenomenon is based on the "self-interest" or "instrumental" model that suggests that "... which is fair is that which benefits the individual" (Naumann & Bennett, 2000, p. 881). In contrast, the group-level phenomenon is based on the "relational model" that suggests that groups specify norms concerning fairness (Tyler & Lind, 1992). This conceptualization links procedural justice to its social context. While the self-interest model of procedural justice 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), "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" (p. 22). It follows that individuals observe their other group members and form an overall impression about how procedures experienced by the other group members affect them (James & Cropanzano, 1990). Thus, procedural justice climate has been conceptualized as a "distinct group-level cognition about how a work-group as a whole is treated" (Naumann & Bennett, 2000, p. 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 as well exist. According to Tyler and

Lind (1992), procedural fairness might be used as the basis by which employees establish longer relationships with their employers, enhancing their loyalty toward the organization. However, we are aware of no empirical studies in the organizational behavior or leadership literature based on Lind and Tyler's (1988) group-value model linking procedural justice climate with organizational commitment. We believe that individuals form an overall judgment about the procedures experienced by the group members that affect them—based on their fairness perceptions of many different HRM practices such as recruiting and selection, training and development, compensation, promotion, performance management, and employee relations (Noe, Hollenbeck, Gerhart, & Wright, 2006). In other words, perception of these practices leads to a group-level cognition. In turn, this cognition or procedural justice climate triggers individuals to be committed or not. In brief, we predict that fairness perceptions of different organizational (HRM) practices lead to the cognition of procedural justice climate that in turn leads to organizational commitment. In summary, we offer the following hypotheses for empirical verifications:

Hypothesis 1: There is a positive relationship between fairness perception of HRM practices and organizational commitment. Specifically, the relationship is stronger for affective and normative commitment than for continuance commitment.

Hypothesis 2: There is a positive relationship between fairness perception of HRM practices and procedural justice climate.

Hypothesis 3: There is a positive relationship between procedural justice climate and organizational commitment. Specifically, the relationship is stronger for affective and normative commitment than for continuance commitment.

Hypothesis 4: Procedural justice climate mediates the relationship between fairness perceptions of HRM practices and organizational commitment such that the direct positive effect of fairness perceptions will weaken after procedural justice is considered.

METHOD

Participants

Four hundred forty managers from nine multinational companies located in northern-Malaysia were randomly contacted to participate in this research. Out of the 440 approached, 224 managers voluntarily completed the survey questionnaire (response rate = 50.91%). The participants represented several diverse companies, including semiconductor, medical products, and automobile components. They were drawn mostly from lower-level management (62.5%) and were in the age range of 25 to 35 years ($M = 29.62$; $SD = 5.18$). Over half

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of them were male (54.5%) and their average tenure was 3.71 years ($SD = 3.11$ years).

Data were collected by means of a printed questionnaire. The questionnaire accompanied a personally-signed cover letter stating the purpose of the study and an assurance of complete anonymity of individual responses.

Measures

We administered a 4-section questionnaire to measure the variables employed in the study. Except for personal-demographics, all other measures required the participants to indicate on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) the extent of their agreement or disagreement with each statement. The items in each scale were summed and then averaged to arrive at an overall score for the scale. Higher scores represent higher levels of each of the constructs.

Fairness of HRM practices. We employed a 20-item scale (Ansari et al., 2000) to assess the perceived fairness of HRM practices. The scale items were based on widely referred HRM content areas such as recruiting and selection, training and development, compensation, promotion, performance management, and employee relations (Noe et al., 2006). Based on a series of psychometric analysis (such as content validation ratio and principal components analysis), Ansari et al. (2000) identified four interpretable factors of organizational fairness: Fairness in Employee Relations and Compensation (9 items), Fairness in Performance Management and Promotion (5 items), Fairness in Overall Procedure (4 items), and Fairness in Training (2 items). Sample items of the subscales are as follows: "Employee relations are considered good in this organization" and "Employees are generally happy with the benefits scheme of this organization" (Fairness in Employee Relations and Compensation); "There is favoritism in performance evaluation in this organization" and "Management follows a 'pick-and-choose' policy for promotion" (Fairness in Performance Management and Promotion; reverse coded items); "The organization follows objective performance evaluation criteria" (Fairness in Overall Evaluation); and "Training and development policy in this organization is fair" (Fairness in Training).

Table 1 contains descriptive statistics, scale characteristics, and interrelationships among the factors. As can be seen in Table 1, the four factors documented acceptable internal consistency reliability--the coefficients alpha ranged between .80 and .89-- thus exceeding the minimum required level (Nunnally & Bernstein, 1994). The factors were weakly to moderately intercorrelated (average $r^2 = .10$), thereby suggesting almost 90% of non-overlapping variances among the factors.

Table 1: Means, Standard Deviations, Coefficients Alpha, and Zero-order Correlations of Study Variables

Factors	M	SD	1	2	3	4	5	6	7	8
1. Fairness 1	4.83	0.95	.89							
2. Fairness 2	3.69	1.26	.13*	.89						
3. Fairness 3	3.89	1.02	.29**	.55	.80					
4. Fairness 4	4.72	1.31	.59**	.16*	.19**	.82				
5. Procedural Justice Climate	4.43	0.93	.56**	.06	.34**	.42**	.86			
6. Affective Commitment	4.82	1.39	.58**	.20**	.29**	.48**	.51**	.89		
7. Normative Commitment	4.17	1.18	.51**	.04	.23**	.54**	.54**	.60**	.84	
8. Continuance Commitment	4.38	1.06	.31**	-.19**	.09	.21**	.38**	.18**	.38**	.82

Note. $N = 224$; * $p < .05$; ** $p < .01$; Diagonal entries in bold indicate coefficients alpha; Fairness 1 = Employee Relations and Compensation; Fairness 2 = Performance Management and Promotion; Fairness 3 = Overall Evaluation; Fairness 4 = Training.

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Procedural justice climate. We used a 9-item scale (Naumann & Bennett, 2000) to assess the construct of procedural justice climate. Naumann and Bennett adapted the scale items from Moorman (1991) to reflect a work-group preference. Sample items include: "As a whole, the people in my work-group feel that around here ... consistent rules and procedures are used when making decisions; our input is obtained prior to making decisions." We performed a confirmatory factor analysis (CFA), using Amos 26.0, to examine the dimensionality of this scale. The goodness-of-fit statistics confirmed the unidimensionality of the scale ($\chi^2 = 79.98$, $df = 20$, $p < .01$; GFI = .92; IFI = .92; CFI = .93; NFI = .89). The coefficient alpha of .86 in this study (see Table 1) was comparable to that of .90, an alpha value reported by Naumann and Bennett (2000).

Organizational commitment. We employed an 18-item scale (Meyer & Allen, 1991) to assess the three components of organizational commitment: affective, normative, and continuance. Each component consisted of six items. Sample items are as follows: "I do not feel a strong sense of belonging to my organization" (Affective Commitment; reverse coded item); "This organization deserves my loyalty" (Normative Commitment); "I feel that I have too few options to consider leaving this organization" (Continuance Commitment). Since this scale was not widely used in the Malaysian context, Kee et al. (2004) did several rounds of principal components analysis (PCA) with Equamax rotation, and came up with three neat factors. Thus, we performed a CFA in this study and found that the 3-factor model fit the data well. Their CFA results (with 13 items) showed that the fit indices fell within an acceptable range ($\chi^2 = 170.20$, $df = 62$, $p < .01$; GFI = .89; IFI = .93; CFI = .93; NFI = .89). Coefficients alpha for the three components of organizational commitment were as follows: Affective Commitment (3 items; $\alpha = .89$), Normative Commitment (4 items; $\alpha = .84$), and Continuance Commitment (6 items; $\alpha = .82$). The three components were intercorrelated (average $r^2 = .15$).

Results

To verify the distinctiveness of the measures, we conducted a PCA including all the derived factors. Thus the PCA was conducted at the dimension level. That is, four dimensions of fairness of HRM practices were treated as its indicators and three components of commitment were treated as its indicators. However, procedural justice climate was treated as it is. Thus, the PCA included eight variables. The analysis indicated a two-factor model (four fairness variables and one justice climate variable as one factor and the three commitment variables as another factor). This fact may be treated as evidence of discriminant validity of the measures, as well as partial evidence against common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In conclusion, results of the

PCA, CFA, and reliability analysis (coefficients alpha ranging between .82 and .89) indicate that the measures have sound psychometric properties.

Before testing the hypothesized relationships, we examined the relationship of salient demographic variables presumed to be related to organizational commitment (Meyer, Stanley, Herscovitch, & Topolnytsky, 2001). Using inferential statistics (one-way ANOVA and independent *t*-test), we compared the present sample on two salient demographic variables in terms of each of the three components of organizational commitment. Demographic variables under examination were: gender (male; female) and ethnicity (Chinese; Malay; Indian). None of the analysis reached its significance level ($p > .05$) for either demographic variable. In addition, zero-order correlations suggested that the three factors of organizational commitment were unrelated to age, managerial level, and organizational tenure ($p > .05$).

To examine the mediating impact of procedural justice climate on the relationship between fairness perceptions of HRM practices and organizational commitment, we followed Baron and Kenny's (1986) procedures in performing multiple regression analysis. Mediation analysis is accomplished with four steps (Baron & Kenny, 1986; Judd & Kenny, 1981; MacKinnon & Dwyer, 1993). In order to demonstrate that procedural justice climate acts as a mediator (i.e., a linking mechanism), the following conditions *must* be examined:

1. Fairness perceptions of HRM practices must significantly predict organizational commitment.
2. Fairness perceptions must significantly predict procedural justice climate.
3. Procedural justice climate must significantly predict organizational commitment.
4. After controlling for procedural justice climate, the impact of fairness perceptions to predict organizational commitment should become significantly smaller (partial mediation) or non-significant (full mediation).

As can be seen in Table 1, the first three conditions (H1 through H3) specified by Baron and Kenny (1986) are clearly met (see also Table 2). Table 2 summarizes the results of multiple regression analysis, and Figure 1 provides the pictorial view of the mediating effect. In Figure 1, numbers represent standardized betas; betas in parentheses and bold are based on a regression equation including the mediator (i.e., the third equation); betas outside parentheses are based on an equation including only predictor (see Baron & Kenny 1986)

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Table 2: Multiple Regression Analyses for the Mediating Role of Procedural Justice Climate between Fairness of HRM Practices and Organizational Commitment

Criterion Variable	Affective Commitment (β)		Normative Commitment (β)		Continuance Commitment (β)	
	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Predictor Variables and Step -->						
Employee Relations and Compensation	.42**	.32**	.26**	.14*	.27**	.16*
Performance Management and Promotion	.06	.10	-.13*	-.08	-.33**	-.28**
Overall Evaluation	.10	.03	.15*	.07	.17*	.10
Training	.21**	.17*	.38**	.33	.07	.03
Procedural Justice Climate		.24**		.30**		.26**
Adjusted R^2	.37**	.40**	.36**	.41**	.16**	.20**
ΔR^2		.03**		.05**		.04**

Note. * $p < .05$; ** $p < .01$; Standardized beta coefficients are reported for the respective steps, Fairness of HRM Practices (Step 1) and Fairness of HRM Practices and Procedural Justice Climate (Step 2).

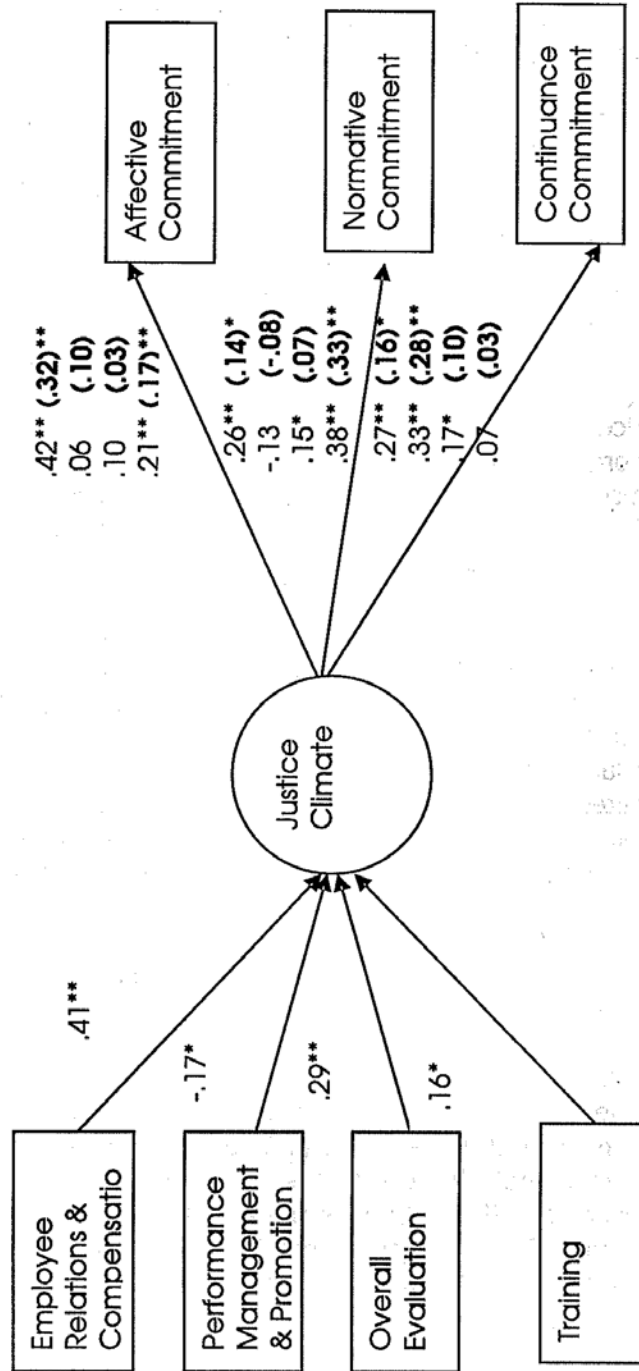


Figure 1. Path diagram for the mediation of procedural justice climate on the fairness of HRM practices-organizational commitment relationships; * $p < .05$; ** $p < .01$.

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Table 2 (see also Figure 1) readily indicates that mediation hypothesis (H4) receives substantial support from the data. That is, procedural justice climate does act as a mediator, because the level of significance for the regression coefficient of fairness perceptions decreases, and the significance of procedural justice climate remains constant (significant) when the two variables—fairness perceptions and procedural justice—enter in the equation simultaneously. Overall, the analysis indicates the following (see Table 2 and Figure 1):

1. Fairness perceptions have significant positive impacts on all three components of organizational commitment (H1).
2. Fairness perceptions have significant positive impacts on procedural justice climate (H2).
3. Procedural justice climate has a significant positive impact on all three components of organizational commitment (H3).
4. Procedural justice climate *partially* mediates the relationship between perceived HRM practices and three components of organizational commitment (H4).

Discussion

Little is known about the mechanism through which fairness perceptions of HRM practices might have their impact on organizational commitment. We hypothesized that one mechanism that operates between fairness perceptions of HRM practices and organizational commitment might be through procedural justice climate. Our stated mediation hypothesis received substantial support from the present data. We found that procedural justice climate partially mediated the impact of fairness perceptions of HRM practices on organizational commitment.

Future research could benefit from identifying the major potential limitations of the present 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 each HRM practice of their organization as fair and just. Thus, future research should systematically manipulate the predictor and mediator—fairness perception of HRM practices and procedural justice climate—and observe their impact on organizational commitment. Only then can we claim a definite causality. Second, our data are cross-sectional. Since fairness perceptions and procedural justice climate both are developmental in nature, only can future longitudinal investigations uncover the stage at which employees develop organizational commitment. Third, although obtaining data from a Malaysian sample is important. It would be interesting in future research to focus on power distance,

collectivism, and humane orientation dimensions in comparing Malaysian culture to other similar or contrasting cultures in a management context. Finally, the study has limited statistical power owing to the geographical coverage and relatively small sample from manufacturing sectors only. Future research should extend the research site with a large sample. Yet, the relatively strong effects that we have observed seem to provide evidence for the impact of procedural justice climate on the fairness perception-commitment relationships.

All data limitation aside, the present research does have some obvious implications for theory, practice, and research. From a theoretical standpoint, we identified and added a new perspective of looking at organizational commitment. There is a definite need to refine and make clear distinctions between fairness dimensions of HRM practices and procedural justice climate. Although, in the present research, the interdependence between the two is not that strong, the two constructs are certainly not that distinct as theorized. Future research should also conceptualize, in addition to procedural justice, interpersonal and informational aspects of justice as climate constructs (Colquitt, 2001). Additionally, although we conceptualized procedural justice climate as a group-level phenomenon, we analyzed it at the individual level. Future research should focus on this aspect as well.

Practically, our findings indicate that if HRM practices are perceived to be fair, then the employees are most likely to develop positive procedural justice climate that in turn will inculcate organizational commitment among employees. In other words, the results of this study provide considerable insight that the perceived fairness of organizational practices leading to procedural justice climate could promote employees' commitment to the organization. Appropriate guidelines could be provided to help managers improve their understanding of how to increase employees' commitment to the organization. For instance, practitioners and managers need to pay special attention to the fairness of organizational practices, as tomorrow's employees look for mutual trust and respect, fairness and opportunities for advancement and learning, and competitive levels of earnings. Practitioners need to maintain positive perceptions of fairness at reasonably high levels in order to facilitate positive justice climate, which in turn increases employee commitment. The mechanisms by which fairness perceptions may be increased include: (a) relating rewards to performance—that is, by informing employees about how the pay, pay raise, or promotion is administered, as well as how the level of salary corresponds to their accomplishments; (b) involving employees in developing the systems used in making promotion decisions; (c) allowing employees to evaluate one another; (d) encouraging employees to join the staff of assessment centers; (e) training

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managers in procedural justice as well as to provide outcome information in a considerate and socially sensitive manner; and (f) requiring that managers give timely feedback to employees regarding their performance.

In conclusion, to be effective, behaving fairly and convincing others of fairness is certainly important (Greenberg, 1990), but to look fair is equally important. The leader should play a crucial role in making the organization look "fair." Fairness is a perceptual phenomenon and judgments of fairness are relative. "A critical point in all such judgments is perceptions ... we act on our own perceptions, and must deal with the perceptions of the people with whom we interact" (Sheppard, Lewicki, & Minton, 1992, p. 12).

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