Three Essays on Leader-Member Exchange in U.S. and China

By

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Dissertation
Submitted to the Faculty of the
Graduate School of Vanderbilt University
in partial fulfillment of the requirements
for the degree of
DOCTOR OF PHILOSOPHY
in
Management
August, 2011
Nashville, Tennessee

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To my husband Xiaodong for his love, encouragement, and support

To my daughter Katherine, who is the joy of my life

and

To my mom, who taught me the importance of perseverance and self-discipline
ACKNOWLEDGEMENTS

This work would not have been possible without support and help from many individuals. First, I would like to thank my dissertation committee for their guidance, insights, and encouragement. I am greatly indebted to Professor Ray Friedman, my advisor and the chair of the committee who has been a great role model for me. Not only is he a productive researcher, a sharp thinker, he is also a devoted professor and a caring mentor. Looking back the journey of my Ph. D. studies, it would not have been possible for me to go through a difficult time without his trust and support. Many thanks for my other committee members, Professor Gardner, Professor Sparrowe, and Professor Ramanujam, who devoted their time to help me develop as a researcher and to provide me valuable feedback and suggestions both for my dissertation and my career development.

It almost seemed mission impossible at the first beginning to collect data needed for my dissertation from both U.S. and China. I am grateful for my old friend and collaborator Professor Enhai Yu who helped me collect data in China. He is one of the most wonderful collaborators I have ever had. I would also like to acknowledge the great assistance of E-lab at Owen for the data collection in U.S.

I thank my fellow students at Owen Ph. D. program, Wu Liu, David Touve, Janson Stansbury, David Oh, Yulan Han, Likuo Sung, Lixiong Guo, Shage Zhang, Sanjukta Kusari, Aditi Bala, and Atul Tankha for their friendship, support, and encouragement throughout the process.

Finally, I would like to thank my family for their endless love and support. My parents have always encouraged me to pursue my dream even though they may disagree
with my career choices. I hope the completion of my dissertation would bring smiles to
their faces. My deepest appreciation goes to my dear husband Xiaodong who has always
believed in me and has had the magic power to help me see things in bright side. This
endeavor would not have been possible without his sacrifice, love, and support.
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INTRODUCTION

This dissertation consists of three separate essays--each can stand on its own but all also are connected to each other by a common theme--a cross-cultural comparison of leader-member exchange (LMX) in U.S. and China.

In the past decades, more and more Western firms have made significant inroads into East Asia, while at the same time, more and more firms from East Asia have expanded their business operations to the West. Managers from both the East and the West face challenges of leading a more culturally diverse workforce; therefore, understanding the cultural schemes of supervisor-subordinate relationships is important for managers from both regions to manage effectively. Given the trend of increasing globalization, failure to understand these differences in relational modes can result in damages that can cause a sense of intrusion, rejection (Morris, Podolny, & Sullivan, 2008), low morale, conflict, and even the failure of joint ventures (Hui & Graen, 1997).

In Essay One, I apply the traditional Western LMX theory as a theoretical framework to investigate whether LMX differentiation functions differently in the U.S. and China. LMX differentiation is defined as the degree of variability in the quality of LMX relationships within work groups. LMX differentiation theory as currently developed does not take into consideration differences across national cultures in how employees relate to their work groups. The purpose of this essay is to develop a culturally-informed theory of LMX differentiation, proposing that the relationship between differentiation and individual and team performance is positive in Western cultures but negative in Asian cultures and to test these hypotheses using data from 125 groups collected from China and the United States.
In Essay Two, I try to extend the current LMX theory by developing a more complete model of LMX. I argue that the current state of research on supervisor-subordinate relations has been dominated by the Western LMX paradigm; an indigenous concept from the East, leader-member guanxi has been neglected in current theorizing of supervisor-subordinate relations. Guanxi is defined as ‘a dyadic, particular and sentimental tie that has potential of facilitating favor exchanges between the parties connected by the tie’ (Bian, 2006: 312). I suggest that a cross-cultural model of LMX should include both the work-focused elements of exchange that are the core of LMX theory (what I call W-LMX, or Work-LMX) and the social or personal elements of exchange that are the core of guanxi theory (what I call P-LMX, or Personal LMX).

In Essay Three, using 125 groups from U.S. and China, I empirically test some of the main ideas developed in Essay Two where I investigate responses to W-LMX and P-LMX from a multi-cultural perspective. Specifically, I examine the extent to which P-LMX and W-LMX are correlated for Chinese and American employees. Furthermore, I explore cultural similarities and differences in responses to W-LMX and P-LMX as well as W-LMX differentiation and P-LMX differentiation.
CHAPTER I

DOES IT HELP TEAMS TO DIFFERENTIATE LMX RELATIONS: OPPOSITE ANSWERS FROM EAST AND WEST

One of the central contributions of Leader-Member Exchange theory has been to demonstrate that the discretionary attitudes and behaviors of employees are related to the quality of the relationships that leaders form with them (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Liden, Sparrowe & Wayne, 1997). What distinguishes the LMX perspective from other leadership frameworks is its emphasis on the leader-member dyad. Rather than assuming leaders form relationships of relatively equal quality with group members, this approach recognizes the possibility that leaders differentiate; that is, they form dyadic relationships of varying quality among their members (Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986). The quality of dyadic leader-member relationships is related to members’ organization commitment (e.g. Nystrom, 1990), intentions to remain with the organization (e.g. Major, Kozlowski, & Chao, 1995), and various dimensions of job performance (e.g. Wayne, Shore, & Liden, 1997).

Although LMX theory shows differentiation of leader-member relations within work groups, much of the research has occurred wholly at the dyadic level of analysis. Any potential effects on members’ attitudes and behaviors from working in groups where leaders form high quality relationships with some individuals and low quality relationships with others simply have not been examined – at least not until relatively recently. New research shows that what matters is not just each individual dyadic relationship but also the extent to which leaders differentiate in the quality of relationships they form with members (Erdogan & Bauer, in press; Henderson, Wayne, Way,
Shore, Bommer, & Tetrick, 2008; Hooper & Martin, 2008; Liden, Erdogan, Wayne, & Sparrowe, 2006). In this stream of research, one of the primary theoretical perspectives used to account for the effects of LMX differentiation on members is that of fairness (e.g. Erdogan & Bauer, in press). That is, members engage in social comparison with others in their work groups, evaluating the extent to which the relational resources they receive from the leaders are commensurate with their contribution to the work of the group; where unfair allocation is perceived, members withhold discretionary effort (Erdogan, 2002).

This study builds on the theoretical foundations of previous work on LMX differentiation, focusing on the question of whether the effects of leaders’ differential treatment on members’ job performance depend upon culture. The factor that motivates our inquiry is the existence of different relational models in the West and the East (Parsons, 1951; Morris, Podolny, & Sullivan, 2008). As House and Aditya (1997) point out, current LMX theory assumes individualistic culture preferences when thinking about how exchanges are built and maintained. Likewise, LMX differentiation theory as currently developed does not take into consideration differences across national cultures in how employees relate to their work groups. We develop a culturally-informed theory of LMX differentiation, proposing that the relationship between differentiation and individual and team performance is positive in Western cultures but negative in Asian cultures, and test these hypotheses using data collected from China and the United States.

In addition to looking at the overall impact of LMX differentiation on performance across Western and Asian cultures, we explore how these differences occur. Taking a dynamic constructivism view of culture (Hong, Morris, Chiu, & Benet-Martinez,
we argue that LMX differentiation produces situational pressures that shape the emergence of team-level collectivism. Because LMX differentiation visibly distinguishes among members in the quality of the relationship and resources exchanged with the leader, it is expected to undermine group-level collectivism in Chinese work teams – and, through undermining group collectivism, have a negative impact on individual and team performance. In contrast, in the United States, LMX differentiation is expected to enhance team-level collectivism, thus improving individual and team performance. Figure 1.1 visually depicts the relationships as hypothesized in our theoretical model.

The primary contributions of this research, thus, are to develop and test the theory that illuminates the cultural context of the relationship between LMX differentiation and individual and team performance, and to point to the key intervening mechanism, team-level collectivism, in these relationships.
Theory and Hypotheses

An emerging literature suggests that the effects of LMX differentiation on individual and group performance may be context dependent. For example, Liden et al. (2006) found positive effects of LMX differentiation on group performance as long as task interdependence was high. However, Erdogan and Bauer (in press) reported that LMX differentiation was associated with more negative work attitudes, less coworker helping, and higher levels of withdrawal behaviors only when justice climate was low. If there already exists a base of suspicion about fair treatment, then differentiation hurts attitudes; if there is a strong base of fairness, then differentiation does not matter. So, while task interdependence may make LMX differentiation more effective, perceptions of unfairness may delegitimize LMX differentiation, creating a backlash against it; the negative impact of differentiation seems to come from group perceptions of how fair or appropriate it is for leaders to have better relations with some members while having worse relations with other members. This view echoes one of the earliest theoretical statements regarding how fairness is the relevant context for understanding the relationship between LMX differentiation and discretionary attitudes and behaviors: “LMX and work group differentiation may be perceived very differently, based upon whether norms of equity or parity (equality) are operating in the leader's decisions regarding allocation of work group resources” (Scandura, 1999, page 29).

The core risk of differentiation is that relations between team members may be undermined. Since social relations are at the core of LMX differentiation risk, it seems highly likely that culture may impact employee reactions to LMX differentiation. Culture
defines the relationship between the individual and the group and the importance of the relationship among group members. Therefore, it is important to take cultural context into account while studying the effects of LMX differentiation. By looking at the cross-country similarities and differences on the effects of LMX differentiation on individual performance and group performance, we may get a better understanding of the role of cultural background on the effects of LMX differentiation on individual and group performance.

**LMX differentiation in China and the U.S.**

We derive our hypotheses regarding the relationship between LMX differentiation and performance using the group engagement model (Tyler & Blader, 2003), but modifying one of its central tenets to bridge from Western to Asian cultures. According to group engagement model (Tyler & Blader, 2003), employees’ level of cooperation within a team or group is primarily determined by the extent to which they identify with the group. The quality of the relationships leaders form with members serves as highly salient cues regarding their relative standing within the group (Sparrowe, Soetjipto, & Kraimer, 2006). Members with relatively high standing are more likely to identify with the group, resulting in emotional attachment and feelings of pride due to being a member of it. Because members seek to maintain and enhance their positive social identity with their group, those who have (or expect that they could have) high relative standing within the group are more likely to perform better and engage in more discretionary behaviors to help achieve group goals and objectives (Tyler & Blader, 2003).

The above view, however, reflects the preferences of those with a Western cultural focus since it implies that relative standing within the group occurs when the
leader differentiates among members as individuals. Differentiation is accepted because it produces a sense of equity – which is the allocation of rewards proportional to the contribution made (Erdogan, 2002). This approach to recognition and rewards is consistent with Western culture in the sense that standing is determined by individual accomplishment – one has standing relative to other members of the group to the degree that one shows greater accomplishment than others. Group acknowledgment comes from distinguishing oneself from others. Moreover, members enact and enhance their relative standing through autonomous (discretionary) cooperation with other members of the group – cooperation is offered by individuals who want to be recognized in order to achieve higher relative standing.

In China, by contrast, the basis for standing is not the relative contribution of each individual, but rather the degree to which one is a non-differentiated member of the total group. According to Bond and Kwang (1986), Chinese have a tendency to prefer equalitarian treatment among employees. Chen, Chen, and Meindl (1998) argued that equality-based reward systems boost long term cooperation within groups in a collectivist culture. As is said in a Confucian aphorism, there should be “no worry about scarcity but unevenness.” In high LMX differentiation situations in Chinese work groups, the equality rule is broken, and Chinese workers may become less attached to their groups.

Consistent with the group engagement model, we hold that motivation to cooperate follows from identification with the group, just as in the U.S., but the basis for identification is the preservation of the whole rather than recognition of the individual. Low LMX differentiation, then, cues members that standing and identification come when the individual is subsumed by the group. Thus, lack of LMX differentiation is
potentially beneficial in China but damaging in the U.S., because the basis for identification and standing is undermined by LMX differentiation in China but enhanced by LMX differentiation in the U.S. When differentiation is high, relative standing is made explicit so that U.S. members see an opportunity to enact and enhance individual recognition of their value to the group. But for Chinese employees, high LMX differentiation tears at the collective fabric of identification and standing, so their identification with the group and cooperation with group members decreases.

Hypothesis 1. US/China moderates the relationship between LMX differentiation and individual performance (and OCBs) such that the relationship between LMX differentiation and individual performance (and OCBs) is negative for Chinese but positive for American employees.

In summary, we contend that the group engagement model holds across both countries because identification and standing drive cooperation in groups everywhere. What matters, though, are the bases for and nature of standing. In China, group identification comes from subsuming the individual within the collective, so equal standing is more likely to enhance identification with the group. In the U.S. standing is determined by each member’s performing more strongly relative to others in the group. While high LMX differentiation in China may make employees feel less attached to the group, high LMX differentiation in US will be seen by employees as an opportunity to enhance their value to the group.

The group engagement model discusses the impact of group identification on individual performance. We expect the impact to be more extensive, affecting team performance as well as individual performance and OCBs. If individuals are performing
well within a team, and if they are acting in ways to help and support the team (that is, engaging in OCBs), then the team itself should perform better. Indeed, empirical studies have found that individual OCBs were related positively to both individual performance (Bommer, Dierdorff, & Rubin, 2007) and group performance (Podsakoff, Ahearne, & MacKenzie, 1997). OCBs enhance group performance because they make the organization function more smoothly, help reduce friction and cost, and increase work efficiency (Smith, Organ, & Near, 1983). Thus, to the degree that LMX differentiation enhances or diminishes individual performance and OCBs (as predicted in H1), it should also enhance or diminish group performance.

Hypothesis 2. U.S./China moderates the relationship between LMX differentiation and team performance such that the relationship between LMX differentiation and team performance is negative for Chinese employees but positive for American employees.

We expect that the way in which group identification has this impact on group performance, as well as on individual performance, is through the way it shapes the culture of the group or team.

The mediating role of team-based collectivism

Our theory specifies that LMX differentiation is positively related to individual and team performance in the U.S. but negatively related to individual and team performance in China, and these opposite relationships are attributable to differences in the emergence of team-based collectivism.

Collectivism is a cultural pattern in which members’ definition of self is based on their group identity, and members look out for the well-being of the group and have a
desire to maintain strong, harmonious relationship with others (Markus & Kitayama, 1991; Triandis, 1995). In the East, people view themselves as interdependent and put more emphasis on harmonious relationships, whereas people in the West view themselves as independent and are more oriented toward task achievement (Kim, Triandis, Kagitcibasi, Choi, & Yoon, 1994). Although collectivism has often been discussed on the national (Hofstede, 1980; Schwartz, 1994) and individual levels (Triandis, 1989), recently it has also been conceptualized as a group- or team-level variable. Team collectivism is defined as the degree to which the interests and well-being of the group take precedence over that of individual members (Colquitt, Noe, & Jackson, 2002). Kirkman and Shapiro (2001) have found that team collectivism was related positively to cooperation. Schaubroeck and his coauthors (2007) demonstrated that team collectivism moderates the relationship between transformational leadership and team potency. Thus, collectivism is a meaningful dimension not only at the national and individual level but also at the group level.

A major factor that we believe can change collectivism within a work team is LMX differentiation, since it has an impact on group identity and thus the degree to which each person commits to the team as a collective. Group identity, we have argued, enhances investments in team and increases commitment to the team. If all members of a team invest more in the team, in terms of their identity and behaviors, then this is exactly the condition that is likely to enhance team collectivism. However, as we discussed above, the impact of LMX differentiation on identification with the team should be opposite in China and the U.S. due to differences in how members engage with the group (that is,
through equity versus equality). Thus, LMX differentiation will have opposite impacts on team collectivism in the U.S. and China.

Hypothesis 3. China/U.S. moderates the relationship between LMX differentiation and team collectivism such that LMX differentiation is related positively with team collectivism for American employees while LMX differentiation is related negatively with team collectivism for Chinese employees.

The theory developed above refers to culture at two different levels. First, we talk about culture that is associated with national boundaries – US and China. Second, we talk about culture within teams (team collectivism). What is common in these two levels is a dynamic constructivist view of culture. In this dynamic approach, culture is defined as “a network of shared knowledge that is produced, distributed, and reproduced among a collection of interconnected individuals” (Chiu & Hong, 2006: 31). This dynamic view of culture treats cultural tendencies (and even multiple cultural tendencies) as being carried within individuals, but what is expressed depends on the social context that triggers or reinforces those tendencies. As Hong and her coauthors demonstrated (Hong et al., 2000), bicultural Hong Kong Chinese could think and behave in Western ways when triggered by American icons, but think and behave in Chinese ways when triggered by Chinese icons. The key factor triggering cultural expressions is context. In our case, one context is country – when we look at Chinese in China and Americans in America, each is informed by the norms of behavior and social expressions reinforced by expectations of those around them. At the same time, Chinese and Americans spend time in more local environments such as teams that have their own distinct sets of norms and expectations.
Team-based collectivism and performance

The relationships between collectivism and individual and group performance for routine tasks has been well established. Research demonstrates that collectivism can be conducive to team performance. A review of the literature of collectivism concluded that collectivism enhances cooperation in group and team settings (Gelfand, Bhawuk, Nishii, & Bechtold, 2004). Kirkman and Shapiro (2001) found that collectivists are less likely to resist team work than individualists, and collectivists expect a much broader scope of team work activity by team members. They also found that teams higher in collectivism were more cooperative, empowered, and productive. Team collectivistic orientation, as well, consistently has been related to cooperative team behaviors (Wagner, 1995), and these cooperative team behaviors, in turn, lead to high team performance (Eby & Dobbins, 1997).

Hypothesis 4. Team collectivism is positively related to team performance.

High levels of team collectivism orientation can also relate positively to individual performance. In high team collectivism environments, employees share information, cooperate, and engage in less social loafing (Cox, Lobel, & Mcleod, 1991; Earley, 1989, 1993), which will be beneficial to individual performance. Collectivism orientation should also enhance helping behaviors of employees since collectivism shifts the focus from self-interest to group interest. Since OCBs are intended to support the well-being of the group and the collective (Moorman & Blakely, 1995), we should expect such behaviors to increase when team collectivism is increased. Research has already found a positive link between individual collectivism orientation and OCBs (Van Dyne, Vandewalle, Kostova, Latham, & Cummings, 2000).
Hypothesis 5. Team collectivism will be positively related to individual job performance and OCBs.

**Mediated moderation**

Taken together, the hypotheses presented above form the foundation for asserting a mediated moderation model. That is, the relationship between LMX differentiation and individual and team performance that is moderated by national culture (China versus the U.S.) is mediated by team-based collectivism. Given the expected impact of team collectivism on group and individual outcomes, we should expect that those factors which enhance or diminish team collectivism should also have an impact on group and individual outcomes. Thus, cross-cultural differences in the impact of LMX differentiation on performance expressed in H1 and H2 should be mediated by team collectivism.

Hypothesis 6. Team collectivism orientation mediates the moderated impact of LMX differentiation on individual performance, OCBs, and group performance.

**Methods**

**Sample and procedures**

We tested the hypotheses using data from 125 groups of 586 employees, collected in the P.R.C. and the U.S. The main reason that we chose these two countries is that they have different relational norms (Morris et al, 2008) and they are the two largest economies of the world.
The research design that we used to conduct this study involved taking samples from companies that were similar in industry and size. Chen (1995) used this sampling strategy to study cross-culture reward allocation. When approaching the companies, we asked for groups with 2-10 members. After each organization’s leadership decided to participate in the study, managers identified employees that would be potential participants. Respondents were advised that their participation in the study was strictly voluntary and confidentiality was assured. Researchers then sent questionnaires to employees, and they themselves collected the questionnaires directly from employees. We consider employees to be members of a work unit or group if they had a common supervisor and worked together on the same shift. The language used in the survey conducted in China was Chinese; and in the United States, English.

The initial U.S. sample included 68 work groups, with 402 group members from eleven organizations, mainly in manufacturing and service industries. They were surveyed via web survey or hardcopy survey, and 373 replied, for a response rate of 93 percent. After deleting missing data in the HLM analysis, the final U.S. sample included 64 groups with 355 employees. The mean group size was 5.59 members (SD=3.07); groups ranged from 2 to 13 members. Within-group response rates ranged from 67 to 100 percent, with an average of 94 percent. The response rate for supervisors was 98 percent.

The initial Chinese sample for this study consisted of 250 group members from twelve organizations in 65 groups in manufacturing, power generation, and service industries. They were surveyed via hardcopy survey, and 250 replied, for a response rate of 99 percent. Participating organizations were drawn from both northern and southern China, but most of the firms were located in northern China. After deleting the missing
data in HLM analysis, the final Chinese sample was comprised of 61 groups of 231 employees. The mean group size was 3.84 members (SD=1.44); groups ranged from 2 to 10 members. Within-group response rates ranged from 75 to 100 percent, with an average of 98 percent. The response rate for supervisors was 100 percent.

Looking at subordinates, the U.S. and Chinese samples did not differ significantly in sex or education. Overall, 40% of subordinates were female, 14% had a high school diploma, 21% had a degree from a professional training program, 18% had an Associate’s degree or some college experience, 38% had an undergraduate degree, and 10% had earned a graduate degree. However, compared to subordinates in the U.S. sample, Chinese subordinates were significantly younger, and they had longer organizational tenure. The average age for Chinese subordinates was 33.98 years versus 39.77 years for American subordinates. The average organizational tenure was 11.12 years for Chinese versus 7.57 years for American.

Looking at supervisors, the U.S. and China samples did not differ in sex but differed significantly in age, education, and organization tenure. Chinese supervisors in the sample were slightly younger: the average age was 39.93 years for Chinese supervisor versus 42.23 years for American supervisors. Chinese supervisors had significantly lower educational level and longer organization tenure compared to their American counterparts. The average education level for the Chinese was between some college experience and a bachelor’s degree and for Americans between a bachelor’s degree and graduate degree. The average organizational tenure was 17.08 years for Chinese and 9.81 years for Americans.
Measures

For all scales, a 7-point Likert scale was used (1 = strongly disagree to 7 = strongly agree). In China, surveys were translated and back-translated into Chinese following Brislin’s (1980) recommended back translation procedure. We also examined and reported cross-cultural measurement invariance below.

LMX differentiation. We measured LMX quality using the LMX-7 scale (Scandura & Graen, 1984). Sample items include, “My supervisor understands my problems and needs” and “it is very likely my supervisor would use his/her power to help me solve problems at work.” The reliability for LMX was .91. Consistent with Liden et al. (2006), we calculated within-group variance in LMX to operationalize LMX differentiation.

Team Collectivism. Four item scales developed by Triandis and Gelfand (1998) were used to measure collectivism. Sample items include, “I care about the well-being of my co-workers” and “If a co-worker gets a prize, I would feel proud.” The reliability for collectivism was .89. Team-level collectivism orientation was aggregated from individual level collectivism. To assess the viability of creating a variable to represent shared perceptions of team level collectivism orientation, we examined three complementary measures of within-group agreement. These measures were \( r_{wg} \), ICC (1), and ICC (2). We also calculated the F-statistic from a one-way ANOVA to determine the between-group variance for group level collectivism orientation. We computed \( r_{wg} \) values using the approach recommended by James, Demaree, and Wolf (1984). James and colleagues (1984) recommended 0.70 as the threshold for asserting that work unit members have developed shared perceptions on certain aspects of their experiences. The mean and
median of $r_{wg}$ was 0.93 and .96 respectively, indicating high agreement within groups on collectivism values.

ICC (1) provides an estimate of the reliability of a single individual rating of the unit mean. Its values can range from -1 to +1, and 0.12 is typically regarded as an acceptable cutoff point (Bliese, 2000). ICC (2) provides an overall estimate of the reliability of the unit means. The closer the value is to 1, the more reliable the unit means. Generally, values equal to or above 0.70 are acceptable (Klein, Conn, Smith, & Sorra, 2001). ICC (1) and ICC (2) calculated from an ANOVA were 0.55 and 0.85 respectively in this study, indicating high interrater reliability and high group mean reliability. In addition, results from the one-way ANOVA showed significant mean differences among groups ($F=2.47$, $df=130$, $p<.001$). On the basis of these results, we concluded that aggregation of individual level collectivism to group level shared perceptions of collectivism practice is justified.

**Individual performance and group performance.** The immediate group supervisors provided a performance rating for each individual employee they supervised. We used three items from an instrument that was originally developed by Heilman, Block, and Lucas (1992) and has been used in cross-cultural studies in U.S. and China showing good reliabilities (e.g. Lam, Chen, & Schaubroeck, 2002). The three items were “This employee is very competent,” “this employee gets his or her work done very effectively,” and “This employee has performed his/her job well.” Supervisors also provided performance ratings for each group they led, using three items that were also originally developed by Heilman et al. (1992) and have been used in cross-cultural studies (e.g. Lam et al., 2002): “This group is very competent,” “This group gets the work done very
effectively,” and “This group has performed the job well.” The reliabilities for individual
and group performance were .91 and .92, respectively.

**Organizational citizenship behavior.** We measured one dimension of OCB—conscientiousness—using measures developed by Podsakoff and his colleagues (1990). Given that supervisors had to rate multiple employees (sometimes up to thirteen), we had to limit somewhat the number of items a supervisor had to fill out for each employee. Given various components of OCB, we chose to focus on conscientiousness because it is the most substantively meaningful component of OCB for job performance. Conscientiousness usually refers to the behavior that goes well beyond the minimum role requirements of the organization (Podsakoff, Mackenzie, Moorman, & Fetter, 1990). Conscientiousness, originally called “generalized compliance” by Organ (1988), is a good indicator of the extent to which employees are committed to the work and to the general adherence to the organizational rules that are designed to facilitate the functioning of work groups as well as the organization. Sample items include: “Attendance at work is above the norm” and “obeys company rules and regulations even when no one is watching.” The reliability for this measure was .76.

**Control variables**

We controlled for individual *LMX quality* in all our analyses; hence, we took into account one’s own relationship quality with the supervisor. We also controlled for LMX median which indicates the overall level of LMX quality within each group as LMX differentiation, and LMX means were usually correlated significantly. By controlling the overall quality of LMX within a group, we can ensure that any observed effects of LMX differentiation on outcomes were not driven by group level LMX. We also
controlled group size for all the analyses. Group size was operationalized as the number of employees in the work group. In addition, when conducting cross-level mediation analysis, we controlled the individual level collectivism orientation, while the team collection was included in the level 2 equation.

We controlled all the demographic variables where there were mean differences in the Chinese and U.S. samples. At the individual level, we controlled employees’ age and organizational tenure. At the group level, we controlled supervisors’ age, education and organizational tenure. Age and organizational tenure were measured in years for both supervisors and employees. Education was measured in five ordered categories: high school, some professional training, some college experience, bachelor’s degree, and graduate degree.

**Sampling check**

Consistent with the approach used in the prior research (e.g. Brett, Tinsley, Shapiro, & Okumura, 2007), we tested whether our samples of American and Chinese employees had a cultural value profile similar to the profile that has been documented in the literature. As expected, Chinese employees scored significantly higher than American employees on individual-level collectivism ($mean_{\text{china}}=6.36$, $mean_{\text{U.S.}} = 5.89$, $t = -6.85$, $p<.001$). In addition, Chinese employees also scored significantly higher than American employees on power distance. ($mean_{\text{china}} = 4.41$, $mean_{\text{U.S.}} = 3.69$, $t = -8.35$ $p<.001$).

**Measurement equivalence**

Measurement equivalence refers to the extent to which respondents from different groups interpret and respond to a given measure in a similar manner (Vandenberg & Lance, 2000). It is important to ensure measurement equivalence in cross-culture research
Lack of measurement equivalence indicates that test scores do not have the same meaning across groups. As a result, it is difficult to interpret differences in mean scores of the measure across groups; therefore, researchers should demonstrate that the members of different culture groups share a common understanding of the scale indicators.

As the literature indicates, there are quite a number of measurement invariance (MI) tests; and which MI tests should be conducted depends on the purposes of such tests (Vandenberg & Lance, 2000). In the present study, what we needed to do in terms of MI tests was to examine whether measures administered in English captured the same underlying constructs as respective measures administered in Chinese. In addition to supporting this using translation-back-translation procedures, we needed to show that (a) the measurement model capturing the four focal constructs (LMX, collectivism, individual performance and OCB) fit well in each respective language, and (b) items related similarly to their intended factors (equal factor loadings) across two languages and two samples. To fulfill the above purposes, we conducted two major tests of MI: configural equivalence (invariance) and metric equivalence (invariance). Configural equivalence refers to the equality of factor structure or equal number of factors and factor patterns. The test of metric equivalence examines whether factor loadings for like items are invariant across groups; in other words, whether the construct is manifested in the same way.

Invariance testing across groups has the assumption of the well-fitting single group model; so, before we conducted multi-group confirmatory factor analysis, we first conducted CFA separately for the Chinese and the U.S. samples to establish baseline
models. This gave a general overview of the factor structures in both groups. Results showed the hypothesized four-factor model which includes LMX, collectivism, individual performance and OCB fits the data well using both the U.S. data ($X^2=279.76$, df=113, RMSEA=.06, CFI=.95, SRMA=.05) and the China data ($X^2=310.64$, df=113, RMSEA=.07, CFI=.95, SRMA=.05).

Then we employed multi-group CFA with covariance matrices to examine the measure equivalence of the constructs used in this study. Configural invariance is demonstrated by showing good fit of indices in the single-sample confirmatory factor analysis. If configural invariance can be demonstrated, we can examine metric equivalence (Vandenberg & Lance, 2000). Metric equivalence is examined to see whether all factor-loading parameters are equal across groups by comparing changes in fit indices between the constrained and unconstrained modes when multi-group CFA is conducted. We used the rule recommended by Cheung and Rensvold (2002) to examine the change in model fit. Cheung and Rensvold (2002) recommended the $\Delta$ CFI>.01 rule to flag a decrease in fit, rather than the biased $X^2$ difference test, because their stimulations suggests that $X^2$ difference test is subject to the sampling errors and the $\Delta$ CFI>.01 rule is more stable.

The results for configural MI showed that the samples had configural equivalence. $X^2=594.64$, df=226, CFI=.944, RMSEA=.05, SRMR=.05. For the test of metric equivalence, results showed the good support for the more constrained model fit, $X^2=630$, df=239, CFI=.941, RMSEA=.05, SRMR=.05. Furthermore, the change of CFI values between the more constrained model and unconstrained model is smaller than .01. Thus,
we have sufficient evidence that supports that the measures used in the present study captured the same constructs’ structure and meanings in the U.S. and China.

**Results**

Table 1.1 shows the means, standard deviations, and intercorrelations among variables.

**Analysis**

Employees were nested within groups, creating a hierarchical data structure with three levels of random variation: variation among individual employees (level 1), variation among group differentiation within an organization (level 2), and variation among organizations (level 3). Because of this nested data structure, we used hierarchical linear modeling (HLM) to test hypotheses in which the dependent variables are individual level variables. In particular, LMX differentiation and group level collectivism orientation are level two variables, whereas individual performance and organizational citizenship behavior are individual level dependent variables. When the dependent variable is a group-level variable such as group performance, we use OLS to test the hypotheses.

We first estimated the three-level null model with no predictors for the two individual outcomes in this study (employees’ individual performance and OCB). We found that there was significant level 2 (group level) variance for both individual performance and OCB; however, we did not find significant variance at level 3 (organization level). Due to the fact that there was no significant variance at the
organization level and the variance was not only insignificant but also extremely small, we decided to use a two-level HLM model to conduct our further analyses. Even though we did not conduct a three-level HLM analysis, it was still very important that we tested the variance at the organization level. By knowing that there was not only insignificant but also close-to-zero variance among organizations, we ruled out the possibility that the relationship between predictors could be caused by the omitted variable bias at the organizational level. In other words, one should be less concerned that omitted organizational level variables, such as organizational culture, could cause the relationships we predicted because there was no unexplained variance at the organizational level for any of the outcome variables. Following the recommendation of Hofmann and Gavin (1998), we grand-mean-centered all level 1 predictors in all the HLM analyses.
TABLE 1.1
Means, Standard Deviations and Intercorrelations among Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
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<td>3. Individual collectivism orientation</td>
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<td>.87</td>
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<td>.08</td>
<td></td>
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<td></td>
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<td>4. Leader-member exchange (LMX)</td>
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<td>-.11*</td>
<td>.01</td>
<td>.41***</td>
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<td>5. Individual in-role performance</td>
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<td>.29***</td>
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<td>7.86</td>
<td>-.17**</td>
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<td>3. Manager’s education</td>
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<td>-.29***</td>
<td>.18*</td>
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<td>4. Manager’s organizational tenure</td>
<td>13.36</td>
<td>7.25</td>
<td>.51**</td>
<td>.29***</td>
<td>-.15*</td>
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<td>5. Group size</td>
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<td>2.56</td>
<td>-.42***</td>
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<td>.33***</td>
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<td>6. LMX median</td>
<td>5.81</td>
<td>.81</td>
<td>.23**</td>
<td>0.09</td>
<td>0.01</td>
<td>.18*</td>
<td>-.12**</td>
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<td>7. LMX differentiation</td>
<td>.8</td>
<td>.50</td>
<td>-.25***</td>
<td>-.04</td>
<td>.16*</td>
<td>-.28**</td>
<td>.11**</td>
<td>-.36***</td>
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<tr>
<td>8. Team collectivism</td>
<td>6.1</td>
<td>.62</td>
<td>.42***</td>
<td>-.02</td>
<td>-.00</td>
<td>.25**</td>
<td>-.14***</td>
<td>.60***</td>
<td>-.26***</td>
<td></td>
</tr>
<tr>
<td>9. Group performance</td>
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<td>.11</td>
<td>.14</td>
<td>.08</td>
<td>.05</td>
<td>.36***</td>
<td>-.13</td>
<td>.37***</td>
</tr>
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</table>

Note. For individual level correlations, n = 586. For group-level correlations, n = 125. * p<.10; **p<.05; ***p<.01; ****p<.001.
Tests of Hypothesis 1: Analyses of country as a Moderator

Hypothesis 1 predicts a cross-level interaction between LMX differentiation and country on individual performance and OCB. To test hypothesis 1, we first specified two sets of intercepts-as-outcomes models for individual performance and OCB separately. In Models 1 and 5 of Table 1.2, we entered individual level LMX quality, employees’ ages and tenure as control variables in level-1. In level-2, we entered LMX median, group size, manager’s organizational tenure, country, and LMX differentiation as predictors of the intercept. In Model 2 and 6 of Table 1.2, we entered the interaction term of LMX Differentiation and Country as a predictor of the intercept.

We found, as shown in Model 2 and Model 6 of Table 1.2, Country*LMX differentiation had a significant relationship with the two individual level outcome variables: individual performance ($\gamma = -0.43, p<.05$) and OCB ($\gamma = -0.52, p<.05$). Because U.S. is coded as 0 and China is coded as 1, these interactions terms showed that the relationship between LMX differentiation and individual performance, as well as OCB, were stronger for Chinese employees than for American employees. Using Aiken and West’s (1991) procedure, we plotted the results in Figure 1.2 and Figure 1.3. Separate analysis of each country’s sample indicated that for Chinese employees LMX differentiation significantly decreased individual performance ($\gamma = -0.44, t=-2.11, p<.01$) and OCB ($\gamma = -0.53, t=-2.14, p<.01$), but for American employees LMX differentiation was not related significantly to individual performance ($\gamma = 0.06, t=.32, ns$) or OCB ($\gamma = 0.25, t=1.52, p<.10$, one-tailed test). We can confirm from these results that the impact of LMX differentiation on individual performance and OCB was moderated by country, and that the impact of LMX differentiation on individual performance and OCB was negative for Chinese. However, we cannot confirm that the impact of LMX
differentiation on individual performance and OCB was positive for Americans (the effects were in the predicted direction, but not significantly different from zero). Thus, hypothesis 1 was partially supported.

FIGURE 1.2
Effects of the Interaction of Country and LMX Differentiation on Individual Performance
Hypothesis 2 predicts that country moderates the relationship between LMX differentiation and group performance. To test hypothesis 2 on group performance, we conducted OLS analysis with two sets of models. In Model 1 of Table 1.3, we entered group size, manager’s organizational tenure, LMX differentiation, and LMX median as controls. In Model 2 of Table 1.3, we entered the interaction term of the LMX differentiation and country as a predictor of the group performance.

We found, as shown in Model 4 of Table 1.3, Country*LMX differentiation had a marginal significant relationship with the group performance ($\beta = -0.32$, $t = -1.88$, $p < .10$). Separate analysis of each country’s sample indicated that the relationship between LMX differentiation and group performance was negative but not significant for Chinese work.
groups ($\beta=-.08$, $t=-.56$, ns); whereas the relationship between LMX differentiation and group performance for Americans was positive and significant ($\beta=.27$, $t=1.80$, $p<.05$, one-tailed). We can confirm from these results that the impact of LMX differentiation on group performance was moderated by country, and that the impact of LMX differentiation on group performance was positive for Americans. However, we cannot confirm that the impact of LMX differentiation on group performance was negative for Chinese. Thus, hypothesis 2 was partially supported. We plotted the result in Figure 1.4.

![FIGURE 1.4](image-url)

**Effects of the Interaction of Country and LMX Differentiation on Group Performance**

**Tests of Hypothesis 3: Analyses of Group Level Collectivism Orientation as a Mediator**

Hypothesis 3 predicted that China/U.S. would moderate the relationship between LMX differentiation and team collectivism such that LMX differentiation would be related
positively with team collectivism for American employees, while LMX differentiation would be related negatively with team collectivism for Chinese employees. Looking at Model 1 in Table 1.3, we can see that the interaction between country and LMX differentiation is significant and negative ($\beta=-.64$, $p<.01$). The slope for the U.S. sample is positive and significant ($\beta=.40$, $p<.01$), while the slope for Chinese sample is negative and significant ($\beta=-.24$, $p<.01$). Hence, hypothesis 3 was supported. We plotted the result in Figure 1.5.

FIGURE 1.5

The Effects of the Interaction of US/China and LMX Differentiation on Team Collectivism

Hypothesis 4 predicted team collectivism would be related positively to team performance. Looking at model 2 in Table 1.3, we can see that the relationship between team
collectivism and team performance is positive and significant ($\beta=.28$, $p<.05$). Hence, hypothesis 4 was supported.

Hypothesis 5 predicted team collectivism would be related positively to individual performance as well as OCB. As it was shown in Model 3 and Model 7 at Table 1.3, the relationship between team collectivism and individual performance was positive and significant after controlling for individual-level collectivism ($\gamma=.42$, $p<.01$). A similar result also was attained for OCB. The relationship between team collectivism and OCB was positive and significant after controlling for individual-level collectivism ($\gamma=.45$, $p<.01$). Hence, hypothesis 5 was supported.

Hypothesis 6 predicted that team collectivism would mediate the moderated impact of LMX differentiation on individual performance, OCBs, and group performance. To test Hypothesis 6, we followed the multi-level mediation test procedures recommended by Krull and Mackinnon (2001), which are in line with the conventional procedures outlined by Baron and Kenny (1986). First, we tested this mediation through the cross-level models when the dependent variables were individual performance and OCB. We then tested the mediation through OLS when the dependent variable was group performance.

Consistent with Baron and Kenny (1986), in the multi-level model to show the mediator effect we generally have to go through four steps. The first step is to demonstrate that significant relationship exists between the initial variable (in this case, interaction between LMX differentiation and U.S./China) and the criteria (individual performance and OCB). We already attained the significant relationship in testing hypothesis 1, which was shown in Model 2 and Model 6 of Table 1.2.
The second step is to demonstrate that significant relationship exists between initial variable (in this case, interaction between LMX differentiation and country) and the proposed mediator (team collectivism). We already attained the significant relationship in testing hypothesis 3. The third step is to demonstrate that significant relationships exist between the mediator and the outcome variables. In this case, we must demonstrate that significant relationships exist between team collectivism and individual performance, and OCB. We already attained the significant relationship in testing hypothesis 5.

In the final step of HLM, we have to demonstrate whether the initial variable (in this case, interaction between LMX differentiation and country) continues to exert significant impact on the outcome variables (in this case, individual performance and OCB) when the mediator, group-level collectivism, is included in the equation. As shown in Model 4 of Table 1.2, we found that the relationship between Country × LMX differentiation and individual performance disappeared when the team collectivism orientation was included in the equation, and the coefficient was reduced from -.43 to -.15. Similar results were achieved for OCB; we also found that the relationship between country × LMX differentiation on OCB disappeared when team collectivism was included in the equation, and the coefficient was reduced from -.52 to -.19. The results were shown in Model 8 of Table 1.2.

To test the mediation group-level collectivism mediates between Country*LMX differentiation and group performance, we followed four criteria recommended by Baron and Kenny (1986). Using OLS, we first needed to demonstrate that there is a significant relationship between Country × LMX differentiation on group performance. We already attained this relationship in testing Hypothesis 2. We then needed to show that there is a significant relationship between country × LMX differentiation on team collectivism. We
already attained this relationship in testing Hypothesis 3. Third, we needed to show that there was a significant relationship between team collectivism and group performance. We already attained this relationship in testing hypothesis 4. Last, when the mediator, team collectivism was put into the equation, the significant of country × LMX differentiation disappeared, and the coefficient was reduced from -.32 to -.17. This result was shown in Model 4 of Table 1.3. Hence, hypothesis 6 was supported.
### TABLE 1.2

Results of Cross-Level Moderation and Mediation Analysis of Individual Performance and Organizational Citizenship Behavior (OCB)

<table>
<thead>
<tr>
<th></th>
<th>DV: Individual Performance</th>
<th>DV: OCB</th>
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<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
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<td>Level 2 variables</td>
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<tr>
<td>Intercept</td>
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<td>5.98***</td>
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<tr>
<td>Country</td>
<td>.03</td>
<td>.39*</td>
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<td>Manager's age</td>
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<td>.00</td>
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<td>Manager's education</td>
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<td>Manager's tenure</td>
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<tr>
<td>Group size</td>
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<td>.03</td>
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<td>LMX median</td>
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<tr>
<td>Team collectivism</td>
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<td>.42**</td>
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<td>Country*LMX differentiation</td>
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<td>Level 1 Variables</td>
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<td>LMX quality</td>
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<tr>
<td>Individual Collectivism</td>
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<td>-.06</td>
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</table>

*Model R^2* = .13    .20    .20    .23    .08    .14    .19    .22

Note. N=125. *p<.05; **p<.01; ***p<.001


**TABLE 1.3**

Results of Moderation and Mediation Analysis of Group Performance

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<tr>
<th>Variable</th>
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<th>Group performance</th>
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<td>Model 1</td>
<td>Model 2</td>
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<td>Manager's tenure</td>
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<td>Group size</td>
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<td>.22*</td>
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<td>LMX differentiation</td>
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<td>Team collectivism</td>
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<td>Model $R^2$</td>
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Note. N=125. * p<.10; +p<.05; **p<.01; ***p<.001.
Discussion

This study examined whether the impact of LMX differentiation on individual and team performance and OCBs depends on the team’s cultural context. Our results suggest that the relationship between LMX differentiation and individual and group performance is different in the U.S. from China. In China, LMX differentiation has negative effects; employees in teams with higher LMX differentiation had lower individual performance and were evaluated by managers to perform less well in their jobs than those in teams with lower LMX differentiation. In the US, LMX differentiation had a positive impact: teams with higher levels of LMX differentiation were evaluated by their managers to be higher-performing teams than those with lower levels of LMX differentiation. For all three outcome variables – individual performance, group performance, and OCB – cultural context (being in China vs. the U.S.) moderated the impact of LMX differentiation.

The factor that accounts for these cultural differences in personal and team outcomes is team collectivism. LMX differentiation reduced team collectivism for Chinese employees, while it enhanced team collectivism for American employees. Team collectivism, in turn, was related positively to group performance, individual performance, and OCB. Because the impact of LMX differentiation on team collectivism is opposite in China and the U.S., the ultimate impact of LMX differentiation in China is opposite – producing beneficial outcomes in the U.S., but counterproductive ones in China.
Theoretical implications

Our findings contribute to the LMX literature by suggesting that it is important to incorporate culture context into LMX differentiation research. Employees in cultures that have different relational models react differently to LMX differentiation. Prior research has considered the effect of culture on dyadic LMX in Turkey: Erdogan and Liden (2006) found that perceptions of justice were not as influenced by LMX for those who were high in collectivism as those who were low in collectivism. Our results show that culture context influences how employees respond not just to LMX relations between a boss and subordinate, but also to the degree to which a given boss varies his or her relationships with employees on his or her team. Interestingly, while at the dyadic level, prior research indicated that employees in cultural contexts like China are less likely to make justice judgments based on LMX exchange than employees in places like the U.S.; but when it comes to group differentiation, it is those who are in highly relational cultural contexts that have the strongest (negative) reactions in terms of individual performance.

It is important to recognize that our results are consistent with prior theory on LMX differentiation. Earlier work indicated that LMX differentiation can enhance group performance because it allows leaders to use their time and energy more efficiently (Dansereau et al., 1975). Yet, later work on LMX differentiation argued that LMX differentiation should affect group performance negatively because it violates justice principals. Integrating these views, Liden et al. (2006) found that LMX differentiation is conditionally positive -- it is positive for individual performance when LMX is low, and it is positive for group performance when the median of LMX within a group is low. In other words, when relationships between team members are arguably weaker, LMX
differentiation had more beneficial effects than when relationships between team members are arguably stronger. This is consistent with our cultural analysis showing that in cultural contexts where relationships are more central (such as China), differentiation has a negative impact on performance, while in cultural contexts where relationships are less central (such as the U.S.), differentiation has a positive impact on performance. What is different about our analysis compared to prior ones is that justice is not the central concern – rather, it is team collectivism.

It is through enhancing or undermining team collectivism that LMX differentiation has its impact on performance – either a positive impact (for Americans) or a negative impact (for Chinese) – and this differential impact explains the moderating effect of culture. Both Americans and Chinese care about having the group accept and value them (Li & Cropanzano, 2009), but what signals group recognition and value, we theorized, varied by culture. In the U.S., being allowed the potential to stand out and separate oneself from others should enhance perceived group value for a team member; in China, being allowed to be part of a group that is more of a whole and less of an amalgam of individual stars is the better way to enhance perceived group value for a team member.

Managerial implications

Findings from the present study have important implications for managerial practice. Our results show that even though the LMX differentiation level is smaller in China than in the U.S., Chinese employees reacted more negatively to such differentiation. LMX differentiation is negatively related to both individual performance and OCB, while the relationship between LMX differentiation and group performance
was positive for American employees. These findings underscore the prevailing wisdom in cross-culture research that managers should alter their leadership behaviors to fit culturally endorsed implicit leadership profiles. When managers work in a society that stresses harmonious relationship within groups (such as China), they should be cautious about differentiating their subordinates since doing so may reduce discretionary behavior and job performance. Instead, they should strive to develop more evenly-distributed relationships with subordinates within a team.

**Limitations and future research**

This study has several limitations. First, comparability of different samples is an important issue in cross-culture research (Brislin, Lonner, & Thorndike, 1973). In the literature, there are two basic approaches to ensure sample comparability, each of which has its own advantages and disadvantages. One is to get samples from a global company/organization that has branches in multiple countries. In this kind of research design, the benefit is that error variance introduced by industry or organizations can be largely reduced since global company, products, policies, and formal structures do not vary, while at the same time these companies recruit local employees. However, the cost of this approach is a loss of generalizability since all data come from one organization. The other design is to obtain samples from companies/organizations that are similar in industry and size. Chen (1995) used this sampling strategy to study cross-culture reward allocation, and we took a similar approach.

In the present study, our sample came from different organizations in the U.S. and P.R.C. These organizations are in similar industries such as service and manufacturing. No significant differences on the variables included in this study were found at the
organization level, and measurement equivalence was achieved for all the variables used in this study. Moreover, the generalizability of this research design is better compared to the one-organization design. Despite the merits of the above points, we acknowledge that a one-organization design has its own advantages, so future research should try to replicate and extend the current study using a one organization design with different branches.

Second, because the data were obtained at one point in time, there are limits in the confidence with which causality may be asserted. We would be more confident if the data were collected at different points of time. Future research should engage in a longitudinal design to further examine the relationship between LMX differentiation and changes in team collectivism.

Finally, there is ongoing debate about the level at which culture is studied. A recent review concluded that cultural values such as collectivism are valid and meaningful at country, group (team), and individual levels (Dickson, Deanne, Den Hartog, & Mitchelson, 2003). Some of the past studies of collectivism and group performance have also used collectivism at the group level (e.g. Wagner, 1995; Schaubroeck, Lam, & Cha, 2007), and the measure we adopted also was used in cross-cultural research (e.g. Lam et al., 2002). More research is needed to continue to investigate the measurement issues of different levels of cultural values and the effects of multi-level cultural values on individual, group, and organizational outcomes. Moreover, future research should continue to study the reasons of the change of individual and group culture values in the work contexts and effects of such changes on individuals’ job attitudes and behaviors.
Conclusion

This study examines cross-cultural differences in the effects of LMX differentiation on both individual and group performance. We found that while high LMX can be beneficial to American teams (creating higher team collectivism and through that higher group performance); it is detrimental to Chinese teams (created lower team collectivism and through that lower individual performance and lower levels of OCB). Thus, for managers trying to enhance individual and group performance, they need to enhance LMX differentiation in the U.S. (or other countries with non-relational models for social interaction) but decrease LMX differentiation in China (or other countries with strong relational models).
References


CHAPTER II

A CROSS-CULTURAL COMPARISON OF SUPERVISOR-SUBORDINATE INTERPERSONAL RELATIONSHIP PATTERNS

Different cultures have different prevalent relational modes (Morris, Podolny, & Sullivan, 2008). Given the trend of increasing globalization, failure to understand these differences in relational modes can result in damages that can cause a sense of intrusion, rejection (Morris et al., 2008), low morale, conflict, and even the failure of joint ventures (Hui & Graen, 1997). Globalization challenges managers to understand how employees’ behaviors are different across national culture so that they can effectively supervise a progressively more diverse workforce. However, few studies have examined the cross-cultural differences on supervisor-subordinate interpersonal relationship patterns (Erodgan & Liden, 2002).

The current state of research on cross-cultural supervisor-subordinate relations has been dominated by the etic, Western LMX approach, while the emic, such as the guanxi approach, has been neglected. Etic refers to the idea of “the outsider perspective,” whose aim is to describe cross-cultural differences using a general, external standard, while emic refers to the idea of the “insider perspective,” whose aim is to describe a particular culture in its own terms (Berry, 1990; Pike, 1967). Because these two paradigms focus on different aspects of supervisor-subordinate relations, the two literatures do not speak to each other directly, and it is hard to compare results from the LMX and guanxi literatures. Guanxi is defined as ‘a dyadic, particular and sentimental tie that has the potential of facilitating favor exchanges between the parties connected by the tie’ (Bian, 2006: 312).
Moreover, there is a lack of conceptual clarity about the degree of overlap (or lack of overlap) between these two literatures. Recent reviews on cross-cultural management called on research that stresses the importance of indigenous research and takes a dual perspective account of cultural influence (Gelfand, Erez, & Aycan, 2007; Morris, Leung, Ames, & Lickel, 1999). The purpose of this conceptual paper is to take a dual-perspective – to integrate both the etic and the emic approach on supervisor-subordinate relations by comparing and contrasting leader-member interpersonal relationship patterns in China and in the United States.

In order to develop a more complete cross-cultural theory of supervisor-subordinate relations, this paper presents a new model that incorporates both the key elements of LMX theory and the key elements of guanxi theory. In particular, I suggest that a more complete cross-cultural model of LMX includes both the work-focused elements of exchange that is the core of LMX theory (what I will call W-LMX, for “work” LMX) and the social or personal elements of exchange that are the core of guanxi theory (what I will call P-LMX, for “personal” LMX). With that conceptual distinction in place, I then propose the ways that Chinese and Americans might respond differently to W-LMX and P-LMX. I look first at the effects of these forms of LMX on individual work outcomes and then examine the effects of W-LMX and P-LMX differentiation (a group or team-level construct) on individual work outcomes. Finally, I discuss the effects of LMX differentiation on the justice climate that exists within a group (another group or team-level construct). In total, these approaches to LMX allow for a more careful examination of cross-cultural differences in supervisor-subordinate relations.
The current research contributes to LMX and cross-culture organizational behavior literature in several ways. First, integrating both the etic, Western LMX theory and the emic, guanxi perspective, can extend and refine the current LMX theory, deepening our understanding of how supervisor-subordinate relations function in different cultures. Second, the integration and distinction between W-LMX and P-LMX within the leader-member exchange framework can stimulate researchers to investigate phenomena that may be recessive in one culture but dominant in another culture. The functions and dynamics of LMX and LMX differentiation may vary between China and the United States. Instead of assuming that supervisors and their subordinates follow the same scheme of social exchange across cultures, this emit-etic model should stimulate research that explores the effects of supervisor-subordinate relations from a multi-level and multi-cultural perspective.

**Developing a Multicultural Conceptualization of LMX**

LMX is defined as “a working relationship that is characterized by the physical or mental effort, material resources, information, and/or emotional support exchanged between the leader and the member” (Liden, Sparrowe & Wayne, 1997, p48). A great deal of literature has shown that leader-member exchange at the individual level can lead to many important workplace outcomes for the parties who are involved in such dyadic relationships (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995), and similar findings have been reported both in the West and non-West settings. In this section, I first argue that although LMX has some universal effects across the world, LMX theory has
unspoken cultural assumptions and limitations: it reflects the dominant leader-member relational models in the West but overlooks other dominant leader-member relational models such as leader-member *guanxi* that is more readily visible in other culture contexts. The majority of LMX research conducted in non-Western contexts is simply a replication or an extension of LMX research conducted in the West. These studies rarely consider the effects of national culture on the meaning and content of leader-member exchange.

Using Fiske’s relational models theory, I propose a multicultural conceptualization of LMX, arguing that LMX should include both a work-focused exchange relationships (what I call W-LMX) that is the core idea of current LMX theory and a personal-focused exchange relationship (what I call P-LMX) that is the core idea of supervisor-subordinate *guanxi*. W-LMX and P-LMX represent two distinct relational models—LMX is modeled after equality-matching relational model whereas P-LMX is modeled after communal sharing relational model.

**Cultural assumptions and limits of LMX**

The current LMX theories assume individualistic culture preferences. House and Aditya (1997) point out that the current LMX theory reflects the American cultural preference for a norm of equality between supervisors and subordinates. At the same time, it ignores possible dominant leader-member relational modes in other cultures that may be recessive in American culture. Zorn (1995) argued that the supervisor-subordinate personal relationships with no romantic component are an “under-studied” relationship in American organizations, as it is often perceived as dysfunctional in organizations.
Leader-member exchange may involve different behaviors in different cultures (Graen, 2003), and different cultures may have different prevalent relational modes. Using network analysis, Morris and his colleagues (2008) examined coworker networks in the United States, Hong Kong, Germany, and Spain. They found that each culture has its own dominant relational norms among co-workers. American coworkers have a dominant norm of market transaction orientation, while in Hong Kong organizations people use family filial piety as their main relational mode; German coworker’s interactional norms are more likely to follow legal/political procedures, while Spanish coworkers are more likely to follow the honor-bound friendship template (Morris et al., 2008).

In the existing literature, some researchers have realized the limitations of the current-LMX theory and adopted two approaches to adjust LMX to different cultural contexts. One takes an etic approach, slightly modifying the measure of LMX so that existing constructs can be applied in other countries. The other takes an emic approach which by turning to indigenous constructs such as guanxi to demonstrate the unique elements of supervisor-subordinate relational patterns that are not covered by the current LMX theory.

The etic approach

One approach to address culture-specific characteristics of LMX is to modify LMX measures to adapt them to other cultural contexts, but keep the meaning the same. For example, when one of the dominant leader-member exchange measures, LMX -7, was used in a Japanese context, researchers added several items to ensure functional equivalence. These questions included whether two parties would go out to a bar after
work, whether a supervisor would engage in career mentoring of his/her subordinates, and whether a subordinate had respect for his/her supervisor’s capabilities. This adapted measure effectively predicted Japanese managers’ promotions, salaries, job satisfaction, and organizational commitment (Wakabayashi, Graen, Graen, & Graen, 1988). Similarly, Wang and his colleagues (2004) tried to modify LMX-12 (Liden & Maslyn, 1998) in a Chinese context, another widely used LMX measure in the literature. They added one item for each dimension of the four dimensions of LMX-12. Using this modified LMX-16 measure, they found that LMX was positively related to work performance and contextual performance as well (Wang, Niu, & Law, 2004).

The emic guanxi approach

The second approach to adapting LMX to other cultural contexts is to draw from indigenous theories from those cultures. Most prominent among them is the theory of *guanxi* developed in Chinese cultures.

*Guanxi* can be viewed as given particularistic ties (Tsui & Farh, 1997) or the general quality of the relationship that is indicated by strong emotional bonds, obligations, loyalty, and trust (Chen & Chen, 2004). Research that adopted this emic view of supervisor-subordinate relations has shown that supervisor-subordinate *guanxi* is associated with many important work outcomes. Studies have found that Chinese supervisors may divide their subordinates based on *guanxi* (Cheng, 1995) and give more bonus and promotion opportunities to those with whom they have good *guanxi* (Law, Wong, Wang, & Wang 2000). These subordinates, in turn, have greater trust in their supervisors and report better performance (Cheung, Wu, Chan, & Wong, 2009; Lin, 2002). Although personal *guanxi* is related to positive individual and organizational
outcomes for those who have guanxi, some scholars believe that guanxi may lower the ethical standards of managers and may lead them to hire and promote unqualified employees due to the strong obligations exerted by guanxi (Dunfee, Warren & Li, 2004).

Previous research on supervisor-subordinate guanxi has stressed that leader-member guanxi is different from LMX (e.g., Chen, Friedman, Yu, Fang, & Lu, 2009; Law et al., 2000; Wang, Liu, & Law 2007), indicating that leader-member guanxi is a cultural-bounded phenomenon. For example, Law et al. (2000) argued that that leader-member exchange is restricted to work-related exchanges, while guanxi focuses on non-work related exchanges. Chen and her coauthors also emphasized the differences between LMX and leader-member guanxi, arguing that contribution and competence are important currencies for LMX (Dienesch & Liden, 1986) while sentiment (qing, human feeling) and unconditional loyalty (or obligations) are the core elements of supervisor-subordinate guanxi (Chen et al., 2009; Lin, 1998).

Although both of the etic and emic approaches show the cultural limitations of the current LMX model, neither one alone makes an attempt to extend and refine LMX theory itself. On the one hand, the etic approach only tries to slightly modify the LMX measure for empirical applications. These studies were replication or extension of studies conducted in the West and did not identify other supervisor-subordinate relational models that are different from LMX in the cultural contexts in which there research was conducted. The emic approach, on the other hand, stressed the cultural uniqueness of leader-member guanxi and did not attempt to incorporate the idea of guanxi into LMX theory. To address the cultural limitations of the current LMX theory, I turn to Fiske’s Relational models theory, arguing a more complete LMX theory should include both
working relationships which are the core idea of LMX and personal relationships which are the core idea of leader-member *guanxi*.

**Creating a more complete model of LMX**

Based on his own fieldwork in Africa and an extensive review of the theories on relationships in several disciplines such as sociology, anthropology, and social psychology, Fiske (1992) proposed an integrated relational model theory. Scholars have used this theory to study how relationships sever as a context to affect employee’s interactions and organizational outcomes (e.g. Blatt, 2009; Mossholdear, Richardson, & Settoon, 2011; Sheppard & Sherman, 1998). Fiske’s relational models theory posits that there exist four – and only four -- distinct elementary relational models across all societies: communal sharing (CS), authority ranking (AR), equality matching (EM), and market pricing (MP). “Communal sharing” is a relationship that is characterized by collective belonging or solidarity. Members of a group are treated as undifferentiated individuals. The well-beings of others within the group are more important than self-interest. In an “authority ranking” relationship, people have asymmetric positions in an ordinal ranking in which subordinates defer to, respect, and obey superiors, while superiors take precedence and have certain responsibilities for subordinates. “Equality matching” is characterized by turn-taking exchanges and balanced reciprocity. “Market pricing” organizes relationships in terms of socially meaningful ratios or rates such as prices, wages, or cost-benefit analyses.

Fiske (1992) states that these four relational models govern most aspects of most social interactions in all societies and that people often use a combination of the elements from the four relational models to organize their social life. However, the relative
emphasis among these four relational models may vary by culture, meaning the social context in which the relationships occur.

Applying Fiske (1992)’s idea to leader-member relations, we can see that the leader-member relationship in organizations, by its nature, is a kind of market-pricing relationship with characteristics of authority ranking: Leaders have authority above members, and organizations pay wages for employees. Fiske (1992) argued that relational models can evolve from one relational form to another in certain directions. He stated that “the transformation of the relationship between a given pair of people or among the members of a particular group probably tend to move from MP to EM to CS” (Fiske, 1992, p. 712). Using the framework of relational models theory, leader-member exchange occurs in the context of an economic exchange relationship—a contract-based market pricing process—that is transformed into a social-exchange based relationship. The direction of this transformation can go, we argue, either towards equality-matching or communal sharing relationships. In other words, leader-member relations can be transformed into two different relational models, one is equality-matching and the other is communal sharing; each of these has different relational patterns and different reciprocity rules. This assertion is consistent with Fiske’s prediction of how the form of a relationship changes within a pair or a group of people. However, current LMX theory only focuses one of these two relational models which is equality-matching, leaving the communal sharing form in leader-member relations unexplored.

In an individualistic culture such as the USA, where LMX was initially developed, transforming the supervisor–subordinate relationship (which would typically start as contract-based economic exchange relationships) into a communal sharing one is
not as easily accepted as demonstrated by Weber’s (1904/1930) argument that the Protestant ethic prevents employees from mixing affective relations with business. The supervisor–subordinate relationship can only legitimately transform into an ‘equality-matching’ relationship, where a supervisor’s support is based on balanced reciprocity principle – only those who perform better get the benefits of favored professional support from the supervisor. Subordinates, in turn, only provide enhanced performance for supervisors who provide them the necessary support. This transformed equality-matching leader-member relationship is often constrained to the work domain. In the Chinese context, by contrast, the relational model of supervisor–subordinate interactions can more legitimately be transformed into a ‘communal sharing’ mode via the familization process (Yang, 1992). This transformed communal sharing leader-member relationship is not constrained to the work domain and is often characterized by socializing between supervisor and subordinate in the personal domain and engaging in non-work related duties.

I argue that a more complete view of LMX as it occurs across cultures, and even within cultures, recognizes that supervisor-subordinate relationship consists of two potential parts: the transformation of a hierarchical, market relationship into an equality matching-oriented working relationship and/or a communal sharing-oriented personal relationship. Current LMX theory focuses on the former, mostly ignoring the component of communal sharing-oriented personal relationship that is found in guanxi research. Current guanxi theory focuses on the later, mostly ignoring the component of equality matching that is found in current LMX theory. To have a more comprehensive model of LMX that will be useful around the globe and that can help identify different elements of
exchange, I propose that there be explicit recognition of these two sides of LMX. The exclusion of communal sharing-oriented personal relationships from LMX theory reflects the aspect of American culture suggested by Protestant relational ideology that regards affective, emotional concern as inappropriate in some work contexts (Sanchez-Burks, 2002), and the separation on guanxi theory from LMX theory reflects the dominance of a guanxi model within Chinese indigenous theorizing.

I propose in this paper that LMX theory should be broadened to include supervisor-subordinate communal sharing relationships (as found in Chinese indigenous research) into its conceptualization. As I mentioned before, LMX is defined as “a working relationship that is characterized by the physical or mental effort, material resources, information, and/or emotional support exchanged between the leader and the member” (Liden, Sparrowe & Wayne, 1997, p48). I refer to this aspect of LMX as Work-LMX, or W-LMX. However, with the more personal-relations-focused aspect of supervisor-subordinate exchange that stresses communal sharing and is emphasized in the guanxi literature, I add to the traditional definition of LMX a second component – Personal-LMX, or P-LMX. The supervisor-subordinate personal relationship is defined in the present study as the quality of personal relationship between supervisors and subordinates that is indicated by non-work-related behaviors and the activities in which they engage in their non-working time (Law et al., 2000; Wong, Tinsley, Law, & Mobley, 2003).

The reason that it is important to add a clear distinction between W-LMX and P-LMX is that communal-sharing oriented exchange has been not as central to LMX theory as it can or should be. Some LMX scholars have developed a larger LMX scale (the
LMX-12) to add personal affect to LMX, but this form of affect is still quite different from what is discussed in *guanxi* theory. Liden and Maslyn (1998) see mutual affect as based on interpersonal attraction, while the *guanxi* literature focuses on the extension of interpersonal affect into not just the work environment, but also the non-work environment. Indeed, some scholars have argued that the work and affect elements of LMX-12 are not really distinguishable (Graen & Uhl-Bien, 1995) because, we would argue, they are still confined mainly to the work context and equality-matching relational model. Furthermore, the development of personal affect in the West implies a symmetrical exchange between supervisors and subordinates; while in *guanxi*, exchange can be asymmetrical, involving the downward giving of favors from superiors and the upward trend of unreserved loyalty and obedience from subordinates. In the West, personal affect indicates a kind of leveling out of the hierarchy between supervisor and subordinate, while in *guanxi* it can actually enhance deference to the authority of the supervisor (Chen et al., 2009). Thus, P-LMX brings to LMX theory a more comprehensive focus on strong personal ties, which are more extensive than those typically seen in the West.

It is noteworthy that both equality-matching and communal-sharing components in leader-member relations can have characteristics of authority ranking which is one of the essences of such relationships. However, how authority ranking is manifested in these two relational models may depend on contextual factors. As Chen et al. (2009) pointed out, *guanxi* has an element which is focused on extended deference to supervisors’ authority. Part of a strong *guanxi* relationship in China is recognizing and believing in the status of the supervisor, which is rooted in Confucian concepts of leader-follower roles.
By contrast, American individualistic culture may downplay the status and power differentiations between superiors and subordinates.

It is likely that leader-member exchange has components of both the working relationship and the personal relationship, but which one is dominant in a given society may depend on the cultural and organizational practices in which the relationships are embedded. Tinsley (2004) suggests that characteristics that are dominant in one culture are likely to recede in another culture. Yang (2000) suggests that the ideal way to develop universal theories is to investigate a phenomenon in different cultures and then to look at the extent to which the dimensions identified in one culture seem sensible in other cultures. I suggest that a new pan-cultural, integrated theory of LMX be recognized that allows for more effective and complete comparisons of social exchange in different cultures.

In summary, I argue that the conceptualization of leader-member exchange should include both leader-member working relationships and leader-member personal relationships. This integration can help to develop a more universal LMX knowledge and deepen the understanding of the dynamics of the effects of LMX in work contexts. This integration can also help to clarify the association between social exchange and the different types of relationships. Social exchange may alter the nature of the relationship at the same time that the transformation of the relationship can alter what is being exchanged in the certain relationship. In the case of leader-member exchange, a contract-based market pricing relationship can be transformed into both an equality-matching relationship and a communal sharing relationship. The degree of such transformation may
vary depending on societal culture, individual characteristics, organizational practices and policies.

Proposition 1: LMX can be conceptualized as having both W-LMX and P-LMX.

Fiske (1992) indicates that the implementation of a specific relational mode may be primarily guided by cultural rules. The variation of relational models across cultural contexts remains understudied (Fiske, 1992). In the next section, I draw on cultural theories to explore cultural differences in response to W-LMX and P-LMX in U.S. and China.

**Cultural Differences in Response to LMX**

*The effects of W-LMX and P-LMX*

I propose that W-LMX is likely to predict better individual outcomes and organizational rewards for American employees, whereas P-LMX is likely to be a better predictor for Chinese employees. I argue that the criteria used to evaluate who is “in” and who is “out” are different in Chinese society than in American society. I contend that having a good W-LMX relationship with a supervisor can be a clear signal of a contract-based relationship being transformed into an equality-matching relationship, also showing that this person is an in-group member for American employees. In the Chinese context, however, this may not be the case.

The dominant relational model for Chinese is communal sharing (Chen et al., 2009). Family is often used as a template for relationships in other domains. Chinese social relationships are characterized by familial collectivism (Bond & Hwang, 1986).
Familial collectivism is defined as a set of values, beliefs, and their associated behavioral norms that take the family as a model for relationships in other domains of life, including supervisor-subordinate relationships (Yang, 1988). Research has shown that one important Chinese cultural characteristic, and a central part of what it means to have guanxi, is to extend kin-relationships to non-kin relationships. This extension is termed a “familization” or “pan-familization” process (Yang, 1998). Therefore, the criteria for “who is in” may be whether or not a subordinate is included in the manager’s personal or family life. If the relationship between a supervisor and a subordinate is restricted to a working relationship, even if the two have a good working relationship, their relationship still may be perceived as distant. When subordinates perceive that they are not invited into their manager’s personal or family life, they may have a sense of exclusion, rejection, and devaluation, which can negatively influence their motivations and well-being.

The dominant relational model among American coworkers is a market transaction-oriented relational model (Morris et al., 2008). In the United States, Protestant ethic prevents employees from mixing affective relations with business, and the supervisor-subordinate relationship can only be legitimately transformed into an “equality-matching” relationship, in which balanced reciprocity rule applied. Employees who perform better and have higher commitment receive support and reward from the supervisors and at the same time, subordinates provide contributions and commitment only for supervisors who provide them the necessary support. In contrast, in Chinese supervisor-subordinate guanxi relationship, as it is a communal sharing relationship, the reward to subordinates is not necessarily based on performance and contribution;
subordinates are expected to show unquestioned loyalty and obedience toward their superiors.

Proposition 2a. The relationships between W-LMX and employees’ work attitudes and perceived organizational rewards are stronger for American employees than for Chinese employees.

The P-LMX relations with supervisors can be a better predictor for Chinese employees in terms of their individual work outcomes and organizational rewards. Previous studies have shown that Chinese employees tend to relate to their supervisors rather than their organizations (Hui, Lee & Rousseau, 2004). In relation-based Chinese societies, particularistic norms are an important basis for decision-making (Westwood, 1997). This can make employees perceive that developing and maintaining good personal relationships is important, as these relationships affect how many resources and benefits subordinates can obtain from their supervisors.

Empirical evidence consistently shows that Chinese managers’ decisions are influenced by their personal relationships with their subordinates. For example, research has found that supervisor-subordinate guanxi impacts managers’ administrative decisions. Managers tend to give more bonuses to and are more likely to promote employees with whom they have good personal relationships (Law et al., 2000) after controlling for W-LMX. Zhang and Yang (1998) argued that Chinese decision makers’ reward allocation decisions are influenced both by the equity rules and by recipients’ guanxi with them. They found in a scenario study that Chinese managers do not distribute rewards based only on contribution; rather, they adopt the reasonableness norm, which means that they
consider both the recipients’ *guanxi* with them and their fairness in making allocation decisions.

Similar phenomena also exist in the United States. For example, developing connections with the right people, which include superiors, can be an effective way of obtaining power (Johns, 1992). Research also has found that having informal relations with superiors can bring about more influence and power for subordinates (Jenks, 1990; Sparrowe & Linden, 2005). I argue that, compared to China, the phenomenon of giving favors to subordinates with whom managers have good personal relations may be less prevalent in the United States; and therefore, personal relations will have less of an impact on employees. The results of a recent survey of senior managers in 544 U.S. cities show that the majority of senior managers disapprove of managers having close personal relations with their subordinates because it may undermine merit-based decision-making and is a threat to the line of command (Berman, West, & Richter, 2002).

Compared to Chinese employees, Americans are less likely to have overlapped friendship ties and instrumental ties among coworkers than Chinese (Morris et al., 2008). Evidence also shows that American managers are more likely to separate their affect-based and cognition-based trust in their professional networks than Chinese managers (Chua, Ingram & Morris, 2008). Compared to Americans, Chinese tend more often to value personal relations and personal loyalty toward their managers. Studies found that Chinese managers gave more nonmonetary rewards to subordinates with whom they have good relationships than did American managers (Zhou & Martocchio, 2001). Recent studies found that American managers display trust based more on subordinates’ competence, whereas Chinese managers display trust based more on subordinates’
personal closeness and loyalty to them (Hu, 2007). Based on the above argument, I propose the following:

Proposition 2b. The relationship between P-LMX and employees’ work attitudes and perceived organizational rewards is stronger for Chinese employees than for American employees.

**Leader-Member Relationship Differentiation**

Dyadic leader-member relations are embedded in a group or team setting, so it is important to also study the characteristics and effects of leader-member relationship differentiation. Leader-member relationship differentiation (I use it interchangeably as supervisor-subordinate relationship differentiation) is conceptualized as the variance in both working relationships and personal relationships. Recently, researchers have begun to study the effects of LMX differentiation on individual and group outcomes (e.g. Boies & Howell, 2006; Hooper & Martin, 2008; Liden, Erdogan, Wayne, & Sparrowe, 2006), but few consider the cross-cultural differences in LMX differentiation. I contend that Chinese managers differentiate treatment among employees more than American managers. Researchers have suggested that compared to Westerners, Chinese have a stronger tendency to divide people into different categories and treat them differently (Butterfield, 1983; Hui & Graen, 1997). Cheng (1995) found that Chinese managers divided their subordinates based on three criteria: particularistic ties, loyalty, and competence. They categorized their subordinates into different groups based on these
three standards. The employees in the three categories have different degrees of closeness with the manager and are treated differently by the manager.

Theoretically, I argue that the leader’s value with respect to universalism/particularism is related to the degree of LMX differentiation, for both P-LMX and W-LMX differentiation. Universalism and particularism represent two opposite ways of how others should be treated. Universalistic values stress the obligations a focal person has to treat all others according to general standards or rules independent of the particular relationships the others have with the focal person. In contrast, particularistic values emphasize the obligations a focal person has to give priority or favor to those who have particularistic relationships with the focal person (Parsons, 1951; Trompenaars, 1993). Leaders with a universalistic value may feel it is difficult to justify their behaviors to develop different qualities of personal relationships with their subordinates because to do so would be to defy universalistic culture. By contrast, leaders with a particularistic value may tend to develop differentiated personal relationships with their subordinates, because particularistic norms justify their behavior in that the focal person always needs to assess the social situation and treat others on the basis of individual preferences and obligations. At a societal level, it is agreed that Chinese are more particularistic than Americans (Trompenaars & Hampden-Turner, 1997). Given the culture group rankings, it is reasonable to expect that both W-LMX and P-LMX differentiation are higher in Chinese than in American firms.

Although no empirical research has directly investigated the difference in the degree of LMX differentiation between Chinese firms and American firms, previous studies suggest that the differentiation might be greater in China than in America. Fei
(1947), based on his observations of Chinese and American societies, concluded that compared to Western society, the relationship structures of Chinese society express more characteristics of differentiation such as differential closeness, social status, and power status. Studies on award allocation demonstrated that Chinese managers treat subordinates differently not just in terms of material rewards, but also in terms of managerial friendliness. American managers similarly will provide different economic rewards but tend to believe that personal treatment should be more equal (Chen, 1995). Thus, to some extent, the quality of interpersonal relationships with the leader can be regarded as a socioemotional reward in China. It is an important signal of employees’ relative standings in groups or firms. Thus, we may expect that there is greater W-LMX and P-LMX differentiation in Chinese firms than in American firms.

Proposition 3. W-LMX and P-LMX differentiation are greater among Chinese work groups than American work groups.

Outcomes of supervisor-subordinate relationship differentiation: individual-level

I propose that for both Chinese and American employees, W-LMX differentiation and P-LMX differentiation are negatively related to employees’ work outcomes (such as work attitudes). Justice theory provides the theoretical foundation for this argument.

Justice theory suggests that there will be a negative relationship between supervisor-subordinate relationship differentiation and individual work outcomes. Because group members tend to think of each other as similar, they may consider that they deserve similar treatment from the leader. When relationship variance is high in a group, both members who maintain high-quality LMX with their leaders, as well as those who do not, may perceive that differential treatments violate the norm of fairness.
(Scandura, 1999). Lind, Tyler, & Huo (1997) have shown that neutrality is a main determinant of procedural justice. When LMX differentiation is high, the rule of neutrality is violated. Hence, there will be a low procedural justice climate in a group with high LMX differentiation, which in turn may have negative effects on individual work outcomes. Research evidence has shown that justice climate is positively related to individual work outcomes (Colquitt, Noe, & Jackson, 2002); when justice climate is low, one can expect that individual work outcomes will be impacted negatively.

Despite my expectation of a universal main effect of LMX differentiation on work outcomes, I expect the strength of the effect to be different for Chinese than for Americans. This is due to differences in power distance between American and Chinese culture. I propose that the negative effects of W-LMX and P-LMX differentiation on employee work outcomes should be smaller for Chinese employees than for American employees. The rationale is that Chinese may be more tolerant of relationship differentiation.

Chinese have a high power distance culture, and people may be more tolerant of the differentiated treatment they receive from an authority figure. According to Hofstede (1980, p45), power distance is defined as “the extent to which a society accepts the fact that power in institutions and organizations is distributed unequally.” In high power distance cultures, people are more likely to accept the unequal treatment they receive from those who have power over them as a fact with which they have to live. Research has found that individuals who have high power distance values are more likely to accept unfair treatment from authorities compared to individuals who have lower power distance values. For example, research has found that Chinese subjects are less sensitive than
Americans to supervisory criticism in evaluating the fairness of interpersonal treatment (Leung, Su, & Morris, 2001). Bond, Wan, Leung, and Giacalone (1985) found that the Chinese, compared with Americans, tend to evaluate supervisors in less negative ways after the supervisors treated them unfairly and aggressively, such as shouting at them with verbal insults in front of others.

Confucian philosophy intensifies Chinese behavioral norms of accepting unequal treatment from superiors. Confucian teaching stresses the value of authority in the form of filial piety to parents and deference to superiors. When a family relational model is adopted as a template for supervisor-subordinate relations, subordinates are expected to and have obligations to defer to the wishes of superiors and to accept the different treatment they receive from superiors. By contrast, compared to China, U.S. has a lower power distance culture, and people may also be influenced by the belief that all men are created equal. As a result, Chinese may be more willing than Americans to accept the differentiated treatment they receive from authority figures.

Proposition 4. The negative effects of W-LMX and P-LMX differentiation on individual work outcomes are less pronounced for Chinese than for American employees.

Outcomes of supervisor-subordinate relationship differentiation: group-level

At the group level, I propose that for both Chinese and Americans, W-LMX differentiation and P-LMX differentiation are related negatively to justice climate.

Justice climate is defined as the group members’ shared perceptions of group justice. It is a group-level construct. Research has found that justice climate is useful to understand group-level phenomena as it can account for unique
variances that go beyond individual-level perceptions (Colquitt, Noe, & Jackson, 2002; Liao & Rupp, 2005). W-LMX and P-LMX differentiation may violate the rule of neutrality and consistency, so it is likely that W-LMX and P-LMX differentiation would be negatively related to justice climate in work groups.

Some may argue that a shared perception of justice may not be possible while LMX differentiation is high, because high LMX members who reap the benefits of a good relationship may rate justice perceptions high, whereas low LMX members may rate such perceptions low. Although it is true that studies have consistently found that LMX at the dyadic level is related positively with individuals’ justice perceptions, it does not mean that it is impossible to form a shared justice climate while differentiated relationships with leaders exist within the group. The deontic justice model suggests that the reason that people care for justice is that people are moral (Folger, 1998, 2001). People have moral obligations to treat other people fairly – as they deserve to be treated. Their motivations to seek justice are based on their moral responsibilities and obligations, which are irrelevant to their own self-interests or social standings within the group. One empirical study has shown that there is a link between LMX differentiation and justice climate. Mayer (2004) found that W-LMX differentiation (he used the term “LMX strength”) was negatively related to both procedural and interactional justice climate.

Although a similar pattern may exist in China and in the American context regarding W-LMX differentiation and justice climate, I argue the strength of such a relationship may be different. Research has shown that some justice principles are
universal and justice perceptions are an important antecedent for trust in leaders across cultures (Pillai, Scandura, & Williams, 1999). However, there are still cultural differences in both justice principles and the strength of justice effects on outcomes.

There are very few studies of the relationship between LMX and justice perception across nations and no cross-culture studies have been done to explore this relationship. Pellegrini (2006) found that the relationship between W-LMX and interactional justice is stronger for American employees than for Turkish employees. In a within-culture study, researchers found that collectivism moderated the relationship between justice perception and W-LMX such that the relationships were weaker for individuals whose collectivism value was high (Erdogan & Liden, 2006). Since W-LMX and justice might be related more strongly to justice perception for Americans than for Chinese, I assert that W-LMX differentiation is more strongly related to justice climate for Americans than for Chinese.

Differential treatment has social legitimacy in China. Hwang (2000) summarized that in a Chinese context based on Confucianism, distributive justice should follow the “closeness rule” and procedural justice should follow the “hierarchical authority rule.” The closeness rule means that resource allocation is based on the degree of closeness an allocator has with recipients. The hierarchical authority rule means that recipients should accept the treatment and decisions they receive from a person who has higher authority over them. Although these two principles are, to some extent, in conflict with the universal justice principle, they still have profound effects on Chinese perceptions and behaviors. For example, Hui & Graen (1997) proposed that Chinese value fairness is less significant than role fulfillment; therefore, the interaction pattern between leaders with in-
group and out-group members can be legitimately different. Zhang (2001) found that Chinese subjects made more generous resource allocations to those with whom they had frequent interactions and closer bonds.

Proposition 5a. The negative relationship between W-LMX differentiation and justice climate is stronger for American employees than for Chinese employees.

As I mentioned before, American culture has a distinct line between work life and personal life. Sanchez-Burks et al. (2003) found that American employees pay less attention to personal information cues at work than employees who come from a collectivistic culture. I propose that P-LMX (personal relationship) differentiation within a group in an American work context should not be related to justice climate. Chinese culture blurs the line between work life and personal life, thus, it is possible for Chinese employees who observe P-LMX differentiation in the workplace to make work-outcome related attributions to the personal relationship an employee has with his/her manager. Therefore, I propose that P-LMX differentiation for Chinese employees should be related negatively to their perceived justice climate.

Proposition 5b. The negative relationship between P-LMX differentiation and justice climate is stronger for Chinese employees than for American employees.

Figure 2.1 presents a model of the current research.
Individual Work Outcomes

W-LMX

P1

P-LMX

Individual work outcomes

P2a +

P2b +

Justice climate

P4

W-LMX

differentiation

P3

P-LMX

differentiation

P5a -

P5b -

FIGURE 2.1 Proposed Model

Note:

Hypothesized a stronger association in China as compared with the U. S.

Hypothesized a stronger association in the U.S. as compared with China

Bold words with shape: Greater strength in China than in the U.S.
Conclusion

By looking into leader-member exchange from both an etic and emic perspective, I argue that a cross-cultural model of LMX should include both the work-focused elements of exchange that are the core of LMX theory (what I call W-LMX, or Work-LMX) and the social or personal elements of exchange that are the core of guanxi theory (what I call P-LMX, or Personal LMX). I predict that Chinese and Americans will respond differently to W-LMX and P-LMX. In particular, I propose that W-LMX is more strongly related to work outcomes for American employees, whereas P-LMX is more strongly related to work outcomes for Chinese employees. Furthermore, I propose that at a group level, LMX differentiation will be higher among groups in Chinese organizations compared to groups in American organizations, but the effects of LMX differentiation – including both W-LMX differentiation and P-LMX differentiation – are smaller in Chinese organizations compared to American organizations.

In this paper, I focus on cross-cultural differences in supervisor-subordinate relationship patterns. Future research should consider the within-culture differences of such relationship patterns, as well as factors that determine or affect such differences. For example, although in this paper I argue that P-LMX (supervisor-subordinate guanxi) is important to Chinese employees in Chinese societies, such importance may vary based on various individual and organizational factors. Indeed, there is a recent debate on whether the importance of guanxi in modern Chinese context is increasing or decreasing (e.g. Guthrie, 1998; Yang, 2002). Future research may explore two important factors that are related to employees’ perceptions of the significance of personal relations with
supervisors (P-LMX). One is their dependence on the supervisors, and the other is the performance-oriented HR system.

Compared to managers in the West, managers in transitional societies such as China have more control over valued resources, more decision-making power, and employees may have to rely more on their supervisors to access scarce resources and opportunities (Pearce, Branyiczki, & Bakacsi, 1994; Wang & Heller, 1993). It is possible that when Chinese workers perceive that managers control valuable resources that can affect their lives (such as firm-subsidized houses); in other words, if they perceive that they have a high dependence on their managers – they are more likely to feel that developing and maintaining personal relationships is important; they can be well motivated to develop such personal guanxi (P-LMX) with managers to gain such scarce resources.

From a historical perspective, it is important to recognize the two components of LMX that is stressed in this paper. The dominant relational model in leader-member relations in a society may change or evolve. A dominant guanxi or communal sharing model can be replaced by an equality-matching or market pricing model. In this process, recognizing the two distinct relational components in leader-member relations can help identify and adapt to such changes. Recent studies have demonstrated that China has been experiencing shifting norms in terms of resource allocation rules. Bozionelos and Wang (2007) investigated the attitudes of Chinese employees towards individually based performance-related reward systems. They found that, although Chinese employees believe that performance evaluations can be affected by guanxi, they consider performance-
based reward systems to be good in principle. Objective measures of employee performance are not always available in many organizations, especially for managerial positions; instead, firms rely on supervisors’ subjective evaluations of employees’ performance. In such situations, subjective judgment may open the door to favoritism, when managers’ evaluations are tainted by their personal preference (Bozionelos & Wang, 2007). However, when managers sense that their performance is effectively monitored and closely related to employees’ performance, their incentive to engage in favoritism may decrease. As a result, employees may be less motivated to maintain close guanxi with supervisors. In such a scenario, guanxi or P-LMX could be replaced by a work-role focused working relationship pattern. How, when, and why the dominant relational model in leader-member relations in a society or an organization or a group will change to other relational models warrants future research.

Future research should also explore how W-LMX and P-LMX are related. Field observations (e.g. Hui & Graen, 1997) found that, unlike Westerners, it is difficult for Chinese to separate work relations and personal relations – when conflicts happen within one domain, they may spill over and severely damage relationships in the other domain. It is also not uncommon for Chinese to utilize personal relations to achieve business goals (Xin & Pearce, 1996; Yang, 1994). In terms of the development process of W-LMX and P-LMX there are several possibilities: (1) P-LMX can be a consequence of W-LMX (I get along well with my subordinate at work and we start hanging out together outside of work as well); (2) P-LMX can be an antecedent of W-LMX (I have a particularistic tie with the
managers, and the managers have more trust in me and depend more on my assistance); (3) P-LMX can moderate the relationship between W-LMX and work outcomes (for example, the effects of LMX on OCBs may be stronger when P-LMX is high). A longitudinal research design may be needed to empirically examine these complexities between W-LMX and P-LMX.

In conclusion, I propose in this paper that a more complete model of LMX should include both W-LMX and P-LMX. Such theoretical distinction and integration can deepen our understanding of cross-cultural differences and similarities in supervisor-subordinate relationship patterns. Moreover, this integration can also help to clarify the dynamics of dual relationships between subordinates and supervisors both within the work context and outside of the work context, as well as the effects of such dual relationships on work outcomes.
References


CHAPTER III

LOOKING AT LMX FROM BOTH THE ETIC AND EMIT PERSPECTIVE: A MULTIT-LEVEL, MULTI-COUNTRY ANALYSIS ON THE RELATIONSHIP BETWEEN SUPERVISOR-SUBORDINATE RELATIONSHIP AND WORK ATTITUDES

It has long been established that LMX is related positively to many important organizational outcomes such as supervisor-rated performance (Wayne, Shore, Liden, 1997), citizenship behaviors (Ilies, Nahrgang, & Morgeson, 2007), job satisfaction (Graen, Novak, & Sommerkamp, 1982; Harris, Wheeler, & Kacmar, 2009), and organizational commitment (Nystrom, 1990). Although research showed that LMX has some universal effects, as House and Aditya (1997) pointed out, current LMX theory reflects American cultural preferences, while other cultures may have different dominant supervisor-subordinate relational models. Among organizational scholars who are aware of other cultural norms, there has been a call not just for understanding non-Western indigenous concepts (Gelfand, Erez, & Aycan, 2007; Tsui, Nifadkar, & Ou, 2007) but also for integrating of Western and non-Western cultural concepts (Morris, Leung, Ames, & Lickel, 1999), or what Berry (1990) calls an emic-etic study of human behavior. In this paper we propose an emic-etic theory of LMX, integrating the core of Western LMX theories with Chinese theories of “guanxi” (defined as ‘a dyadic, particular and sentimental tie that has potential of facilitating favor exchanges between the parties connected by the tie’; Bian, 2006: 312). By building and testing a multi-cultural theory of LMX, we are better able to study and compare leader-member dynamics in a more truly global way.
In this paper, I argue that LMX consists of both Western-based, work-related leader member exchange (Work-LMX or “W-LMX”) and guanxi-based, personal relationship-related leader-member exchange (Personal-LMX or “P-LMX”). This distinction is used to investigate responses to both W-LMX and P-LMX across cultures. Specifically, I examine the extent to which P-LMX and W-LMX are correlated for Chinese and American employees, similarities and differences across cultures in responses to W-LMX and P-LMX, and cultural differences in response to W-LMX differentiation and P-LMX differentiation.

By examining LMX and guanxi from a multi-cultural perspective, I attempt to make three specific contributions to both the LMX and guanxi literatures. First, this more inclusive framework for LMX theorizing captures the full range of leader-member relations – not just the kind that is dominant in the West or that is dominant in the East. This allows for a richer and more comprehensive analysis of leader-member exchange in both the West and the East. Second, I apply the W-LMX/P-LMX distinction to LMX differentiation (e.g. Liden, Erdogan, Wayne, & Sparrowe, 2006). This distinction also enhances our ability to understand and compare the different impact of different bases of LMX differentiation across cultural systems. Finally, this study sheds light on the long term debate about whether guanxi is a unique cultural-bounded phenomenon or a local term for a general phenomenon by presenting a conceptual framework for identifying and examining both W-LMX and leader-member guanxi (P-LMX) in a cross-cultural context.
Theoretical Background

Fiske’s relational models theory and LMX

The basic idea of LMX is that leaders develop differentiated relationships with members. The quality of such relationships can range from low to high: Low quality leader-member relations are based strictly on economic exchange, and the contents of exchange do not go beyond what is specified in the employment contract, whereas high quality leader-member relations are based on social exchange, characterized by mutual trust, obligations, and commitment. Although leader-member exchange is about leader-member relations being transformed from economic exchange-based relations to social exchange-based relations, little research has looked at it from a relational model perspective. Fiske’s (1992) relational modes theory provides an explicit theoretical framework to understand better social exchange process from the lens of relational models. This theoretical addition can enhance the robustness of LMX theory and research.

Fiske (1992) states that there are four elementary, distinct forms of human relationships: communal sharing, authority ranking, equality matching, and market pricing. The elements of four relational forms can coexist in a particular relationship. “Communal sharing” is a relationship that is characterized by collective belonging or solidarity. Members of a group are treated as undifferentiated members of a group. In an “authority ranking” relationship, people have asymmetric positions in an ordinal ranking. “Equality matching” is characterized by turn-taking exchange and balanced reciprocity. “Market pricing” organizes relationships in terms of socially meaningful ratios or rates such as prices, wages, or cost-benefit analyses.
Looking at leader-member relations from Fiske’s relational models perspective, we can see that leader-member relations, by their nature, are a kind of market-pricing relations with characteristics of authority ranking. That is, there is a market for labor, a person is hired to do a job and is paid for it, and in the job there is a supervisor who has higher authority. LMX, as traditionally understood, is essentially the extent to which leader-member relations are transformed from a market-pricing and authority-ranking form of exchange to an equality-matching form in the social exchange process. In the equality-matching context, parties involved are distinct but equal, and they are concerned about relationship balance and attach importance to long-term equivalence (Fiske, 1992). This is what has been the core of leader-member exchange in LMX theory.

However, leader-member relations can also be transformed to communal sharing forms. A typical communal sharing relation is enacted among close kin and is characterized by high interdependent, indefiniteness in the obligation, and altruism (Fiske, 1992). The well-being of the group and others within the group is more important than self-interests. In this case, a market pricing and authority ranking form of exchange is transformed to a communal sharing form of exchange that is similar to the way that supervisor-subordinate guanxi works in China.

Family is often used as a template for supervisor-subordinate guanxi in China, and supervisor-subordinate guanxi can be conceptualized as the extent to which a contract-based employment relationship is transformed to a communal sharing relationship (Chen, Friedman, Yu, Fang, & Lu, 2009). This is consistent with the notion that a central part of what it means to have guanxi in Chinese culture is to extend kin-relationship to people who are not kin through pan-familization process (Yang, 1992).
Integrating LMX and leader-member guanxi

Given that both LMX and guanxi can be understood as types of social relations in a broader model (Fiske’s model), and given that Fiske identified aspects of social relations that may exist together in a relationship, it is plausible then that both coexist in leader-member relations: some elements of LMX exist in Chinese supervisor-subordinate relations and some elements of guanxi exist in Western supervisor-subordinate relations. This notion enables us to see both elements in both cultures.

I refer to the core traditional idea of LMX as “work” LMX or W-LMX. LMX is defined as “a working relationship that is characterized by the physical or mental effort, material resources, information, and/or emotional support exchanged between the leader and the member” (Liden, Sparrowe & Wayne, 1997. P48). In order for LMX theory to be able to address the second kind of transformation of leader-member relations – into a communal sharing relational form – LMX theory should be expanded to include a second component – what I call “Personal”-LMX, or P-LMX, which is the core element of supervisor-subordinate guanxi (Chen et al., 2009). P-LMX, is defined as the personal relationship between supervisors and subordinates that is indicated by non-work-related socializing behaviors and activities after work hours (e.g. Law, Wong, Wang, & Wang 2000; Wong, Tinsley, Law, & Mobley, 2003). In Fiske’s term, W-LMX is modeled after equality-matching while P-LMX is modeled after communal sharing.

Integrating traditional, Western-inspired LMX theory and Asian-inspired guanxi theory provides a useful theoretical framework to examine leader-member relations across cultural contexts. Armed with this more culturally robust, globally-informed, and multi-dimensional model of LMX, I draw on cultural theories to explore the reasons that
W-LMX and P-LMX can be expected to have different effects in the U.S. and China, and how the relationship between W-LMX and P-LMX are likely to be different in the U.S. and China.

**Intertwining W-LMX and P-LMX**

I have argued that leader-member exchange potentially has components of both W-LMX (that is modeled after equality matching relationship) and P-LMX (that is modeled after communal sharing relationships) in all societies, but which one is dominant in one society may depend on the cultural and organizational practices in which supervisor-subordinate relationships are embedded. I expect that the two components of supervisor-subordinate relationships, W-LMX and P-LMX, are more closely related to each other among Chinese employees than American employees. The reason is that in European-American culture, there is a sharp distinction between the relational schema used at work versus that used outside work (Sanchez-Burks, 2002). Empirical studies have found that Americans are more likely to interpret “professionalism” as a necessary means of restricting relational and socioemotional concerns in the workplace, indicating that Americans tend to maintain a clear line between work and personal life (Heaphy, Sanchez-Burks, & Ashford, 2005). Research evidence suggests that compared to employees in China, American employees’ work and personal lives are more inclined to be separate (Morris, Podolny, & Sullivan, 2008) and, thus, supervisor-subordinate relations should be more constrained to the work domain in American work settings.

However, in Chinese culture tradition, there is no clear line between work domain and private domain. Studies have shown that Chinese culture has characteristics of familial collectivism (Bond & Wang, 1986). Familial collectivism is defined as a set of
values, beliefs, and their associated behavioral norms that take the family as a model for relationships in other domains of life such as supervisor–subordinate relationships (Yang, 1988). In this cultural tradition, supervisor-subordinate relationship can be transformed more easily into P-LMX, a family-like/communal sharing relationship through ‘pan-familization’ process such as helping each other when needed, visiting each other often, and sharing meals together (Yang, 1992). Under the influence of the *pan-familism* cultural tradition (Bond & Hwang, 1986; Yang, 1988), managers in Chinese organizations are expected to care not only for their subordinates’ job performance and other work related issues but also their well-beings and family situations; subordinates, in turn, are expected to be loyal to their superiors and provide support that their superiors need, whether it is work-related or not.

The institutional arrangements of organized dependence (Walder, 1986) that refers to all the resources, such as daycare to healthcare that workers received through work units and from the leaders of such units during the pre-reform era, further strengthened this cultural tradition. Walder (1986) described in detail how workers’ personal loyalty and closeness to the manager were intermingled with their commitment to their work units. After the reform, socializing with managers has remained an important way to receive scarce resources (Yang, 1994). In managerial practices, since some firms (especially state-owned firms) provide housing or subsidized housing costs, many employees and their managers who work for the same firm live in nearby neighborhoods or in the same apartment building (Osigweh, & Huo, 1993). This kind of housing arrangement intensifies the intertwining of work relationships and personal relationships among employees and their managers.
Hypothesis 1. W-LMX is more correlated with P-LMX among Chinese employees than among American employees.

The effects of W-LMX and P-LMX on individual work attitudes—individual level

Effects of P-LMX

Having a high quality P-LMX with managers should also be related positively to organizational commitment and job satisfaction for both Chinese and American employees. Previous studies have demonstrated that P-LMX (called supervisor-subordinate guanxi) is related to Chinese managers’ reward and bonus decisions (Law et al., 2000), indicating that developing good personal relationships with supervisors is an important route for Chinese employees to receive valuable resources, in addition to becoming a high performer. Having good personal relationships with supervisors could also be helpful for American employees. Studies have found that developing connections with the right people, which include superiors, can be an effective way of obtaining power (Johns, 1992). Research has also shown that having informal relationships with superiors can bring about more influence and power for subordinates (Jenks, 1990; Sparrowe & Liden, 2005). However, P-LMX relationships with supervisors should be better predictors of work attitudes for Chinese employees compared to American employees.

This difference occurs in part because, compared to Chinese, Americans working in organizations have a tendency to keep their work life and personal life separated. American employees are influenced by Protestant Relational Ideology (PRI). Sanchez-Burks (2002, 2005) defined Protestant Relational Ideology as a deep-seated belief that regards affective and relational concerns as inappropriate in some work contexts.
Relational concerns, thus, are generally given less attention in the workplace for American employees than those from cultures low in PRI. Research has found that PRI has influenced American employees to use different relational schema at work versus outside work. East Asian employees pay equal attention to social/emotional cues and task cues in work settings while Americans pay much less attention to social/emotional cues and indirect communications compared to Asians in work settings. (Sanchez-Burks, 2003).

Another way to look at this difference is that compared to Chinese employees working in Chinese contexts, American coworkers are more likely to engage in a market-transaction oriented relation model, and they are less likely to have overlapping friendship ties and instrumental ties among coworkers than Chinese (Morris et al., 2008). Evidence also shows that American managers are more likely to separate their affect-based and cognition-based trust in their professional networks than Chinese managers (Chua, Ingram & Morris, 2009). In contrast, compared to Americans, Chinese value more personal relations and personal loyalty toward their managers. Studies found that Chinese managers gave more nonmonetary rewards to subordinates with whom they have good relationships than Americans managers (Zhou & Martocchio, 2001). Recent studies found that American managers display trust based more on subordinates’ competence, whereas Chinese managers display trust based more on subordinates’ personal closeness and loyalty to them (Hu, 2007). Based on the above arguments, I hypothesize the following:
Hypothesis 2. Controlling for W-LMX, P-LMX has a stronger relationship with job satisfaction as well as organizational commitment for Chinese employees than for American employees.

In term of the relationship between W-LMX and work attitudes, past research has shown a positive relationship between W-LMX and job satisfaction as well as organizational commitment, and such relationships are quite universal. Empirical studies confirm that LMX is related positively with organizational commitment in both the U.S. (e.g. Wayne et al., 1997) and in the Chinese context (e.g. Yi, 2002). Pillai and colleagues (1991) conducted a study to examine the relationship between W-LMX and job satisfaction in five countries, including the U.S., Australia, India, Columbia, and Jordan. In all five countries, they found that W-LMX was related positively to job satisfaction. Similar findings were also reported in a Chinese context (Li, Liang, & Grant, 2010). Given these results, we do not expect any differences between the U.S. and China in the impact of W-LMX on job satisfaction or organizational commitment.

**The effects of W-LMX and P-LMX on individual work attitudes—group Level**

Leaders and members often work in a group or team setting; therefore, studying W-LMX and P-LMX at the dyadic level can only explain part of the impact of LMX on employee attitudes. LMX can have an impact on attitudes not just based on individual LMX qualities, but also based on how an employee sees LMX relationships being built across a work group – that is, based on LMX “differentiation.” Leader-member relationship differentiation is conceptualized as the level of variances in interpersonal relationships within a team or group. Differentiation of W-LMX relations within a team is called W-LMX differentiation, and differentiation of P-LMX relations within a team is
called P-LMX differentiation. High LMX differentiation means there is great variance in terms of the relationship quality with the leader. Although I expect that for both Chinese and American employees, W-LMX differentiation and P-LMX differentiation are negatively related to employees’ work attitudes, the negative relationships between leader-member relationship differentiation and work attitudes should be weaker for Chinese employees than for American employees. The reason behind this argument is that Chinese have a high power distance culture which may lead them to be more tolerant of differentiated treatment.

As mentioned above, I expect a negative relationship between leader-member relationship differentiation and employees’ work attitudes. Social comparison theory provides the theoretical foundation for this argument. Social comparison theory states that individuals tend to evaluate their own abilities, social status, compensation, and achievements against similar others (Festinger, 1954). These “similar others” are people who are perceived to have similar attributes, background, and ability level. In a work group context, group members have the same team membership, occupy comparable organizational hierarchical levels, have similar degrees of formal power and responsibility, and work interdependently on relevant tasks. Moreover, social comparison could be heightened in group settings. Indeed, Shah (1998) found that individual employees tend to compare themselves to structurally equivalent actors when evaluating their job-related attributes. Thus, it is likely that group members will view each other as “similar others” and make mutual comparisons in terms of the level of the quality of LMX relationship they and others have with a supervisor. High LMX differentiation within a group should result in resentment, envy, and other negative reactions from the
group members (Bolino & Turnley, 2009; Vechiio, 1995). Previous research has found that differentiated relationship with leaders among co-workers is negatively related to their organizational commitment (Sherony & Green, 2002). Recent research (Hooper & Martin, 2008) has shown that leader-member exchange variability (the extent to which LMX relationships are perceived to vary within a team) is negatively related to employees’ job satisfaction and well-being after controlling leader-member exchange quality.

Despite my expectation of a universal main effect of LMX differentiation on work outcomes, I expect the strength of the effect to be different for Chinese than for Americans. This is due to differences in power distance in American and Chinese culture. Chinese have a high power distance culture, and people may be more tolerant of the differentiated treatment they receive from an authority figure. According to Hofstede (1080, p45), power distance is defined as “the extent to which a society accepts the fact that power in institutions and organizations is distributed unequally.” In high power distance cultures, people are more likely to accept the unequal treatment they receive from those who have power over them as a fact with which they have to live. Research has found that individuals who have high power distance values are more likely to accept unfair treatment from authorities compared to individuals who have lower power distance values. For example, Leung, Su, & Morris (2001) found that Chinese subjects are less sensitive than Americans to supervisory criticism in evaluating the fairness of interpersonal treatment. Bond, Wan, Leung, and Giacalone (1985) found that the Chinese, compared with Americans, tend to evaluate supervisors in less negative ways after the supervisors treated them unfairly and aggressively such as shouting at them with verbal
insults before others. Even when leader-member relationships are transformed into a communal sharing form in Chinese contexts, hierarchical power structure still exists and is prevalent in these family-like relationships (Yang, 1998).

Compared to Chinese culture, American culture is relatively low in power distance. When leader-member relationship is transformed to an equality matching form, subordinates view themselves and their leaders are equal partners. As a result, American employees may be less willing to accept differentiated treatment they receive from those in positions of authority.

Hypothesis 3a. The negative effects of W-LMX and P-LMX differentiation on individual job satisfaction work should be less for Chinese than for American employees.

Hypothesis 3b. The negative effects of W-LMX and P-LMX differentiation on organizational commitment should be less for Chinese than for American employees.

**Methods**

**Sample**

We tested the above hypotheses using data from 125 groups of 572 employees, collected in the P.R.C. and the U.S. I obtained access to 12 organizations in China and 11 organizations in U.S. through senior managers who were current or previous part-time MBA students in a midsize university in the southern U.S. and a midsize university in northern China. When approaching these organizations, I asked for groups with 2-10
members. The management of these organizations provided the list of group members and managers. I considered employees to be members of a work unit or group if they had a common supervisor and worked together on the same shift. Before the survey started, the senior managers sent supporting letters to all the managers and members at their organizations to encourage their employees to participate in the survey and also to stress that participation was completely voluntary. The principal investigators of the survey also sent letters to the survey participants, indicating that the survey was voluntary and that confidentiality was assured. The management of the organization determined whether they would like to have a web-based survey or a paper-pencil survey. In the U.S., data from nine organizations were collected through web-based surveys and paper-pencil surveys were conducted in another two organizations. As for the data from China, all data were collected through paper-pencil surveys. The survey conducted in China was administered in Chinese, while English was used in the United States survey.

The initial U.S. sample was comprised of 68 permanent work groups that included a total of 373 full-time employees from 11 organizations, mainly in manufacturing and service industries. After deleting the missing data in HLM analysis, the U.S. sample was comprised of 65 groups of 358 employees. Within-group response rates ranged from 67 to 100 percent, with a mean of 94 percent. The overall response rates of group members and supervisors were 93 and 98 percent, respectively.

The initial Chinese subordinate sample for this study consisted of 250 employees from twelve organizations with 65 groups. These companies were in manufacturing, power generation, and service industries. After eliminating responses with missing data, the China sample included 60 groups with 214 total employees. Within-group response
rates ranged from 75 to 100 percent, with a mean of 98 percent. The overall response rates of group members and supervisors were 99 and 100 percent, respectively.

Comparing the subordinates’ sample from the U.S. and China, we found that the U.S. and China samples did not differ significantly in sex or education. Overall, 40% of subordinates were women; in terms of education level, 14% had a high school diploma, 21% had a degree from a professional training program, 18% had an Associate’s degree or some college degree, 38% had an undergraduate degree, and 10% had earned a graduate degree. However, compared to subordinates in U.S. sample, the mean age of Chinese subordinates was significantly younger (M= 34.30, SD=7.71) than that of subordinates in the U.S. sample (M=39.63, SD=11.11). The mean organizational tenure of subordinates in the China sample (M=11.50, SD=8.05) was also significantly longer than that of subordinates in U.S. sample (M=7.56, SD=6.13).

Comparing the supervisors’ samples from the U.S. and China, we found no significant differences in sex, but the U.S. and China samples differed significantly in age, education, and organizational tenure. The mean age of supervisors in the China sample was slightly younger (M=39.88, SD=5.37) than that of American supervisors (M=42.55, SD=9.85). Supervisors in the China sample had a significantly lower educational level than that of the American supervisors. The average education level was between some college degree to bachelor degree for Chinese supervisors, and between a bachelor degree to a graduate degree for American supervisors. The mean organizational tenure of Chinese supervisors (M=17.03, SD=7.11) was significantly longer than that of American supervisors (M=9.78, SD=5.42).
In addition, the average group size for U.S. sample (M=5.62, SD=3.05) was significantly larger than that of China sample (M=3.78, SD=1.39). For the U.S. sample, groups ranged from 2 to 13 members, seven groups had 2 group members and two groups consisted of 13 members. For the China sample, groups ranged from 2 to 10 members; one group had 2 members and one group had 10 members. We controlled for these sample differences in all the statistical analyses.

**Measures**

For all scales, a 7-point Likert scale was used (1 = strongly disagree to 7 = strongly agree). In China, surveys were translated and back-translated into Chinese following Brislin’s (1980) recommended back translation procedure. We also examined and reported cross-cultural measurement invariance below.

**W-LMX.** We measured W-LMX quality using the LMX-7 scale (Scandura & Graen, 1984). Sample items include “My supervisor understands my problems and needs,” “it is very likely my supervisor would use his/her power to help me solve problems at work.” The alpha coefficient was 0.90 for the U.S. sample and 0.92 for the China sample.

**P-LMX.** We included a four-item supervisor-subordinate P-LMX scale used in prior studies (Chen et al., 2009). The four items were “After work, I sometimes socialize with my supervisor, independent of work duties,” “I am well acquainted with the family members of my supervisor and I have personal contact with these members,” “During holidays my supervisor and I would call each other or visit each other at home,” and “My supervisors asks me to help him/her with personal/family errands.” The alpha coefficient of P-LMX was 0.81 for the U.S. sample and 0.83 for the China sample.
**Organizational commitment.** A six-item scale from Mowday, Steers and Porter (1979) was used to measure affective commitment. Sample scale items are “I am proud to tell others that I am part of this organization,” and “I care about the fate of this organization.” The alpha coefficient was 0.92 for the U.S. sample and 0.89 for the China sample.

**Job satisfaction.** A four-item job satisfaction scale taken from Cole (1979) was used to measure job satisfaction. Two sample items are “I am satisfied with my job” and “I would recommend this job to a friend.” The alpha coefficient was 0.93 for the U.S. sample and 0.91 for the China sample.

**Control variables**

We controlled for group level LMX differentiation, including both W-LMX and P-LMX differentiation in all our analyses, and therefore took into account group level LMX differentiation with the supervisor. We calculated within-group variance in LMX separately for W-LMX and P-LMX to operationalize LMX differentiation. We also controlled for both the W-LMX and P-LMX median, to ensure that LMX-differentiation was not really indicating median levels of LMX (which otherwise could happen, since LMX differentiation and LMX mean were usually correlated significantly). We also controlled group size for all the analyses. Group size was operationalized as the number of employees in the work group.

In addition, at the individual level, we controlled employees’ age, sex, education, and organizational tenure. At the group level, we controlled supervisors’ age, sex, education and organizational tenure. Age and organizational tenure were measured in years for both supervisors and employees. Education was measured in five ordered
categories: high school, some professional training, some college degree, a bachelor’s degree, and a graduate degree. Sex is coded 1 for male and 0 for female for both employees and managers.

**Measurement equivalence**

To examine measurement equivalence, researchers need to first conduct a single-group CFA analysis to examine discriminant validity of the hypothesized four factor model in each country separately. First, I tested whether the hypothesized four-factor model (consisting of W-LMX, P-LMX, job satisfaction and organizational affective commitment) fit the data well in the U.S. and China separately. The results showed that the hypothesized four-factor model fit the data well using both the U.S \((x^2=445.07, \text{df}=183, n=357; \text{SRMR=.04, CFI=.95})\) and the Chinese data \((x^2=624.34, \text{df}=183, n=250; \text{SRMR=.07, CFI=.90})\). Next, we contrasted the hypothesized four-factor model with two alternative models. One was a three-factor model in which W-LMX and P-LMX were loaded onto a single factor, and the other was a one-factor model in which all four variables were combined into one factor. As is shown in Table 3.1, the two alternative models exhibit a significantly worse fit than the baseline four-factor models in both the U.S. and China. These results demonstrate the discriminant validity of the measures across the U.S. and China. The poor fit of the one-factor model also suggested that common source variance did not affect the validity of the measures.

I then examined measurement equivalence. It is important to establish measurement equivalence in cross-cultural research (Tsui et al., 2007). I conducted two major tests of MI: configural equivalence (invariance) and metric equivalence (invariance). Configural equivalence refers to the equality of factor structure or equal
number of factors and factor patterns. Metric equivalence test examines whether factor loadings for like items are invariant across groups; in other words, whether the construct is manifested in the same way.

The results for configural MI showed that the samples had configural equivalence. \( X^2 = 1069.42, \text{df}=366, \text{CFI}=0.92, \text{RMSEA}=0.05, \text{SRMR}=0.05 \). For the test of metric equivalence, results showed good support for the more constrained model fit, \( X^2 = 1162.63, \text{df}=383, \text{CFI}=0.91, \text{RMSEA}=0.05, \text{SRMR}=0.05 \). I used the rule recommended by Cheung and Rensvold (2002) to examine the change in model fit. Cheung and Rensvold (2002) recommended the \( \Delta \text{CFI}>0.02 \) rule to flag a decrease in fit, rather than the biased \( X^2 \) difference test, because their stimulations suggest that the \( X^2 \) difference test is subject to sampling errors and the \( \Delta \text{CFI}>0.01 \) rule is more stable. As shown above, the change of CFI values between the more constrained model and the unconstrained model is smaller than 0.02. Thus, I have sufficient evidence to support that the measures used in the present study capture the same constructs in the U.S. and China.

**Analytical strategy**

Given the multilevel nature of the data, we applied hierarchical linear modeling (HLM) to test our hypotheses (Raudenbush, Bryk, Cheong, & Congdon, 2004). We first ran a three-level null model with no predictors but job satisfaction and organizational commitment as the dependent variable. We found significant variance at both the group level and the organizational level. The test results showed significant variance at the group level (\( x^2=203.36, \text{df}=102, p<0.001 \)) and organizational level (level 3) (\( x^2=38.28, \text{df}=22, p<0.05 \)) for job satisfaction. The results also showed significant variance at group level (\( x^2=230.77, \text{df}=102, p<0.001 \)) and at organizational level (level 3)(\( x^2=64.64, \text{df}=22, p<0.05 \)).
### TABLE 3.1

Comparison of Measurement Models for U.S. and China Samples

<table>
<thead>
<tr>
<th>Model Description</th>
<th>U.S.</th>
<th>China</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x^2</td>
<td>df</td>
</tr>
<tr>
<td>Baseline Four factor model: W-LMX, P-LMX, job satisfaction, and organizational commitment</td>
<td>445.07</td>
<td>183</td>
</tr>
<tr>
<td>Three factor model: W-LMX and P-LMX were combined into one factor</td>
<td>935.18</td>
<td>186</td>
</tr>
<tr>
<td>One factor model: All four factors were combined into one factor</td>
<td>2255.96</td>
<td>189</td>
</tr>
</tbody>
</table>

Note. ** p<.01
d.f, degree of freedom; CFI, comparative fit index; SRMR, standardized root mean square residual.
p<.001) for organizational commitment. Therefore, we conducted a three level HLM analysis to test our hypotheses.

### Results

Means, standard deviations, and intercorrelations among all variables are presented in Table 3.2.

Hypothesis 1 predicted that W-LMX and P-LMX would be more correlated for Chinese than for American employees. Correlation between the employee-rated W-LMX and P-LMX was 0.36 for the Chinese sample, but 0.18 for the American sample. These two correlations were significantly different (Z=2.43, p<0.05). Hence, Hypothesis 1 was supported.

Post-hoc analysis showed that there was a positive relationship between W-LMX, job satisfaction and organizational commitment for both American and Chinese employees. As shown in Table 3.3, Model 1 and Model 8, the relationship between W-LMX and job satisfaction was significant and positive (γ=.48, p<.01); the relationship between W-LMX and organizational commitment was also significant and positive (γ=.46, p<.01). Post-hoc analysis also showed there were no country differences in the relationship between WLMX and organizational commitment as well as job satisfaction. As shown in Table 3.3, Model 3

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1 The same relationship was found when regression was used and all the controls were added. When W-LMX was the dependent variable, the coefficient for country × P-LMX interaction term was significant and positive (γ=.20, p<.001); when P-LMX was the dependent variable, the coefficient for country × W-LMX interaction term was also significant and positive (γ=.47, p<.001). Since I coded the country variable as 1 for China and 0 for U.S., this implies that the interdependence between W-LMX and P-LMX was stronger in the China sample than in the U.S. sample.
TABLE 3.2
Descriptive Statistics and Correlations

| Variable                    | Mean | SD  | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     |
|-----------------------------|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Individual Level            |      |     |       |       |       |       |       |       |       |       |       |       |
| 1. Country                  | 0.39 | 0.49|       |       |       |       |       |       |       |       |       |       |
| 2. Age                      | 37.43| 10.25| -0.26**|       |       |       |       |       |       |       |       |       |
| 3. Sex                      | 0.6  | 0.49| 0.01  | 0.05  |       |       |       |       |       |       |       |       |
| 4. Education                | 4.1  | 1.23| 0.05  | -0.10**| 0.13**|       |       |       |       |       |       |       |
| 5. Organization tenure      | 8.92 | 7.15| 0.24**| 0.45**| 0.09* | -0.15**|       |       |       |       |       |       |
| 6. WLMX                     | 5.62 | 1.1 | 0.16**| -0.10*| 0.02  | 0.10* | 0.02  |       |       |       |       |       |
| 7. PLMX                     | 2.91 | 1.76| 0.64**| -0.16**| 0.09* | 0.08  | 0.15**| 0.29**|       |       |       |       |
| 8. Job Satisfaction         | 5.5  | 1.28| 0.02  | -0.05 | 0.07  | -0.01 | 0.04**| 0.21**|       |       |       |       |
| 9. Organizational commitment| 5.65 | 1.14| 0.18**| -0.04 | -0.02 | 0.04  | 0.03  | 0.6** | 0.28**| 0.74**|       |       |
| Group Level                 |      |     |       |       |       |       |       |       |       |       |       |       |
| 1. Country                  | 0.48 | 0.5 |       |       |       |       |       |       |       |       |       |       |
| 2. Manager’s age            | 41.27| 8.1 | -0.16*|       |       |       |       |       |       |       |       |       |
| 3. Manager’s sex            | 0.74 | 0.44| -0.06 | -0.02 |       |       |       |       |       |       |       |       |
| 4. Manager’s education      | 4.18 | 1.14| -0.31**| 0.18  | 0.11  |       |       |       |       |       |       |       |
| 5. Manager’s tenure         | 13.26| 7.24| 0.51**| 0.28**| 0.06  | -0.18 |       |       |       |       |       |       |
| 6. Group size               | 4.74 | 2.56| -0.43**| 0.05  | 0.18* | 0.33**| -0.1  |       |       |       |       |       |
| 7. WLMX median              | 5.8  | 0.81| 0.23**| 0.09  | 0.05  | 0.01  | 0.17  | -0.13**|       |       |       |       |
| 8. PLMX median              | 2.97 | 1.62| 0.79**| -0.06 | -0.01 | -0.25**| 0.45**| -0.29**| 0.32**|       |       |       |
| 9. WLMX differentiation     | 0.81 | 0.5 | -0.25**| -0.04 | -0.1  | -0.15 | -0.24*| 0.12**| -0.36**| -0.34**|       |       |
| 10. PLMX differentiation    | 1.12 | 0.64| 0.14**| -0.06 | 0.11  | 0.01  | -0.04 | -0.01 | 0.04  | 0.13  | 0.07  |       |

Note. * p<.05, ** p<.01. n=572
and Model 10, the interaction between country \(\times\) W-LMX on organizational commitment \((\gamma=0.10, t=0.89)\) as well as job satisfaction \((\gamma=0.04, t=0.05)\) were not significant.

Hypothesis 2 predicted that the relationship between P-LMX and organizational commitment as well as job satisfaction would be stronger for Chinese employees than for American employees. As seen in Table 3.3, Model 4, the interaction between country and PLMX was significant when the dependent variable was job satisfaction \((\gamma=0.15, p<0.05)\). The results in Table 3.3, Model 11 showed that the interaction between country and P-LMX was not significant for organizational commitment \((\gamma=-0.02, t=-0.34)\). Thus, Hypothesis 3 was partially supported. Figure 3.1 was created using traditional methods for depicting moderated effects in regression analyses (Cohen & Cohen, 1983). We derived equations for predicting employees’ job satisfaction from two levels of employees’ PLMX with managers, at 1 standard deviation above the mean and at 1 standard deviation below the mean. Simple slope analysis showed that the slope for the U.S. sample was positive and significant \((\gamma=0.05, p<0.01)\) and the slope for the China sample was also positive and significant \((\gamma=0.21, p<0.01)\). Thus, although P-LMX has a positive impact on job satisfaction for both Chinese and Americans, this effect is stronger for Chinese than Americans.

Hypothesis 3a predicted that the negative effects of W-LMX and P-LMX differentiation on individual job satisfaction would be less for Chinese than for American employees. As shown in Model 6 and Model 7 in Table 3.3, the interaction terms between country and PLMX differentiation bachelor’s degree – as well as between country and WLMX differentiation – were not significant; hence, hypothesis 3a was not supported.
Hypothesis 3b predicted that the negative effects of W-LMX and P-LMX differentiation on organizational commitment would be less for Chinese than for American employees. As presented in Model 13, Table 3.3, contrary to hypothesis 3b’s predication, the interaction term between country and WLMX differentiation was significant but negative ($\gamma=-0.39$, $p<.05$). The simple slope analysis showed that the slope for the U.S. sample was not significant ($\gamma=0.23$, $t=1.63$, $p=0.11$), while the slope for the China sample was negative and marginally significant ($\gamma=-0.31$, $t=1.88$, $p<.10$). The implication is that for WLMX differentiation, the effect is somewhat beneficial for Americans, but somewhat non-beneficial for Chinese. The results in Model 14, Table 3.3 showed that the interaction term between country and PLMX differentiation was
significant and positive, indicating that the negative impact of PLMX differentiation was less strong for Chinese employees than for American employees. The simple slope analysis showed that the slope for the U.S. sample was negative and significant ($\gamma = -0.14$, $p < .05$) while the slope for the Chinese sample was not significant ($\gamma = -0.05$, $t = -0.37$). The implication is that for PLMX differentiation the effect was somewhat negative for Americans, but not negative for Chinese. These two interaction effects are shown in Figure 3.2 and Figure 3.3.

The overall story told by this pattern is more complicated than hypothesized. The effect of LMX differentiation does differ by culture, but the direction of the interaction effect flips depending on whether it is WLMX or PLMX that is being assessed. Americans appear to gain somewhat from WLMX differentiation but are hurt from PLMX differentiation. Chinese appear to respond negatively to WLMX differentiation but are not hurt by PLMX differentiation. Hence, hypothesis 3b was partially supported, but the underlying story was different and more subtle.
FIGURE 3.2

Effects of the Interaction of Country and WLMX Differentiation on Organizational Commitment
FIGURE 3.3

Effects of the Interaction of Country and PLMX Differentiation on Organizational Commitment
### TABLE 3.3

Results of HLM Analysis with Job Satisfaction and Organizational Commitment as the Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>Job Satisfaction</th>
<th>Organizational Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1</strong></td>
<td>5.48**</td>
<td>5.66**</td>
</tr>
<tr>
<td><strong>Model 2</strong></td>
<td>5.46**</td>
<td>5.65**</td>
</tr>
<tr>
<td><strong>Model 3</strong></td>
<td>5.46**</td>
<td>5.65**</td>
</tr>
<tr>
<td><strong>Model 4</strong></td>
<td>5.41**</td>
<td>5.65**</td>
</tr>
<tr>
<td><strong>Model 5</strong></td>
<td>5.41**</td>
<td>5.65**</td>
</tr>
<tr>
<td><strong>Model 6</strong></td>
<td>5.41**</td>
<td>5.65**</td>
</tr>
<tr>
<td><strong>Model 7</strong></td>
<td>5.41**</td>
<td>5.65**</td>
</tr>
<tr>
<td><strong>Model 8</strong></td>
<td>5.66**</td>
<td>5.66**</td>
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<tr>
<td><strong>Model 9</strong></td>
<td>5.65**</td>
<td>5.66**</td>
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<tr>
<td><strong>Model 10</strong></td>
<td>5.65**</td>
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<tr>
<td><strong>Model 11</strong></td>
<td>5.65**</td>
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<tr>
<td><strong>Model 12</strong></td>
<td>5.65**</td>
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</tr>
<tr>
<td><strong>Model 13</strong></td>
<td>5.65**</td>
<td>5.66**</td>
</tr>
<tr>
<td><strong>Model 14</strong></td>
<td>5.65**</td>
<td>5.66**</td>
</tr>
</tbody>
</table>

**Level 1 controls**

- **Countries**
  - -0.40** -0.43** -0.99 -0.88** 0.12 0.10 0.10 0.10
  - Age
  - Sex
  - Education
  - Organizational tenure

**WLMX**

- 0.48** 0.44** 0.41** 0.43** 0.44** 0.44** 0.44** 0.44** 0.44** 0.44** 0.44**

**PLMX**

- 0.12** 0.11** 0.05** 0.12** 0.12** 0.12** 0.06* 0.06* 0.06* 0.06* 0.06* 0.06*

**Country × WLMX**

- 0.10

**Country × PLMX**

- 0.15*

**Level 2 controls**

- **Countries**
  - -0.43* -0.19 -0.50 0.10 0.43+ -0.17
  - Manager’s age
  - Manager’s sex
  - Manager’s education
  - Organizational tenure
  - Group size
  - WLMX median
  - PLMX median

**WLMX differentiation**

- 0.25+ 0.24+ 0.25+ 0.24+ 0.14+ 0.36* 0.24+ 0.07 0.07 0.07 0.07 0.23 0.06

**PLMX differentiation**

- -0.17+ -0.19*-0.19* -0.09 -0.19 -0.18+ -0.11+ -0.04 -0.04 -0.04 -0.04 -0.04 -0.14*

**Country × WLMX diff**

- -0.29

**Country × PLMX diff**

- 0.05 0.04 -0.39* 0.20+

Note. N=125. *p<.05; **p<.01
Discussion

To summarize, the results of this study have showed that W-LMX and P-LMX were more correlated to each other among Chinese than American employees. This study also demonstrated the importance of PLMX and PLMX differentiation in both Chinese and American organizations. At the individual level, I found that controlling for W-LMX, the relationship between PLMX and job satisfaction was stronger for Chinese employees. At the group-level, WLMX differentiation is more damaging for Chinese employees while PLMX differentiation is more damaging for American employees in terms of employees’ organizational commitment.

Theoretical implications

The current research makes three theoretical contributions. First, this study incorporated the indigenous concept of guanxi into main-stream LMX research. I extended both guanxi and LMX theory by examining a more complete globally-informed supervisor-subordinate relationship model that consists of P-LMX which is the core element of guanxi and W-LMX which constitutes Western LMX theory. The finding that P-LMX was more closely related to Chinese employees’ job satisfaction provides an explanation as to why Chinese employees are eager to engage in developing personal relationships (P-LMX) with bosses through off-duty socializing, gift-giving, and other forms of behavioral interactions. Second, the findings from this study shed light on the debate of whether guanxi is a local phenomenon that is unique to China or only a local term for a general phenomenon. This paper shows that at least one part of guanxi (P-LMX) also exists in an individualist culture
such as the U.S., but the effects of P-LMX and P-LMX differentiation vary based on its social location.

Third, this study sheds light on the importance of understanding the basis of LMX differentiation (that is, whether it is based on work relations or personal relations) and cross-cultural differences on the effects of LMX differentiation. The most striking finding of this study is that, although both Chinese and American employees react negatively to P-LMX differentiation in general, P-LMX differentiation appears to play a larger (negative) role for Americans while W-LMX differentiation plays a larger (negative) role for Chinese. Protestant Relational Ideology (PRI) may make it less acceptable for American managers to socialize with subordinates, and Americans may also have fewer concerns about emotional cues at the work place. However, if high differentiation of P-LMX does take place, Americans’ affective attachment to their organization is more severely damaged than their Chinese counterparts. By contrast, Chinese employees appear to be more sensitive to W-LMX differentiation. High W-LMX differentiation was related more with lower organizational commitment for Chinese than for American employees.

These findings indicate that different societies may have different degrees of cultural legitimacy for W-LMX differentiation and P-LMX differentiation. In a collectivistic culture like China, equality rules and concerns for work group harmony may lead managers to face more cultural constraints to differentiate employees in term of their work contributions while they have more cultural legitimacy to differentiate employees based on their personal closeness to managers. The important way for Chinese managers to motivate workers is through high P-LMX differentiation, rather high W-LMX differentiation. In contrast, American managers face more cultural constraints to engage in high P-LMX differentiation

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while having more cultural legitimacy to differentiate among employees based on their work contributions. The important way for American managers to cultivate high performers is high W-LMX differentiation. Once the cultural leadership schemes are violated in each of these contexts (which means that Chinese managers engage in high-WLMX differentiation or American managers engage in high P-LMX differentiation), employees would react more negatively.

Managerial implications

There are two important managerial implications of this study. First, because W-LMX and P-LMX are more intertwined in Chinese organizations than in American organizations, it is a common practice in Chinese societies for supervisors and subordinates to socialize together after work hours in an attempt to transform a work relationship into a personal or family-like relationship. Understanding this aspect of Chinese culture can greatly reduce the negative views some Western managers may hold toward their Chinese colleagues after seeing Chinese bosses and subordinates being too personally involved; and it may help them become more open to how supervisors and subordinates interact in Chinese societies. It has been reported that Western managers who work in China feel that interacting with their Chinese employees during social times is a sacrifice of their private time and space (Gao, Ballantyne, & Knight, 2010). The ability to understand and deal with off-hour socializing with subordinates is critical for Western expatriates to manage effectively in Chinese contexts. Moreover, Western managers should be aware that it is hard for Chinese to separate work relationship from personal relationships, so it is important to address personal as well as work relations. For example, when conflicts arise within the personal domain, it may spill over and severely damage work relationships (Hui & Graen, 1997). In a similar vein, good
personal relationships can also greatly facilitate business transactions and strengthen business relations (Xin & Pearce, 1996). Western managers, when working in China, should understand this spill-over effect between personal relationships and work relationships and utilize it wisely to benefit the organization.

Second, our research suggests that W-LMX differentiation seems more damaging in China while P-LMX differentiation is more damaging in the U.S. On the one hand, managers should be more cautious and provide sufficient merit-based evidence when they differentiate Chinese employees in terms of their work roles in Chinese contexts. On the other hand, managers should be more cautious when they engage in differentiated personal interactions with American employees working in American organizations.

**Limitations and future research**

There are several limitations of this study. First, some major variables come from the same source, which may bring concerns about common method variance. However, results of Harman’s one-factor test suggested that a single common-method factor was not driving the results. Although this test does not exclude the existence of common method variance, it can increase confidence in the interpretations because it excludes extreme cases of common-method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Furthermore, group level W-LMX and P-LMX differentiation stem from aggregated responses; any relationships involving these variables cannot be due to common methods. It is desirable, however, that future studies collect data at several different times and from multiple sources.

Second, because of the cross-sectional design of the current study, we were unable to determine causality among the variables under study. Although for Hypothesis 1, we were only concerned about the correlations between the two types of leader-member relationship
(i.e. W-LMX and P-LMX), future research should engage in longitudinal studies to further examine the relationship between W-LMX and P-LMX. The relationship between W-LMX and P-LMX has several possibilities: 1) P-LMX can be a consequence of W-LMX (I get along well with my supervisor at work and we start hanging out together outside work as a result); 2) P-LMX can be an antecedent of W-LMX (I start interacting a lot with my supervisor at a golf club and then want to become a trusted cadre at work); or 3) supervisors and subordinates develop P-LMX and W-LMX simultaneously. A longitudinal research design is needed to empirically examine the complex relationships between W-LMX and P-LMX. Additionally, although we intentionally develop a more complete model of supervisor-subordinate relationships and examine such a model in both a Chinese context and a Western context, future research should certainly apply this model to more countries in order to examine the generalizability of findings of the current study.

**Conclusion**

In this paper I develop an extended LMX model which includes both work-related exchange -- which is the core of LMX theory (what I called W-LMX) -- and non-work related personal elements of exchange, which are the core of *guanxi* (what I called P-LMX). I used this model to examine cultural similarities and differences between Chinese and American employees in their responses to W-LMX and P-LMX at both the individual level and the group level. This study demonstrates that an indigenous concept of *guanxi* can also be applied in a Western context, and that Chinese and American employees both have similarities and differences in their responses to W-LMX and P-LMX as well as differentiation of W-LMX and P-LMX.
References


APPENDIX A
EMPLOYEE QUESTIONNAIRE

In the following set of questions, think about your immediate supervisor/manager. Please circle one number per statement that best represents your response.

Section I. The following statements relate to your feelings and attitudes about your immediate supervisor or manager.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.  I usually know how satisfied my supervisor is with what I do.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2.  My supervisor understands my job problems and needs.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3.  My supervisor recognizes my potential.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4.  It is very likely that my supervisor would use his/her power to help me solve problems in my work.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5.  It is very likely that my supervisor would bail me out at his/her expense.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6.  I have enough confidence in my supervisor that I would defend and justify his/her decision if he/she were not present to do so.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>7.  I have an effective working relationship with my supervisor.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>8.  My supervisor and I always discuss thoughts, opinions, and feelings toward work and life.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>9.  I feel easy and comfortable in a face-to-face meeting with my supervisor.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>10. I would feel sorry and upset if my supervisor decided to work for another company.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>11. If my supervisor had personal problems I would do my best to help him/her out.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>12. My supervisor asks me to help him/her with personal/family errands.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>13. During holidays, my supervisor and I call each other or visit each other.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>14. I sometimes socialize with my supervisor, independently of work duties.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>15. I am well acquainted with the family members of my supervisor and I have personal contact with these members.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>16. I am willing to obey my supervisor unconditionally.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>17. Even if I disagree with my supervisor, I still support his/her decisions.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>18. When my goal is in conflict with my supervisor’s goal, I am willing to give up my goal in order to fulfill my supervisor’s goal.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>19. I am willing to sacrifice my interests in order to fulfill my supervisor’s interests.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>20. My chances for a pay raise depend on my supervisor’s recommendation.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>21. I am dependent on my supervisor for important organizational rewards.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
22. My supervisor’s recommendation is necessary for me to be promoted.  
23. When someone praises my supervisor, I feel like a personal compliment.  
24. When someone criticizes my supervisor, I feel like a personal insult.  
25. My supervisor’s successes are my successes.

Section II. Following are some items which assess your feelings about your job and the organization for which you work.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am satisfied with my job.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>2. I would take the same job again.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>3. I would recommend this job to a friend.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>4. This job measures up to my expectations.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>5. I work closely with others in doing my work.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>6. I frequently must coordinate my efforts with others.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>7. My own performance is dependent on receiving accurate information from others.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>8. Pay is closely tied to individual performance in my organization.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>9. Pay raises and promotions are closely tied to performance appraisal.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>10. Bonus distribution is based on performance appraisal in my organization.</td>
<td>1 2 3 4 5 6 7</td>
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</tr>
<tr>
<td>11. This organization really inspires me to be my very best in terms of job performance.</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>12. I talk up this organization to my friends as a great organization to work for.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>13. I am proud to tell others that I am part of this organization.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>14. I really care about the fate of this organization.</td>
<td>1 2 3 4 5 6 7</td>
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</tr>
<tr>
<td>15. I find that my values and this organization’s values are very similar.</td>
<td>1 2 3 4 5 6 7</td>
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</tr>
<tr>
<td>16. For me this is the best of all possible organizations to work for.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>17. I often think about quitting my job with my present organization.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>18. I will probably look for a new job within the next year.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>19. It is very likely that I will leave my present organization in the next 12 months.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
Section III. Following are some items that ask your opinion about fairness in your workplace.

<p>| | | | | | | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1. My supervisor has rewarded me fairly when I consider the responsibilities I have.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. My supervisor has rewarded me fairly when I consider the amount of effort that I have put forth.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. My supervisor has rewarded me fairly when I consider the stresses and strains of my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>4. My supervisor has rewarded me fairly when I consider the work that I have done well.</td>
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<tr>
<td>5. My supervisor has rewarded me fairly when I consider the amount of experiences I have</td>
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<td>3</td>
<td>4</td>
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<tr>
<td>6. Job decisions are made by my supervisor in an unbiased manner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
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<tr>
<td>7. My supervisor makes sure that all employee concerns are heard before job decisions are made.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8. To make job decisions, my supervisor collects accurate and complete information.</td>
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<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9. My supervisor clarifies decisions and provides additional information when requested by employees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10. All job decisions are applied consistently across all affected employees.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>11. Employees are allowed to challenge or appeal job decisions made by my supervisor.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12. Concerning decisions about my job, my supervisor treats me with kindness and consideration.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<tr>
<td>13. When decisions are made about my job, my supervisor deals with me in a truthful manner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>14. When decisions are made about my job, my supervisor shows concerns for my rights as an employee.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>15. When making decisions about my job, my supervisor considers my viewpoint.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>16. When making decisions about my job, my supervisor is able to suppress personal biases.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>17. Concerning decisions are made about my job, my supervisor provides me with timely feedback about the decision and its implications</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>7</td>
</tr>
</tbody>
</table>

Section IV. Following are some items that ask your opinion about your group members (other employees you work with in your work group) and the group you are in.

<p>| | | | | | | | |</p>
<table>
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<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When I am in a bind, my group members will take on extra work to help ensure completion of my important tasks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. My group members have asked for my advice in solving a job-related problem of theirs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. I would come to a group member's defense if he/she were being criticized.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. I respect my group members as professionals in our line of work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
5. My group members create an atmosphere conducive to accomplishing my work.  
   1 2 3 4 5 6 7

6. My group members are the kind of people one would like to have as friends.  
   1 2 3 4 5 6 7

7. Even when they disagree with me, my group members respect the value of my judgments and decisions.  
   1 2 3 4 5 6 7

8. I feel that I am loyal to my coworkers.  
   1 2 3 4 5 6 7

9. My group members value the skills and expertise that I contribute to our work group.  
   1 2 3 4 5 6 7

10. Our group likes to spend time together outside of work hour.  
    1 2 3 4 5 6 7

11. Members of our group do not stick together outside of work time.  
    1 2 3 4 5 6 7

12. Our group members rarely party together.  
    1 2 3 4 5 6 7

13. Members of our group would rather go out on their own than get together as a group.  
    1 2 3 4 5 6 7

14. There is personal friction in my group.  
    1 2 3 4 5 6 7

15. There are frequent personality conflicts evident in my group.  
    1 2 3 4 5 6 7

16. There is frequent tension in my group.  
    1 2 3 4 5 6 7

17. There is frequent emotional conflict among my group members.  
    1 2 3 4 5 6 7

**Section V. Following are some items that ask about your values.**

<table>
<thead>
<tr>
<th></th>
<th>1. If a co-worker gets a prize, I would feel proud.</th>
<th>2. The well-being of my coworkers is important to me.</th>
<th>3. To me, pleasure is spending time with others.</th>
<th>4. I feel good when I cooperate with others.</th>
<th>5. Parents and children must stay together as much as possible.</th>
<th>6. It is my duty to take care of my family, even when I have to sacrifice what I want.</th>
<th>7. Family members should stick together, no matter what sacrifices are required.</th>
<th>8. It is important to me that I respect decisions made by my family.</th>
<th>9. In most situations, managers should make most decisions without consulting their subordinates.</th>
<th>10. In work related matters, managers have a right to expect obedience from their subordinates.</th>
<th>11. Employees who often question authority sometimes keep their managers from being effective.</th>
<th>12. Once a decision of a top-level executive is made, people working for the company should not question it.</th>
<th>13. Employees should not express disagreements with their managers.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
<td>Strongly Agree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>1</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
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<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
14. Managers should be able to make the right decision without consulting others.  
1  2  3  4  5  6  7

15. Managers who let their employees participate in decisions lose power.  
1  2  3  4  5  6  7

16. A company’s rules should not be broken—not even when the employee thinks it is in the company’s best interest.  
1  2  3  4  5  6  7

Section VI. This is the last section of this questionnaire. Please complete the following background information.

1. What is your gender? □ Male          □ Female

2. Which year were you born? ______

3. What is the highest level of education you have completed?  
□ Less than high school □ High school □ Professional training program  
□ Associate (2 year) college degree □ Bachelors (4 year) college degree □ Graduate degree

4. How long have you worked for this organization?  
□ Less than 2 yrs □ 2-5 yrs □ 6-10 yrs □ 11-15 yrs □ 16-20 yrs □ More than 20 yrs

5. How long have you been working for your current manager? ______years ______months

6. Do you work together with your supervisor (manager) at the same location? □ Yes □ No

7. What rank best describes your position:  
□ Line employee □ Supervisor (directly manage line employees) □ Manager □ Executive

8. You describe yourself as (check one):  
□ Black/African-American □ Asian/Pacific Islander □ Hispanic/Latino/Latina  
□ Native-American □ White/Caucasian □ Other

Thank you very much for your participation!
APPENDIX B
SUPERVISOR QUESTIONNAIRE

Section I. The following statements relate to your evaluation of your subordinate ________________.

Please circle one number per statement that best represents your response.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. This subordinate is very competent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. This subordinate gets his or her work done very effectively.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>3. This subordinate has performed his/her job well.</td>
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<td>4. This subordinate is willing to assist new colleagues to adjust to the</td>
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<td>work environment.</td>
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<td>5. This subordinate is willing to help colleagues solve work-related</td>
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<td>problems.</td>
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<td>6. This subordinate is willing to cover work assignments for colleagues</td>
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<td>when needed.</td>
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<td>7. This subordinate complies with company rules and procedures even when</td>
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<td>nobody is watching and when no evidence can be tracked.</td>
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<td>8. This subordinate takes his/her job seriously and rarely makes mistakes.</td>
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<td>9. This subordinate’s attendance at work is above the norm.</td>
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<td>10. This subordinate knows how satisfied I am with what he/she does.</td>
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<td>11. I understand this subordinate’s job problems and needs.</td>
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<td>12. I recognize this subordinate’s potential.</td>
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<td>13. It is very likely that I would bail this subordinate out at my</td>
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<td>expense.</td>
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<td>14. It is very likely that I would use my power to help this subordinate</td>
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<td>solve problems relating to his or her work.</td>
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<td>15. I am confident that this subordinate would defend and justify my</td>
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<td>decision if I were not present to do so.</td>
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<td>16. I have an effective working relationship with this subordinate.</td>
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<td>17. This subordinate and I always discuss our thoughts, opinions, and</td>
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<td>feelings towards work and life with each other.</td>
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<td>18. I feel at ease when meeting with this subordinate.</td>
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<td>19. This subordinate would feel sorry and upset if I decided to work</td>
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<td>for another organization.</td>
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<td>20. If I have personal problems, this subordinate will do his/her best</td>
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<td>to help me out.</td>
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<td>21. I ask this subordinate to help me with my personal/family errands.</td>
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<td>22. During holidays, this subordinate and I call each other or visit</td>
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<td>each other.</td>
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</table>
23. I sometimes socialize with this subordinate, independently of work duties. 1 2 3 4 5 6 7
24. This subordinate is well acquainted with my family members. 1 2 3 4 5 6 7

Section II. The following statements relate to your evaluation of your group’s performance. Please circle one number per statement that best represents your response.

1. This group is very competent. 1 2 3 4 5 6 7
2. This group gets work done very effectively. 1 2 3 4 5 6 7
3. The overall performance of this group is high. 1 2 3 4 5 6 7

Section III. Read the following two scenarios and answer the questions that follow. Please circle one number per question that best represents your response.

1. Jim has the responsibility of filling a position in his firm. His friend Paul has applied and is qualified, but someone else (Person A) seems even more qualified.
   a. What right does Paul have to expect Jim to hire him instead of Person A?
      Absolutely has NO right 1 2 3 4 5 6 7 Absolutely has the right
   b. Would you give the job to Paul?
      Definitely NOT 1 2 3 4 5 6 7 Definitely

2. Your friend tells you about his plan to steal a digital camera from a store. Thinking that he is just joking around, you laugh and shrug it off. Two days later, the police take your friend into custody and ask him where he was on the day the camera was stolen. He says he was with you.
   a. What right does your friend have to expect you to go along with his story?
      Absolutely has NO right 1 2 3 4 5 6 7 Absolutely has the right
   b. Would you go along with your friend’s story?
      Definitely NOT 1 2 3 4 5 6 7 Definitely

Section IV. This is the last section of this questionnaire. Please complete the following background information.

1. What is your gender? ☐ Male ☐ Female
2. Which year were you born? _____
3. What is the highest level of education you have completed?
   ☐ Less than high school ☐ High school ☐ Professional training program
4. How long have you worked for this organization?

- Less than 2 years
- 2-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- More than 20 years

5. You describe yourself as (check one):

- Black/African-American
- Asian/Pacific Islander
- Hispanic/Latino/Latina
- Native-American
- White/Caucasian
- Other

Thank you very much for your participation in this research study!