Management and Organization Review 5:3 401–422
doi: 10.1111/j.1740-8784.2009.00149.x

Linking Leader-Member Exchange and Employee Work Outcomes: The Mediating Role of Organizational Social and Economic Exchange

Raymond Loi[1], Yina Mao[2], and Hang-yue Ngo[2]
[1] *University of Macau, Macau, and* [2] *The Chinese University of Hong Kong, Hong Kong*

ABSTRACT This study presents and tests a framework that links leader–member exchange (LMX) with two different forms of employee–organization exchange: organizational social exchange and organizational economic exchange. We propose that these two forms of employee exchange with the organization would be the main mechanisms through which LMX affects employees' affective commitment and intention to leave. We used structural equation modelling to analyze the data collected from 239 employees in a foreign-invested enterprise in China. Results showed that both organizational social exchange and organizational economic exchange acted as full mediators in the relationships between LMX and the two outcome variables but in different directions. Theoretical and practical implications are discussed.

KEYWORDS China, leader–member exchange, organizational economic exchange, organizational social exchange, social exchange theory

INTRODUCTION

Social exchange theory has long been used by organizational researchers to explain workplace relationships (e.g., Eisenberger, Huntington, Hutchison, & Sowa, 1986; Rousseau, 1995; Wayne, Shore, & Liden, 1997). The theory emphasizes the exchange of tangible and intangible resources among individuals or other social entities such as an organization (Cropanzano, Rupp, Mohler, & Schminke, 2001). A common presumption is that, within an organization, employees can form distinguishable exchange relationships with different parties, including their immediate supervisors and the employing organization (Cropanzano & Mitchell, 2005). Most of the existing research, however, focuses on the resources and benefits that flow between the interacting parties in one particular exchange (e.g., Eisenberger et al., 1986; Turnley, Bolino, Lester, & Bloodgood, 2003). Such an approach overlooks the interdependency among various exchange relationships. Since an employee may simultaneously establish exchange relationships with different parties, the extent to which one exchange relationship operates could be influenced by the resource interchanges in another relationship (Coyle-Shapiro & Conway, 2004). Omitting such possible interdependencies may restrict the explanatory scope of social exchange theory and our full understanding of the exchange dynamics in the work setting.

The present study examines the linkage between employee–supervisor exchange, typically conceptualized as leader–member exchange (LMX), and employee–organization exchange. Extant literature has consistently showed that LMX enhances employees' affective organizational commitment and reduces their intention to leave the organization (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995). However, from the social exchange perspective, it is unclear why and how a subordinate–supervisor exchange leads to employees' reciprocations toward their organization, which is not a party involved in LMX. We attempt to explicate this theoretical ambiguity by proposing that two employee–organization exchange elements (i.e., organizational social exchange and organizational economic exchange) act as the intervening mechanisms through which LMX affects employees' job attitudes.

One void in current research is the neglect of organizational economic exchange as a salient form of the employment relationship (Wong, Wong, Ngo, & Lui, 2005). As pointed out by Gakovic and Tetrick (2003), some employees may develop their exchange with the organization based on a short-term economic orientation. This is particularly so during the globalization era when firms strive to maintain a high level of employment flexibility and hire a large number of contract workers. Following the argument of Shore, Tetrick, Lynch, and Barksdale (2006) that the employee–organization relationship is governed by both social and economic exchanges, we explored the different roles of these two types of exchange on employees' work outcomes.

This study aims to contribute to the social exchange literature by examining both types of organizational exchange in the workplace. While previous research (e.g., Masterson, Lewis, Goldman, & Taylor, 2000; Wayne et al., 1997) adopted a multi-foci approach to explore the differential sources and impacts of employee–supervisor and employee–organization exchanges, we take a step further to link these constructs together. We extend the work of Shore et al. (2006) by suggesting that organizational social and economic exchanges mediate the relationships between LMX and employees' work outcomes. Given the importance of reciprocity in Chinese social relations (Wu et al., 2006), we chose China as the research site for our study. We developed a framework and tested several hypotheses with a dataset collected from 239 employees working in a foreign-invested enterprise in China.

THEORETICAL BACKGROUND AND HYPOTHESES

Social exchange theory identifies two types of exchange: economic and social (Blau, 1964). Economic exchange is rather short-term and involves the exchange of concrete or economic resources in a *quid pro quo* fashion. The nature of obligations is specified in an explicit contract. In contrast, social exchange tends to be long-term in nature. It involves the exchange of socio-emotional benefits with open-ended obligations. The central norm underlying social exchange is reciprocity (Gouldner, 1960). Following the norm of reciprocity, people tend to believe that each member in the social exchange relationship is obligated to repay any benefits received, and the mutual exchange of goods and services could be balanced out in the long run. Social exchange theory has been widely applied to study various types of exchange relationships, among which employee–organization exchange and LMX are the two most extensively studied (Coyle-Shapiro & Shore, 2007; Graen & Uhl-Bien, 1995).

Employee–Organization Exchange

Studies on employee–organization exchange generally take the view that employees treat the organization with human-like characteristics (Levinson, 1965) and that an individual employee and the organization can enter into a social exchange relationship. Simply stated, employees will reciprocate the care and valuable treatment they receive from the organization in the form of positive work outcomes such as job satisfaction (Masterson et al., 2000), affective organizational commitment (Settoon, Bennett, & Liden, 1996), work performance (Turnley et al., 2003), and organizational citizenship behaviour (Organ, 1990). This stream of research has operationalized employee–organization social exchange by different variables, including perceived organizational support (POS) (Eisenberger et al., 1986), psychological contract (Rousseau, 1995), and affective commitment (Cropanzano, Rupp, & Byrne, 2003). We argue that these variables fail to fully capture social exchange in its entirety. Conceptually, organizational social exchange encompasses the sense of give-and-take, long-term investment, and mutual trust between employees and their organization (Shore et al., 2006). POS only represents employees' fundamental belief about the organization's care for their well-being, while psychological contract focuses on the extent to which the employees and the organization have met or violated the promises that both parties made and kept (Tekleab, Takeuchi, & Taylor, 2005). Further, affective commitment reflects employees' loyalty to the organization subsequent to an exchange relationship and should be considered an outcome of organizational social exchange (Gakovic & Tetrick, 2003). Blau (1964) contended that the meaning of an exchange is determined by an individual's own interpretation. Thus, in empirical research, a more parsimonious and generalizable approach is to measure the nature of the exchange relationship directly from the perspective of employees (Shore et al., 2004).

Another issue in current studies is the neglect of organizational economic exchange, as mentioned in our introduction. Such oversight is surprising since social exchange theory does include both economic and social aspects, and employees may simultaneously engage in both forms of exchange with their working organization. Shore et al. (2006: 842) conceptualized organizational social and economic exchanges as 'employee perceptions of the form of their exchanges with the organization' and pointed out that employees develop exchanges with the organization for both socio-emotional and economic reasons. Organizational economic exchange is distinctive from organizational social exchange, however, in that it reflects the basic expectations in employment relationships, such as a fair day's pay for a fair day's work. This form of exchange neither requires employees' trust and investment in their organization (Gakovic & Tetrick, 2003) nor entails the norm of reciprocity and open-ended obligations as required under organizational social exchange (Coyle-Shapiro & Shore, 2007). Accordingly, organizational social exchange and organizational economic exchange should be seen as two different dimensions of employment relationships that have their own impacts on employee outcomes (Shore et al., 2006) rather than as the opposite poles of a single continuum. As an increasing number of firms emphasize employment flexibility to cope with today's dynamic environment, organizational economic exchange has become more prominent in the workplace than before. Song, Tsui, and Law (2009) found these two types of exchange, as perceived by employees, to partially mediate the influence of three forms of organizational level control mechanisms such as organizational culture, executive leadership style, and employment approaches. Their study suggests the possibility that the relationship between an employee and his or her supervisor may generate perceptions of organizational social or economic exchange.

Leader–Member Exchange (LMX)

A well-established construct related to workplace exchange relationships is leader–member exchange or LMX (Graen & Uhl-Bien, 1995). It concerns the emotional and resource-based exchanges in the supervisor–subordinate dyad (Sparrowe & Liden, 1997). Supervisors have expectations of their subordinates' role performance, and subordinates likewise possess role expectations of their supervisors with respect to how they should be treated and rewarded for meeting their supervisors' expectations (Wang, Law, Hackett, Wang, & Chen, 2005). There is a reciprocal exchange process between the two parties such that the greater the perceived value of the tangible and intangible benefits exchanged, the higher the quality of LMX (Liden, Sparrowe, & Wayne, 1997; Wayne et al., 1997). Graen and Uhl-Bien (1995) pointed out that, due to limited time and social resources, supervisors tend

https://doi.org/10.1111/j.1740-8784.2009.00149.x Published online by Cambridge University Press

to develop high-quality LMX with some subordinates but not with the others. In general, high-quality LMX is characterized by high degrees of mutual trust, respect, and obligations between the dyadic members. On the contrary, low-quality LMX involves only the members' obligatory compliance with formal role requirements. LMX is distinctive from organizational social and economic exchanges in that the development of LMX is based on an employee's working relationship with the supervisor and their mutual role expectations. In brief, high-quality LMX involves exchanges of psychological benefits between the supervisor and the subordinate, whereas, under low-quality LMX, both parties have low levels of mutual influence and confine their role expectations to standard job descriptions (Yukl & Michel, 2006).

According to social exchange theory, individuals involved in a high-quality exchange relationship with a particular party should develop and direct their attitudes and behaviours toward that exchange party (Murphy, Wayne, Liden, & Erdogan, 2003). Interestingly, empirical research has indicated that the quality of LMX is consistently related not only to work outcomes pertinent to the LMX dyads, but also to organizationally relevant criteria such as organizational commitment and turnover intentions (Gerstner & Day, 1997). It is theoretically important to explain *why* subordinates under high-quality LMX are more committed to the organization and willing to stay in it and vice versa.

We argue that the quality of LMX shapes employees' perceptions of their exchange relationships with the organization, which in turn initiate their reciprocations toward the organization. Liden, Bauer, and Erdogan (2004) suggested that LMX influences new employees' socialization process and their initiation to the organization. Interactions between supervisors and subordinates tend to be direct and frequent. Through the intense daily interactions, supervisors play a key role in providing valuable information to an organization's newcomers and assist them in the process of organizational assimilation. They also help the subordinates carry out their obligations to the organization (Shore & Tetrick, 1994). For that reason, supervisors can be seen as important agents, representing the organization in managing employment relationships with employees (Coyle-Shapiro & Shore, 2007; Wong, Ngo, & Wong, 2003). It is logical to expect that LMX may influence employees' evaluation of their employment relationships with the organization. For example, they may attribute the supportiveness of their supervisor to the organization rather than solely to the supervisor's personal inclinations (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002).

The Relationship of Leader–Member Exchange and Employee–Organization Exchange

We contend that the quality of LMX is related to employees' perception of their exchange with the organization. As discussed above, LMX starts to develop in the employee's early entry stage when he or she learns about interpersonal relationships and work-related issues from the supervisor (Liden et al., 2004). With mutual trust, supervisors are willing to provide additional investments to some subordinates even though they have limited time and resources (Graen & Uhl-Bien, 1995). They will sponsor high-LMX subordinates in obtaining salient organizational resources through their social network (Sparrowe & Liden, 1997). Such sponsorship and support help the employees obtain more resources and better career opportunities from the organization, which then generate their sense of obligation to the organization (Liden et al., 2004). Moreover, since employees often view their supervisors as organizational agents acting in concert with the interests of the organization (Eisenberger et al., 2002), subordinates may interpret the benefits they received from the supervisor as originating from the organization. As such, employees under high-quality LMX would feel that their organization offers them a high level of investment and support, which in turn enhances their perceptions of a social exchange relationship with the organization.

We expect the above relationship will be prominent in a high power-distance and relational-oriented society like China. It is common for Chinese employees to view their supervisors as the representatives of the organization (Chen, Tsui, & Farh, 2002). Wong et al. (2003) found that Chinese employees tend to relate their trust in the supervisor to their trust in the organization. Further, Hui, Lee, and Rousseau (2004) suggested that Chinese people view the employment relationship as based upon 'thinking interpersonally' instead of 'thinking organizationally'. With a strong emphasis on personal relationships, they tend to relate to the organization through the quality of the work relationship they have built with their supervisors. High-quality LMX may enhance the favourability of employees' organizational experiences and anchor organizational social exchange relationships (Aryee & Chen, 2006). Thus, we propose the following hypothesis:

Hypothesis 1: LMX will relate positively to employee perceptions of organizational social exchange.

Organizational economic exchange is characterized by its short-term orientation and an emphasis on financial and tangible resources. It reflects an employee's basic expectations of the organization, and long-term investment and mutual trust are not crucial in this form of employment relationship (Coyle-Shapiro & Shore, 2007). LMX research suggests that members in low-quality LMX tend to avoid obligation toward each other in terms of exchange of favours (Uhl-Bien, Graen, & Scandura, 2000). Subordinates work with their supervisors under unidirectional downward influence (Graen & Uhl-Bien, 1995). As long as they comply with the formal role requirements, they can receive standard benefits from the organization. Supervisors tend to invest less in these subordinates, as shown by not going beyond basic supervision or providing them with additional resources and support. Under such circumstances, low-LMX subordinates would have less access to both organizational resources and development opportunities within the organization. They may feel ignored and isolated, and, hence, they are likely to develop a lower attachment and identification with their organization. Worse still, if they attribute their unfavourable treatment to organizational policies and practices, their trust in the organization becomes problematic. As suggested by Wong et al. (2005), when subordinates are uncertain about the organization's obligations to them in the long run, they tend to focus on short-term and narrowly defined benefits instead. In other words, when the quality of LMX is lower, employees are likely to engage in economic exchange with the organization, focusing on immediate and tangible returns in exchange for their work efforts.

Along with the country's market transition, research has shown that employees in China pay more attention to economic goals and materialistic rewards than employees in the United States (Chen, 1995). Miller, Giacobbe-Miller, and Zhang (1998) argued that, despite Chinese cultural values emphasizing long-term social harmony, economic consideration takes precedence in the short term. This is particularly the situation in foreign-invested enterprises, which generally offer high wages to attract competent skilled labour (Nee & Cao, 2005). Under the 'labor contract system' (Ding & Warner, 2001), both employees and employers in these enterprises are required to sign fixed-term contracts that stipulate their rights, duties, and benefits at work. Based on the performance of employees, contracts can be terminated or renewed on expiration. The employment relationship is transactional in nature, and workers become instrumental and calculative (Wong et al., 2005). Hence, economic exchange becomes the prominent form of the employee–organization relationship in these organizations. When LMX is lower, employees may perceive that their organization does not value their contributions or care about their long-term well-being. These employees are inclined to engage in economic exchange with the organization. The following hypothesis is thus put forward:

Hypothesis 2: LMX will relate negatively to employee perceptions of organizational economic exchange.

The Mediating Role of Organizational Exchanges

Existing studies have consistently shown that LMX shapes employees' attitudes toward the organization (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995), within which affective commitment and intention to leave are two major work outcomes impacting organizational practice (Schyns & Paul, 2005). Affective commitment refers to 'an affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in, the organization' (Allen & Meyer, 1990: 2). Intention to leave indicates an

https://doi.org/10.1111/j.1740-8784.2009.00149.x Published online by Cambridge University Press

employee's readiness to seek employment elsewhere and is the strongest predictor of employee turnover (Griffeth, Hom, & Gaertner, 2000). Since these two outcomes represent employees' reciprocation toward the organization, which is not a party involved in the supervisor–subordinate exchange (Wayne et al., 1997), the mechanisms behind their relationships with LMX have not been fully understood. In this study, we argue that organizational social exchange and organizational economic exchange are two intervening variables through which LMX affects employees' affective commitment and intention to leave.

As discussed earlier, LMX is considered the building block of the employee–organization relationship. When LMX is of high quality, employees are likely to perceive social exchange with the organization. Organizational social exchange emphasizes the socio-emotional aspect of employment relationships, such as feelings of obligation, give-and-take, and care. A stronger organizational social exchange represents the organization's higher level of investment and trust in the employment relationship, which will generate employees' stronger feelings of obligation to care about their organization (Shore et al., 2006). The obligation to exchange caring for caring invokes greater affective commitment to the organization (Rhoades & Eisenberger, 2002). Empirical research shows that organizational social exchange and employees' affective commitment are positively related (Gakovic & Tetrick, 2003; Shore et al., 2006). Furthermore, since organizational social exchange implies a long-term and on-going employee–organization relationship, employees tend to be satisfied with the *status quo* and have less intention to leave their employing organization. Based on the above argument, we expect that high-quality LMX enhances employees' perception of social exchange with their organization, which in turn brings about some positive employee outcomes. The mediating role of organizational social exchange is stated in the following hypothesis.

Hypothesis 3: Organizational social exchange will mediate (a) the positive relationship between LMX and affective commitment and (b) the negative relationship between LMX and intention to leave.

We further contend that organizational economic exchange acts as another mediator in the relationship between LMX and the outcome variables. Yet, its role is different from that of organizational social exchange. Organizational economic exchange is characterized as a type of contractual or economic affiliation with the organization. As pointed out by Shore et al. (2006: 846), individuals with a high level of organizational economic exchange tend to maintain an attitude of 'easy exit' since they are reluctant to develop a long-term membership in the organization. With a focus on their immediate and tangible benefits, these employees are less psychologically involved and emotionally attached to their organization. Hence, organizational economic exchange is thought to be negatively related to

https://doi.org/10.1111/j.1740-8784.2009.00149.x Published online by Cambridge University Press

affective commitment and positively related to intention to leave. Empirically, Gakovic and Tetrick (2003) found a negative relationship between organizational economic exchange and affective commitment in an American sample. We predict that low-quality LMX employees will perceive stronger organizational economic exchange, which in turn adversely affects their job attitudes. This prediction turns into the following hypothesis:

Hypothesis 4: Organizational economic exchange will mediate (a) the positive relationship between LMX and affective commitment and (b) the negative relationship between LMX and intention to leave.

METHOD

Sample and Procedure

We collected the data from a manufacturing plant located in Shenzhen, a southern city of China. It is a foreign-invested enterprise engaged in the manufacturing of printed circuit boards, wholly owned by a Hong Kong listed company. A survey was administered to 256 technical and administrative employees of the company. The cover letter attached to each survey described the purpose of the survey and assured the respondents of anonymity and the voluntary nature of the study. A return envelope was enclosed, and the respondents were asked to seal the return envelope after completion of the questionnaires, which were then collected by the first author in person. This procedure guaranteed the confidentiality of the responses provided. Of the 256 questionnaires distributed, 239 completed questionnaires were obtained. This represents a response rate of 93.4 percent. Within the sample, 53.4 percent were male and 70.3 percent were below the age of 30. Fifty percent of the respondents were married and 73.4 percent had a monthly income of below RMB 3,000. The average company tenure of the respondents was 4.45 years (SD = 4.02). Seventy-nine percent of the respondents were technical staff. Results of *t*-tests showed no significant differences between the technical and administrative staff with respect to the variables under study.

Measures

We adopted all the measurement items in the questionnaire from established scales developed in the West with sufficient validity and reliability. Two university professors in China conducted a back translation where the measurement scales used in the present study were translated into Chinese and then translated back into English (Brislin, 1970). Except for the demographic variables, all study variables were measured on a six-point Likert-type scale (1 = 'strongly disagree' and 6 = 'strongly agree') to avoid the central tendency bias (choosing the midpoint of the scale).

Leader–member exchange (LMX). We measured this construct with the Chinese version of the seven-item LMX scale used by Hui et al. (2004), adapted from Scandura and Graen (1984). Sample items of the scale include 'My direct supervisor understands my job problems and needs very well' and 'I would characterize my working relationship with my direct supervisor as highly effective'. Cronbach's alpha for this scale in the present study was 0.87.

Organizational social exchange. We used the eight-item scale developed by Shore et al. (2006) to measure the respondents' perceptions of socio-emotional exchange with the organization. Sample items include 'There is a lot of give and take in my relationship with my organization' and 'I try to look out for the best interest of the organization because I can rely on my organization to take care of me'. Cronbach's alpha was 0.89 for this scale.

Organizational economic exchange. Shore et al. (2006) also developed this eight-item scale to capture the respondents' perceptions of economic exchange with the organization. Sample questions include 'My relationship with my organization is strictly an economic one – I work and they pay me' and 'The most accurate way to describe my work situation is to say that I give a fair day's work for a fair day's pay'. This scale's Cronbach's alpha was 0.77.

Affective commitment. We measured this construct by the eight-item Affective Organizational Commitment Scale developed by Allen and Meyer (1990). Sample questions include 'I enjoy discussing my organization with people outside it' and 'I really feel as if this organization's problems are my own'. Cronbach's alpha for this scale was 0.84.

Intention to leave. We used the four-item scale developed by Rosin and Korabik (1991) to measure this construct. Sample items include 'I am actively searching for another job right now' and 'I have thought about leaving this organization'. Cronbach's alpha was 0.90.

Control variables. As an employee's company tenure and dyad tenure have been found to impact LMX and employee–organization exchange (Wayne et al., 1997), we controlled these two variables in our analysis. We measured company tenure by the number of years the respondent has been with the company and dyad tenure by the number of years the respondent was supervised by the present supervisor. We also controlled the employee's gender, educational level, and job type. Gender was a dummy variable coded 0 if the respondent was male and coded 1 if the respondent was female. Educational level was measured by six levels ranging from 'primary school or below' to 'higher than bachelor degree' with the higher values corresponding to higher educational attainment. Job type was a dichotomous variable, coded 0 if the respondent was administrative staff and coded 1 if the respondent was technical staff.

Analyses

We employed structural equation modelling (SEM) to test the hypotheses, using LISREL 8.54. We first estimated the fit of the measurement model using confirmatory factor analysis (CFA) and then evaluated the fit of the structural models. Overall model fit was examined by various fit indices including root mean square error of approximation (RMSEA), incremental fit index (IFI), Tucker–Lewis index (TLI), and comparative fit index (CFI). The requirements of a reasonable model fit are met if RMSEA is below 0.08 (Browne & Cudeck, 1993) and IFI, TLI, and CFI are above 0.90 (Bentler & Bonett, 1980; Byrne, 1998; Tucker & Lewis, 1973).

A limitation of SEM is that a large sample size is needed in estimating models that carry too many observed indicators. One way to deal with this issue is to reduce the number of observed indicators in each construct. Following the procedures suggested by Brooke, Russell, and Price (1988), we reduced the number of observed indicators for each construct to three, based on the factor loadings from the CFA for each of the constructs. The items with the highest and lowest loadings of the construct were averaged to form the first indicator. Items with the next highest and lowest loadings were combined next, and so forth until all items were assigned to one of the three indicators for each construct. We compared a five-factor baseline measurement model with several alternative models to ensure discriminant validity.

To test the mediation effect, we examined the four conditions suggested by Baron and Kenny (1986). First, the independent variable is significantly related to the outcome variable. Second, the independent variable is significantly related to the mediator. Third, the mediator is significantly related to the outcome variable. Finally, after controlling for the mediator, the direct effect of the independent variable on the outcome variable becomes weaker or non-significant. To make sure that our mediation hypotheses fulfilled the above conditions, we estimated three nested structural models (Kelloway, 1998): (i) a fully mediated model, (ii) a partially mediated model derived from the fully mediated model by adding two additional direct effect paths from the independent variable (i.e., LMX) to the two outcome variables (i.e., affective commitment and intention to leave), and (iii) a non-mediated model which is the partially mediated model with the paths from the mediators to the outcome variables removed. We then evaluated the model fit of these three nested models, and we employed χ^2 difference tests to determine the best model. The parameter estimates of the accepted model were then used to test the hypotheses. In estimating the above models, we added all the paths from the control variables to the study constructs. In addition, we conducted supplemental analyses by testing the model fit of two alternative models: a model with the causal

https://doi.org/10.1111/j.1740-8784.2009.00149.x Published online by Cambridge University Press

orderings between LMX and the two exchange variables reversed and a model with the effect of a common method factor statistically controlled. The former can strengthen the internal validity of our model while the latter can examine whether our results were affected by common method variance in light of the use of all self-reported measures.

RESULTS

Table 1 has the means, standard deviations, and correlations among all the variables. As expected, LMX is positively correlated with affective commitment ($r = 0.57$, $p < 0.01$) and negatively correlated with intention to leave ($r = -0.31$, $p < 0.01$). In addition, organizational social exchange has a negative correlation with organizational economic exchange ($r = -0.32$, $p < 0.01$).

The results of the CFAs on the measurement model are in Table 2. As shown, among all the measurement models, the five-factor baseline model achieved a good model fit in terms of all the fit indices, with χ^2 (80) = 178.18, RMSEA = 0.07, CFI = 0.98, IFI = 0.98, and TLI = 0.97. The significant χ^2 change between each alternative model and the baseline model indicates that the respondents of this study could distinguish the five constructs well. Finally, to further confirm the distinctiveness between LMX and organizational social exchange, we also conducted an independent CFA using only the items of these two constructs. In comparing the two-factor model with the one-factor model (i.e., loading all items of LMX and organizational social exchange together on one factor), a significant χ^2 difference resulted ($\Delta\chi^2(1) = 125.83$, $p < 0.001$). In view of the above results, we concluded that the distinctiveness of the constructs used in this study was supported.

Table 3 presents the results for the various SEM models. The fit indices of the non-mediated model (Model 3) are as follows: χ^2 (136) = 414.92; RMSEA = 0.10; CFI = 0.95; IFI = 0.95; TLI = 0.93. The paths from LMX to the two outcome variables (i.e., affective commitment and intention to leave) were found to be significant, thus satisfying the first condition of mediation. The fully mediated model (Model 1) fit the data better with χ^2 (134) = 279.40 and RMSEA = 0.07; CFI = 0.97; IFI = 0.97; TLI = 0.95. The estimated structural paths from LMX to the two mediators (i.e., organizational social exchange and organizational economic exchange) and from them to the two outcomes variables were all significant, thus fulfilling the second and the third conditions of a mediating effect. In specific, LMX was positively related to organizational social exchange ($\beta = 0.76$, $p < 0.01$) and negatively related to organizational economic exchange ($\beta = -0.36$, $p < 0.01$), therefore supporting hypotheses 1 and 2. Compared with the fully mediated model, the partially mediated model (Model 2) achieved a similar model fit: χ^2 (132) = 276.76; RMSEA = 0.07; CFI = 0.97; IFI = 0.97; TLI = 0.96. The χ^2 difference test between Model 1 and Model 2 ($\Delta\chi^2(2) = 2.64$, n.s.) indicated that adding

Table 1. Means, standard deviations, and correlations among study variables

Variables	*Mean*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1. Company tenure (years)	4.45	4.02										
2. Dyad tenure (years)	3.07	2.98	0.77**									
3. Gender (female = 1)	0.47	0.50	0.15*	0.15*								
4. Educational level	4.20	0.74	–0.23**	–0.14*	–0.22**							
5. Job type (technical = 1)	0.79	0.41	–0.07	–0.12	–0.33**	0.28**						
6. Leader–member exchange	4.10	0.98	0.22**	0.14*	–0.04	–0.05	–0.07	(0.87)				
7. Organizational social exchange	3.82	1.04	0.06	0.01	–0.04	–0.09	–0.13	0.66**	(0.89)			
8. Organizational economic exchange	3.41	0.87	0.17**	0.15*	–0.08	–0.07	–0.03	–0.18**	–0.32**	(0.77)		
9. Affective commitment	4.05	0.99	0.14*	0.09	0.07	–0.15*	–0.14*	0.57**	0.70**	–0.40**	(0.84)	
10. Intention to leave	2.89	1.38	–0.02	–0.05	–0.20**	0.16*	0.23**	–0.31**	–0.46**	0.48**	–0.58**	(0.90)

Notes:
n = 239.
* $p < 0.05$; ** $p < 0.01$, all two-tailed tests.
Cronbach's alphas are displayed on the diagonal in parentheses.

Table 2. Results of confirmatory factor analysis of the measurement models

Models	χ^2 *(df)*	$\Delta\chi^2$ *(*Δ*df)*	*RMSEA*	*CFI*	*IFI*	*TLI*
1-factor Model†	911.76 (90)**	733.58 (10)**	0.22	0.83	0.83	0.80
3-factor Model‡	539.33 (87)**	361.15 (7)**	0.16	0.90	0.90	0.88
4-factor Model 1§	367.60 (84)**	189.42 (4)**	0.13	0.94	0.94	0.92
4-factor Model 2¶	260.80 (84)**	82.62 (4)**	0.10	0.96	0.96	0.95
4-factor Model 3††	394.63 (84)**	216.45 (4)**	0.14	0.93	0.93	0.92
5-factor Model (baseline)	178.18 (80)**	–	0.07	0.98	0.98	0.97

Notes:
** $p < 0.01$; $\Delta\chi^2$ tests are between the baseline model and each alternative model.
† In the 1-factor Model, all items were loaded on one factor.
‡ In the 3-factor Model, items of leader–member exchange, organizational social exchange, and organizational economic exchange were loaded on one factor.
§ In the 4-factor Model 1, items of leader–member exchange and organizational social exchange were loaded on one factor.
¶ In the 4-factor Model 2, items of organizational social exchange and affective commitment were loaded on one factor.
†† In the 4-factor Model 3, items of leader–member exchange and affective commitment were loaded on one factor.
df, degrees of freedom; RMSEA, root mean square error of approximation; CFI, comparative fit index; IFI, incremental fit index; TLI, Tucker–Lewis index.

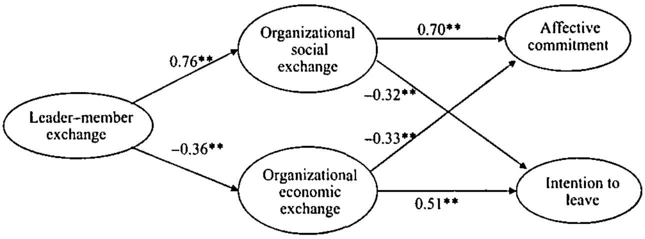
Table 3. Results of structural equation modelling for alternative models

Models	χ^2 *(df)*	$\Delta\chi^2$ *(*Δ*df)*	*RMSEA*	*CFI*	*IFI*	*TLI*
Model 1: Fully mediated model (baseline model)	279.40 (134)**		0.07	0.97	0.97	0.95
Model 2: Partially mediated model	276.76 (132)**	2.64 (2)†	0.07	0.97	0.97	0.96
Model 3: Non-mediated model	414.92 (136)**	135.52 (2)**†	0.10	0.95	0.95	0.93
Model 4: Reverse causal model	446.45 (136)**		0.10	0.94	0.94	0.92
Model 5: Common method factor model	267.34 (134)**		0.06	0.97	0.97	0.96

Notes:
** $p < 0.01$.
† Since Model 4 and Model 5 were not nested with the baseline model, $\Delta\chi^2$ tests were conducted between the baseline model and Model 2 and Model 3 only.
df, degrees of freedom; RMSEA, root mean square error of approximation; CFI, comparative fit index; IFI, incremental fit index; TLI, Tucker–Lewis index.

the two direct paths from LMX to affective commitment and intention to leave did not significantly improve the overall model fit. As depicted in Figure 1, all the path coefficients estimated in Model 1 were significant and in the predicted direction. We further found that organizational social exchange was positively related to affective commitment ($\beta = 0.70$, $p < 0.01$) and negatively related to intention to

Figure 1. LISREL results for the fully mediated model



Notes: Standardized path coefficients were reported.
**$p < 0.01$.
The five control variables have not been included in the figure to avoid complication in our presentation. The paths from the five control variables to the study constructs were non-significant except the ones from company tenure to organizational economic exchange ($\beta = 0.28$, $p < 0.05$), from gender to organizational economic exchange ($\beta = -0.20$, $p < 0.05$), from educational level to affective commitment ($\beta = -0.11$, $p < 0.05$), and from job type to intention to leave ($\beta = 0.13$, $p < 0.05$).

leave ($\beta = -0.32$, $p < 0.01$); and organizational economic exchange was positively related to intention to leave ($\beta = 0.51$, $p < 0.01$) and negatively related to affective commitment ($\beta = -0.33$, $p < 0.01$). The LISREL program also estimated the indirect effects of some variables in the model based on the standard Sobel test. The result showed that the indirect effects of LMX on affective commitment ($\beta = 0.68$, $p < 0.01$) and intention to leave ($\beta = -0.64$, $p < 0.01$) were both significant.

Considering the above results together, these findings supported the hypothesized full mediating effect. Specifically, organizational social exchange and organizational economic exchange fully mediated the relationships between LMX and the two outcome variables and provided support for hypotheses 3 and 4. The squared multiple correlations reported by LISREL provide the information on the explained variance of each construct under study. The fully mediated model explained 76 and 50 percent of the variance in affective commitment and intention to leave, respectively. It also explained 57 percent of the variance in organizational social exchange and 19 percent of the variance in organizational economic exchange.

In addition, we estimated the model fit of an alternative fully mediated model (Model 4) in which the causal orderings from LMX to organizational social exchange and organizational economic exchange were reversed. As Model 4 and Model 1 are not nested (Kelloway, 1998), comparing the χ^2 difference between the two models is not feasible. Yet, the unsatisfactory model fit of Model 4 (χ^2 (136) = 446.45; RMSEA = 0.10; CFI = 0.94; IFI = 0.94; TLI = 0.92) further reinforced our hypothesized causal relationships shown in Figure 1.

Because this study used self-reported measures, there is a risk that common method variance may inflate the magnitude of the relationships under study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We performed an additional analysis by statistically controlling the effect of a common method factor and then re-estimated the coefficients in the fully mediated model. Since loading all the items of the exogenous variables and the endogenous variables on one common method factor would result in a model that cannot be identified in the LISREL program, we employed a two-step approach in our analysis. In the first step, we conducted a CFA for all the study variables as well as the five control variables and a common method factor. The purpose of this step is to obtain a covariance matrix which has partialled out the common method variance in order to test the structural models. The control variables were included such that a covariance matrix with all variables can be obtained for running the full model in the next step. All items of the study variables (except the five control variables) were specified to load on the common method factor. That is, the control variables were not linked with the common method factor in the analysis. In the next step, we used the covariance matrix resulting from the first step to run the fully mediated model again. The new model, Model 5, achieved a similar model fit with our hypothesized model (χ^2 (134) = 267.34; RMSEA = 0.06; CFI = 0.97; IFI = 0.97; TLI = 0.96), and the overall pattern of our proposed relationships was not affected. This suggests that our results are not under serious threat of common method bias.

DISCUSSION

Although employees form multiple exchange relationships with various parties within the organization, current literature seldom examines the interdependency among various kinds of exchange. The primary objective of this study is to fill this void by investigating the linkage between LMX and employee–organization exchange and how such a linkage impacts employees' affective commitment and intention to leave. We developed four hypotheses and tested them with data collected from employees working in a foreign-invested enterprise in China. Our analysis generated some new findings.

First of all, the distinctiveness of the key constructs in our study, namely, LMX, organizational social exchange, and organizational economic exchange, were confirmed by the results of the CFA. SEM has shown that LMX was differentially associated with organizational social exchange and organizational economic exchange. These findings hint that employee–organization exchange is related to the quality of the exchange relationship between the subordinates and their supervisors. Since supervisors act as the 'linking pin' connecting employees with the organization (Sparrowe & Liden, 2005), high-quality LMX can reinforce employees' perceptions of organizational support and investment in them. In addition, a long-term, trusting relationship between the employees and the organization can also be established through the socio-emotional exchange inherent in LMX. For these reasons, we found a positive relationship between LMX and organizational social exchange. On the other hand, when LMX is of low quality such that both parties confine their mutual role expectations to formal job requirements, employees tend to perceive organizational economic exchange with their employing organization. In sum, our empirical results highlight that employees develop different exchange relationships with the organization based on the quality of LMX.

Despite the above significant results, the effect size of organizational economic exchange explained by LMX is much smaller than that of organizational social exchange. There is a need to further explore other predictors of organizational economic exchange. Previous studies found that Chinese employees with low perceived job security would develop a low level of trust and commitment to their organization (Bartol, Liu, Zeng, & Wu, 2009; Wong, Ngo, & Wong, 2002). Future research may investigate whether employees' perception of job security influences their social and economic exchanges with the organization. Moreover, since intra-organizational exchange relationships do not exist in isolation (Coyle-Shapiro & Conway, 2004), more research should be conducted to examine the possible interdependency among other types of exchanges such as team–member exchange (Seers, 1989) and co-worker exchange (Sherony & Green, 2002).

Although LMX literature has accumulated evidence that the quality of relationships developed between subordinates and their supervisors is predictive of employees' job attitudes (Gerstner & Day, 1997), the underlying mechanisms have not been explored. Our study revealed that organizational social and economic exchanges serve as full mediators between LMX and affective commitment and intention to leave, as they trigger employees' attitudinal reciprocation toward the organization. These findings enhance our understanding of the psychological processes behind the relationship of LMX and work attitudes of employees.

Shore et al. (2006) predicted that employees with high economic exchange would display a high level of withdrawal, yet they did not find empirical support in their study. The present study provides some evidence for their prediction. We found that organizational social exchange and organizational economic exchange are related to affective commitment and intention to leave in different ways. Organizational social exchange has a stronger relationship with affective commitment than with intention to leave, while organizational economic exchange relates more strongly to intention to leave than to affective commitment. A possible explanation lies in the unique features of organizational social exchange (i.e., mutual trust and open-ended obligations), which are more relevant to employees' affective or emotional attachment to their organization, whereas organizational economic exchange is more instrumental and short-term oriented, and, thus, it has a greater impact on individuals' detachment from the organization.

Limitations

This study has a number of limitations. First, the cross-sectional design means that the causal relationships among the variables should be interpreted with caution. Second, all variables in this study were self-reported by the respondents. We have attempted to deal with this issue by controlling for the effect of a common method factor, but the possibility of inflated relationships among these perceptual measures due to common method variance cannot be ruled out completely. Third, our data were collected in one foreign-invested enterprise located in Southern China. The single sample design not only restricts the comparison of the exchange relationships in different forms of Chinese enterprises (e.g., state-owned enterprises and private firms), but also limits the generalizability of our findings. As firm types have been found to affect organizational culture (Tsui, Wang, & Xin, 2006), it is possible that employees working in different types of enterprises may perceive the exchanges with their organizations differently. Fourth, we have not directly measured the variables underlying the linkage between LMX and employee–organization exchanges, such as the level of resources exchanged in LMX, and employees' view of supervisors as organizational agents and their identification with them.

Practical Implications

On a practical level, our study demonstrates that the quality of LMX is crucial for the development of employee–organization exchange. Given that organizational social exchange is associated with some positive outcomes, it is desirable to establish high-quality LMX and, hence, to bring about a strong perception of social exchange among employees. In contemporary China, people are sensitive to their social roles and their reciprocal exchange with others (Chen et al., 2002). The relationally oriented nature of the Chinese culture makes LMX an important type of exchange relationship in the workplace (Aryee & Chen, 2006; Hui, Law, & Chen, 1999). In view of the above, organizations operating in China should train supervisors to cultivate long-term, trusting relationships with their subordinates. By doing so, strong social exchange relationships can form between employees and their organization.

Furthermore, our findings illustrate the differential impacts of organizational social and economic exchanges on affective commitment and intention to leave. Previous research noted that some Chinese firms are operating under a narrow employment relationship solely relying on materialistic rewards (Tsui, Wang, & Zhang, 2002). As such, employees place greater emphasis on their economic exchange relationships with their employers (Chen, 1995; Miller et al., 1998). Human resource management practices focusing mainly on economic rewards are likely to strengthen employees' perceptions of organizational economic exchange, which could adversely affect their attitudes toward the organization. To avoid this situation, organizations operating in China should carefully design their human resource management practices in such a way that promotes organizational social exchange.

CONCLUSION

Our study makes a unique contribution to the social exchange literature by linking LMX with employee–organization exchange. We showed that both organizational social and economic exchanges act as intervening mechanisms through which LMX affects employees' affective commitment and intention to stay with the organization. In an era when Chinese organizations are undergoing rapid changes and in a labour market where valued talents are in short supply and great demand, organizations that succeed in developing perceptions of social exchange by fostering high-quality exchange relationships between subordinates and their supervisors would have a competitive advantage. We hope this study sheds some insight on the much-needed research examining different exchange relationships in the Chinese workplace.

REFERENCES

Allen, N. J., & Meyer, J. P. 1990. The measurement and antecedents of affective, continuance, and normative commitment to the organization. ***Journal of Occupational Psychology,*** 63(1): 1–18.

Aryee, S., & Chen, Z. X. 2006. Leader-member exchange in a Chinese context: Antecedents, the mediating role of psychological empowerment and outcomes. ***Journal of Business Research,*** 59(6): 793–801.

Baron, R. M., & Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. ***Journal of Personality and Social Psychology,*** 51(6): 1173–1182.

Bartol, K. M., Liu, W., Zeng, X., & Wu, K. 2009. Social exchange and knowledge sharing among knowledge workers: The moderating role of perceived job security. ***Management and Organization Review,*** 5(2): 223–240.

Bentler, P. M., & Bonett, D. G. 1980. Significant tests and goodness of fit in the analysis of covariance structures. ***Psychological Bulletin,*** 88(3): 588–606.

Blau, P. M. 1964. ***Exchange and power in social life.*** New York: John Wiley & Sons.

Brislin, R. W. 1970. Back-translation for cross-cultural research. ***Journal of Cross-Cultural Psychology,*** 1(3): 185–216.

Brooke, P. P., Russell, D. W., & Price, J. L. 1988. Discriminant validation of measures of job satisfaction, job involvement, and organizational commitment. ***Journal of Applied Psychology,*** 73(2): 139–145.

Browne, M. W., & Cudeck, R. 1993. Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), ***Testing structural equation models:*** 445–455. Newbury Park: Sage Publications.

Byrne, B. M. 1998. ***Structural equation modeling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications, and programming.*** Mahwah, NJ: Lawrence Erlbaum Associates.

Chen, C. C. 1995. New trends in reward allocation preferences: A Sino-US comparison. ***Academy of Management Journal,*** 38(2): 408–428.

Chen, Z. X., Tsui, A. S., & Farh, J. L. 2002. Loyalty to supervisor versus organizational commitment: Relationships to employee performance in China. ***Journal of Occupational and Organizational Psychology,*** 75(3): 339–356.

Coyle-Shapiro, J. A., & Conway, N. 2004. The employment relationship through the lens of social exchange. In J. A. Coyle-Shapiro, L. M. Shore, M. S. Taylor & L. E. Tetrick (Eds.), ***The employment relationship: Examining psychological and contextual perspectives:*** 5–28. New York: Oxford University Press.

Coyle-Shapiro, J. A., & Shore, L. M. 2007. The employee-organization relationship: Where do we go from here? ***Human Resource Management Review,*** 17(2): 166–179.

Cropanzano, R., & Mitchell, M. S. 2005. Social exchange theory: An interdisciplinary review. ***Journal of Management,*** 31(6): 874–900.
Cropanzano, R., Rupp, D. E., & Byrne, Z. S. 2003. The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. ***Journal of Applied Psychology,*** 88(1): 160–169.
Cropanzano, R., Rupp, D. E., Mohler, C. J., & Schminke, M. 2001. Three roads to organizational justice. In G. Ferris (Ed.), ***Research in personnel and human resources management:*** 1–113. Oxford: Elsevier Science.
Ding, D. Z., & Warner, M. 2001. China's labour-management system reforms: Breaking the 'Three Old Irons' (1978–1999). ***Asia Pacific Journal of Management,*** 18(3): 315–334.
Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. 1986. Perceived organizational support. ***Journal of Applied Psychology,*** 71(3): 500–507.
Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. 2002. Perceived supervisor support: Contributions to perceived organizational support and employee retention. ***Journal of Applied Psychology,*** 87(3): 565–573.
Gakovic, A., & Tetrick, L. E. 2003. Perceived organizational support and work status: A comparison of the employment relationships of part-time and full-time employees attending university classes. ***Journal of Organizational Behavior,*** 24(5): 649–666.
Gerstner, C. R., & Day, D. V. 1997. Meta-analytic review of leader-member exchange theory: Correlates and construct issues. ***Journal of Applied Psychology,*** 82(6): 827–844.
Gouldner, A. W. 1960. The norm of reciprocity. ***American Sociological Review,*** 25(2): 165–178.
Graen, G. B., & Uhl-Bien, M. 1995. Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. ***Leadership Quarterly,*** 6(2): 219–247.
Griffeth, R. W., Hom, P. W., & Gaertner, S. 2000. A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. ***Journal of Management,*** 26(3): 463–488.
Hui, C., Law, K. S., & Chen, Z. X. 1999. A structural equation model of the effects of negative affectivity, leader-member exchange, and perceived job mobility on in-role and extra-role performance: A Chinese case. ***Organizational Behavior and Human Decision Processes,*** 77(1): 3–21.
Hui, C., Lee, C., & Rousseau, D. M. 2004. Employment relationships in China: Do workers relate to organization or to people? ***Organization Science,*** 15(2): 232–240.
Kelloway, E. K. 1998. ***Using LISREL for structural equation modeling.*** Thousand Oaks, CA: Sage.
Levinson, H. 1965. Reciprocation: The relationship between man and organization. ***Administrative Science Quarterly,*** 9(4): 370–390.
Liden, R. C., Bauer, T. N., & Erdogan, B. 2004. The role of leader-member exchange in the dynamic relationship between employer and employee: Implications for employee socialization, leaders, and organizations. In J. A. Coyle-Shapiro, L. M. Shore, M. S. Taylor & L. E. Tetrick (Eds.), ***The employment relationship: Examining psychological and contextual perspectives:*** 226–250. New York: Oxford University Press.
Liden, R. C., Sparrowe, R. T., & Wayne, S. J. 1997. Leader-member exchange theory: The past and potential for the future. In G. R. Ferris (Ed.), ***Research in personnel and human resources management,*** vol. 15: 47–119. Greenwich, CT: JAI Press.
Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. 2000. Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. ***Academy of Management Journal,*** 43(4): 738–748.
Miller, D. J., Giacobbe-Miller, J. K., & Zhang, W. J. 1998. A comparative study of Chinese and U.S. distributive justice values, goals, and allocative behaviors. In J. C. Cheng & R. B. Peterson (Eds.), ***Advances in international comparative management,*** vol. 12: 185–206. Stamford, CT: JAI Press.
Murphy, S. M., Wayne, S. J., Liden, R. C., & Erdogan, B. 2003. Understanding social loafing: The role of justice perceptions and exchange relationships. ***Human Relations,*** 56(1): 61–84.
Nee, V., & Cao, Y. 2005. Market transition and the firm: Institutional change and income inequality in urban China. ***Management and Organization Review,*** 1(1): 23–56.

Organ, D. W. 1990. The motivational basis of organizational citizenship behavior. In B. M. Staw & L. L. Cummings (Eds.), ***Research in organizational behavior:*** 43–72. Greenwich, CT: JAI Press.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. 2003. Common method biases in behavioral research: A critical review of the literature and recommended remedies. ***Journal of Applied Psychology,*** 88(5): 879–903.

Rhoades, L., & Eisenberger, R. 2002. Perceived organizational support: A review of the literature. ***Journal of Applied Psychology,*** 87(4): 698–714.

Rosin, H. M., & Korabik, K. 1991. Workplace variables, affective responses, and intention to leave among women managers. ***Journal of Occupational Psychology,*** 64(4): 317–330.

Rousseau, D. M. 1995. ***Psychological contracts in organizations: Understanding written and unwritten agreements.*** Thousand Oaks, CA: Sage.

Scandura, T. A., & Graen, G. B. 1984. Moderating effects of initial leader-member exchange status on the effects of a leadership intervention. ***Journal of Applied Psychology,*** 69(3): 428–436.

Schyns, B., & Paul, T. 2005. Dyadic leadership and organizational outcomes: Different results for different instruments. In G. B. Graen & J. A. Graen (Eds.), ***Global organizing designs:*** 173–203. Greenwich, CT: Information Age Publishing.

Seers, A. 1989. Team-member exchange quality: A new construct for role-making research. ***Organizational Behavior and Human Decision Processes,*** 43(1): 118–135.

Settoon, R. P., Bennett, N., & Liden, R. C. 1996. Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. ***Journal of Applied Psychology,*** 81(3): 219–227.

Sherony, K. M., & Green, S. G. 2002. Co-worker exchange relationships between co-workers, leader-member exchange, and work attitudes. ***Journal of Applied Psychology,*** 87(3): 542–548.

Shore, L. M., & Tetrick, L. E. 1994. The psychological contract as an explanatory framework in the employment relationship. In C. Cooper & D. Rousseau (Eds.), ***Trends in organizational behavior,*** vol. 1: 91–109. New York: John Wiley & Sons.

Shore, L. M., Tetrick, L. E., Lynch, P., & Barksdale, K. 2006. Social and economic exchange: Construct development and validation. ***Journal of Applied Social Psychology,*** 36(4): 837–867.

Shore, L. M., Tetrick, L. E., Taylor, M. S., Coyle-Shapiro, J. A., Liden, R. C., Parks, J. M., Morrison, E. W., Porter, L. W., Robinson, S. L., Roehling, M. V., Rousseau, D. M., Schalk, R., Tsui, A. S., & Van Dyne, L. 2004. The employee-organization relationship: A timely concept in a period of transition. In J. J. Martocchio (Ed.), ***Research in personnel and human resources management:*** 291–370. Oxford: Elsevier.

Song, L. J., Tsui, A. S., & Law, K. S. 2009. Unpacking employee responses to organizational exchange mechanisms: The role of social and economic exchange perceptions. ***Journal of Management,*** 35(1): 56–93.

Sparrowe, R. T., & Liden, R. C. 1997. Process and structure in leader-member exchange. ***Academy of Management Review,*** 22(2): 522–552.

Sparrowe, R. T., & Liden, R. C. 2005. Two routes to influence: Integrating leader-member exchange and social network perspectives. ***Administrative Science Quarterly,*** 50(4): 505–535.

Tekleab, A. G., Takeuchi, R., & Taylor, M. S. 2005. Extending the chain of relationships among organizational justice, social exchange, and employee reactions: The role of contract violation. ***Academy of Management Journal,*** 48(1): 146–157.

Tsui, A. S., Wang, D. W., & Zhang, Y. 2002. Employment relationships with Chinese middle managers: Exploring differences between state-owned and non-state-owned firms. In A. S. Tsui & C. M. Lau (Eds.), ***The management of enterprises in the People's Republic of China:*** 347–374. Boston, MA: Kluwer Academic Publishers.

Tsui, A. S., Wang, H., & Xin, K. R. 2006. Organizational culture in China: An analysis of culture dimensions and culture types. ***Management and Organization Review,*** 2(3): 345–376.

Tucker, L. R., & Lewis, C. 1973. The reliability coefficient for maximum likelihood factor analysis. ***Psychometrika,*** 38(1): 1–10.

Turnley, W. H., Bolino, M. C., Lester, S. W., & Bloodgood, J. M. 2003. The impact of psychological contract fulfillment on the performance of in-role and organizational citizenship behaviors. ***Journal of Management,*** 29(2): 187–206.

https://doi.org/10.1111/j.1740-8784.2009.00149.x Published online by Cambridge University Press

Uhl-Bien, M., Graen, G. B., & Scandura, T. A. 2000. Implications of leader-member exchange (LMX) for strategic human resource management systems: Relationships as social capital for competitive advantage. In G. R. Ferris (Ed.), ***Research in personnel and human resources management,*** vol. 18: 137–185. Stamford, CT: JAI Press.

Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X. 2005. Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. ***Academy of Management Journal,*** 48(3): 420–432.

Wayne, S. J., Shore, L. M., & Liden, R. C. 1997. Perceived organizational support and leader-member exchange: A social exchange perspective. ***Academy of Management Journal,*** 40(1): 82–111.

Wong, Y. T., Ngo, H. Y., & Wong, C. S. 2002. Affective organizational commitment of workers in Chinese joint ventures. ***Journal of Managerial Psychology,*** 17(7): 580–598.

Wong, Y. T., Ngo, H. Y., & Wong, C. S. 2003. Antecedents and outcomes of employees' trust in Chinese joint ventures. ***Asia Pacific Journal of Management,*** 20(4): 481–499.

Wong, Y. T., Wong, C. S., Ngo, H. Y., & Lui, H. K. 2005. Different responses to job insecurity of Chinese workers in joint ventures and state-owned enterprises. ***Human Relations,*** 58(11): 1391–1418.

Wu, J. B., Hom, P. W., Tetrick, L. E., Shore, L. M., Jia, L., Li, C., & Song, L. J. 2006. The norm of reciprocity: Scale development and validation in the Chinese context. ***Management and Organization Review,*** 2(3): 377–402.

Yukl, G., & Michel, J. W. 2006. Proactive influence tactics and leader member exchange. In C. A. Schriesheim & L. L. Neider (Eds.), ***Power and influence in organizations:*** 87–103. Greenwich, CT: Information Age Publishing.

Raymond Loi (rloi@umac.mo) is an Assistant Professor in the Department of Management and Marketing, University of Macau. He received his Ph.D. in Management from The Chinese University of Hong Kong. His research interests include international human resource management, organizational justice, career studies, and social exchange relationships.

Yina Mao (yinamao@baf.msmail.cuhk.edu.hk) is a current Ph.D. student in the Department of Management, The Chinese University of Hong Kong, where she received her M.Phil. Her research interests include organizational justice, social exchange, and mentoring in organizations.

Hang-Yue Ngo (hyngo@baf.msmail.cuhk.edu.hk) is a Professor in the Department of Management, The Chinese University of Hong Kong. He received his Ph.D. in Sociology from the University of Chicago. His research interests include gender and employment, human resource management, and organizational studies. He has published widely on these areas in international journals.

Manuscript received: November 28, 2007
Final version accepted: May 7, 2009
Accepted by: Lynn M. Shore