# cemerald insight



# Journal of Managerial Psychology

Leader-member exchange and leader identification: comparison and integration Jie Li, Stacie Furst-Holloway, Suzanne S. Masterson, Larry M. Gales, Brian D. Blume,

### Article information:

To cite this document: Jie Li, Stacie Furst-Holloway, Suzanne S. Masterson, Larry M. Gales, Brian D. Blume, (2018) "Leader-member exchange and leader identification: comparison and integration". Journal of Managerial Psychology, https://doi.org/10.1108/JMP-06-2017-0220 Permanent link to this document: https://doi.org/10.1108/JMP-06-2017-0220

Downloaded on: 16 March 2018, At: 10:03 (PT) References: this document contains references to 86 other documents. To copy this document: permissions@emeraldinsight.com The fulltext of this document has been downloaded 9 times since 2018\*

# University Libraries

Access to this document was granted through an Emerald subscription provided by emeraldsrm:123756 []

# For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

## About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

\*Related content and download information correct at time of download.

# Leader-member exchange and leader identification: comparison and integration

Jie Li

School of Management, University of Michigan-Flint, Flint, Michigan, USA Stacie Furst-Holloway Department of Psychology, University of Cincinnati, Cincinnati, Ohio, USA Suzanne S. Masterson and Larry M. Gales

Department of Management, University of Cincinnati, Cincinnati, Ohio, USA, and

Brian D. Blume

School of Management, University of Michigan-Flint, Flint, Michigan, USA

#### Abstract

**Purpose** – The purpose of this paper is to compare and integrate leader-member exchange (LMX) and leader identification (LID) as concurrently functioning mediators between three leadership styles (individual-focused transformational, contingent reward, and benevolent paternalistic) and two citizenship behaviors (helping and taking charge).

**Design/methodology/approach** – Data included 395 stable, independent leader-follower dyads from numerous Chinese organizations. Partial least squares structural equation modeling and relative weight analysis were used in data analyses.

**Findings** – In established, steady-state leader-member alliances, LMX was the dominant explanation between various leadership styles and helping; whereas LID explained leadership effects on taking charge. Three-stage indirect effects of leadership-LMX-LID-taking charge were found. Also, LMX and LID related to the three focal leadership styles in distinct ways.

**Research limitations/implications** – Limitations include cross-sectional data. Strengths include a large, multi-source field sample. Implications include that LMX and LID provide different prosocial motivations; LMX indirectly engenders stronger other-orientation through LID; and the nature of indirect leadership effects via LID is more sensitive to the nature of the focal leadership styles. LMX and LID together provide a package of prosocial motivations.

**Practical implications** – Leaders interested in increasing employees' helping vs taking charge behaviors can be more effective by understanding the different motivational potentials of LMX vs LID. Leaders also need to choose appropriate behavioral styles when they activate LMX *vis-à-vis* LID.

**Originality/value** – This study integrates multiple leadership theories to provide a nuanced account of how social exchange and self-concept explain leadership at the interpersonal level when leadership styles, LMX, and LID are stable.

Keywords Identification, Leadership, Helping, Leader-member exchange (LMX),

Organizational citizenship behaviours, Interpersonal relations, Leadership integration

Paper type Research paper

One challenge for workplace leadership in the twenty-first century is that leaders need to properly organize workplace experiences for employees (Graen and Canedo, 2017). A large part of employees' work experiences hinge on the quality of the leader-follower role relationships, on which leaders have a major impact. Indeed, leadership is a relational phenomenon and leader-follower role relationships are crucial for leadership effectiveness (Gottfredson and Aguinis, 2017; Uhl-Bien, 2006). Two such relationships have been



Journal of Managerial Psychology © Emerald Publishing Limited 0268-3946 DOI 10.1108/JMP-06-2017-0220

LMX and leader identification

Received 29 June 2017 Revised 21 October 2017 Accepted 11 January 2018 extensively studied in leadership research. One is leader-member exchange (LMX), which captures the quality of the reciprocal role relationship through which valuable resources are exchanged between a leader and a follower (Liden *et al.*, 1997). The other is leader identification (LID, hereafter), which reflects the extent to which a follower's beliefs about the leader are self-defining (Kark *et al.*, 2003); that is, his/her perceived oneness with the leader (Ashforth *et al.*, 2016).

Although separate lines of research establish LMX and LID as important mediators of leadership effects (e.g. Dulebohn *et al.*, 2012; Zhu *et al.*, 2012), they merely coexist in the leader-follower role context. How they work together to mediate leadership effects remains unclear (cf. van Knippenberg *et al.*, 2004). As Bono and McNamara (2011, p. 659) noted, most mediators in leadership research, "even when they are conceptually related to each other, are studied in isolation. Typically, each is treated as if it is the unique process [...] and other known mediators are not considered." Thus, this research purports to explicate how LMX and LID concurrently function as mediators for leadership.

Research suggests that LMX provides a social exchange mechanism and LID offers a self-concept explanation of leadership (Dinh *et al.*, 2014). As a further distinction, some scholars argue that LMX is a "somewhat calculative and instrumental process," while also acknowledging that these role relationships also include "communal and less calculative aspects," such as identity-based attachment in the subordinate-manager relationship (Sluss and Ashforth, 2008, p. 808). However, others consider LMX and LID as subsumed in a leader-focused social exchange process (Lavelle *et al.*, 2007).

Although the preceding views are not necessarily conflicting, we do not know exactly how LMX and LID together explain leadership effects. In the interest of theoretical parsimony, one might argue that if one mediator has no incremental validity beyond the other, we may have a simpler account for leadership processes. To this end, Gottfredson and Aguinis (2017) conducted a meta-analysis based on multiple meta-analyses and found that, compared with other leadership mediators (e.g. job satisfaction, satisfaction with leader, role ambiguity, role conflict, trust, and justice), LMX was the most potent mediator between four positive leadership styles (consideration, initiating structure, transformational, and contingent reward) and followers' task performance and organizational citizenship behaviors (OCBs). However, the authors did not include LID in their analysis. Thus, it is unclear how LMX and LID compare. Additionally, the relative validities of LMX and LID as leadership mediators may depend on the specific outcome variables studied (cf. Martin *et al.*, 2016; Zhu *et al.*, 2012). Hence, a more complete understanding of leader-follower relational influence should consider LMX and LID together with behavioral outcomes that are in sharper contrast with the more traditional performance variables (e.g. Chiaburu *et al.*, 2014).

We argue that LMX and LID each may motivate followers in distinct ways that foster different kinds of behaviors. Because motivation is better understood by considering what it predicts (Cerasoli *et al.*, 2014), we focus on two distinct citizenship behaviors as outcomes to help differentiate LMX and LID. The first is helping, also called altruism, which refers to followers' small acts that are cooperative and beneficial to others (Farh *et al.*, 1997). The second is taking charge, a challenging type of OCB (Van Dyne *et al.*, 1995), which denotes "voluntary and constructive efforts, by individual employees, to effect organizationally functional change with respect to how work is executed within the contexts of their jobs, work units, or organizations" (Morrison and Phelps, 1999, p. 403).

Helping and challenging OCBs are stimulated by distinct types of motivations (e.g. Raub and Robert, 2010), which we argue can derive from LMX and LID, respectively. In this study, we focus on the stage when LMX and LID are likely to have reached a steady state (unchanging, George and Jones, 2000), as opposed to focusing on them in the leader-follower relationship development process, during which LMX and LID may develop at different rates of change and influence each other differentially. During such a dynamic state, the qualities of LMX and LID are transient and perhaps volatile, rendering their comparison less reliable. Given our interest in the relative validity of LMX and LID, using steady-state data is appropriate for our purpose of comparison.

Investigating the mediating roles of LMX and LID also concerns how they relate to leadership antecedents. Gottfredson and Aguinis (2017) examined each of the four positive leadership styles in separate models, focusing on pruning the mediating mechanisms for each style. However, because "controlling for one leadership style has substantial effects on the validity of the other" (Judge and Piccolo, 2004, p. 765), investigating multiple leadership styles together with LMX and LID provides more accurate information about the mediating roles of both in a more inclusive context of leadership behaviors.

Due to our relational emphasis, we chose three positive leadership predictors, each with a clear interpersonal focus: individual-focused transformational leadership, which was part of the transformational leadership model (Bass, 1985; Bass and Avolio, 1994; Podsakoff et al., 1990). The dual-level perspective separated it from the group-focused transformational leadership (cf. Wang and Howell, 2012); contingent reward leadership (Bass, 1985; Podsakoff et al., 1990); and benevolent paternalistic leadership (Aycan, 2006). In organizations, these leadership styles correspond to Max Weber's (1968) three types of legitimate authority. Individual-focused transformational leadership connects with charismatic authority that is inspirational. Contingent reward reflects the bureaucratic authority that is rational and depends on formal rules such as equity. Finally, benevolent paternalistic leadership corresponds to traditional authority originating from the patriarchal household. Although each is well suited at the interpersonal level, individual-focused transformational leadership is more change oriented, contingent reward more task oriented, and benevolent paternalistic leadership more relationship oriented (Yukl, 2010). Further, while individual-focused transformational leadership and contingent reward leadership represent western approaches to leadership, benevolent paternalistic leadership represents an eastern approach (Graen, 2008). Overall, these styles reflect some major categorizations of leadership from different angles, offering conceptually diverse antecedents that may differentially impact LMX and LID.

We conducted our study among Chinese managers who emphasize interpersonal relationships with followers, as are often reflected in LMX and LID (e.g. Zhang *et al.*, 2015; Zhu *et al.*, 2012). The coexistence of western and traditional paternalistic leadership in China calls for more thoughtful integrations of relational leadership theories (Graen, 2008) in order to effectively organize employees' workplace experiences (Graen and Canedo, 2017). Additionally, the rising status of China's economy and organizations requires enhanced practical knowledge on the highly interpersonal leadership phenomena for managers operating in China.

This study extends the literature in three ways. First, we explicate how the social exchange and self-concept mechanisms simultaneously function in a relatively broad nomological network. In doing so, we respond to calls for more extensive integration of leadership theories (e.g. Dinh *et al.*, 2014; Meuser *et al.*, 2016). Second, we extend Gottfredson and Aguinis's (2017) study by incorporating LID in the leadership processes. Lastly, this study adds to research on OCBs by systematically differentiating the mechanisms that lead to helping and challenging OCBs (e.g. Raub and Robert, 2010).

#### Theory and hypotheses

#### Motivation for helping and taking charge

Helping and taking charge are prosocial behaviors as they promote the welfare of others. However, they are likely driven by different kinds of prosocial motivation (i.e. the desire to benefit others, Bolino and Grant, 2016). Prosocial motivation can vary from a more controlled motivation (a sense of having to engage in the actions, Gagné and Deci, 2005)

to a more autonomous motivation (acting with a sense of volition and choice, Gagné and Deci, 2005). We argue that helping is likely driven by the more controlled form of prosocial motivation, whereas taking charge is likely motivated by the more autonomous prosocial motives.

OCB has been prominently featured in social exchange frameworks (Masterson *et al.*, 2000; Organ, 1988), including LMX research (Graen and Uhl-Bien, 1995; Ilies et al., 2007; Liden et al., 1997). Different from the original conceptualization which emphasized that OCBs were discretionary and unrewarded (Organ, 1988), Organ (1997) redefined OCB as "contributions to the maintenance and enhancement of the social and psychological context that supports task performance" (p. 91). As a prominent social exchange currency, helping is commonly used in reciprocal exchanges as a means of securing rewards. For example, employees use helping instrumentally to receive promotions (Hui *et al.*, 2000). Indeed, research demonstrates that OCBs, similar to task performance, are explicitly considered and rewarded through supervisors' performance evaluation (Podsakoff et al., 2009). Employees tend to engage in OCB when they perceive that allocations are fair in the exchanges with the authority (Masterson et al., 2000; Moorman, 1991). Additionally, helping is also commonly used in interpersonal reciprocation and is normatively regulated (Michel, 2017). Thus, helping is likely driven by the more controlled (Raub and Robert, 2010) prosocial motivations, such as those based on anticipated rewards and normative obligation to reciprocate (Korsgaard et al., 2010).

In contrast, taking charge is a challenging type of OCB that involves high-potential risk and cost for the employees (Morrison and Phelps, 1999). For example, taking charge to improve work methods entails changing the status quo, which often provokes skepticism and resistance. The potential failure could damage the individual's personal image and reputation. Also, the opportunity cost for performing taking charge instead of task behaviors can be significant. Because of these qualities, compared with helping, taking charge is not an ideal currency for exchanging rewards with the leader on a regular basis. It requires stronger internal forces to overcome the fear of personal risk and cost to perform taking charge (Parker *et al.*, 2010). The goal to make positive changes for the long-term well-being of the workplace provides a compelling other-oriented reason to self-initiate taking charge when "individuals have high levels of discretion, goals are not tightly specified, the means for achieving them are uncertain, and attainment is not clearly linked to rewards" (Parker *et al.*, 2010, p. 10). Thus, taking charge is largely motivated by a more autonomous (Parker *et al.*, 2010; Raub and Robert, 2010) prosocial motivation.

Consistent with the above discussion, recent findings show that self-interest is a dominant motive behind helping (Michel, 2017). Other research suggests that concerns for self-interest are featured less prominently in motivating taking charge than in prompting helping (McAllister *et al.*, 2007). Moon *et al.* (2008, p. 92) maintained that "the antecedents to taking charge are based more on concerns about others than on self-interest." The above discussion suggests that, compared to helping, taking charge is often motivated by a stronger other-orientation and thus is more prosocially motivated. We argue that to the extent that taking charge is more prosocially motivated than helping, the two OCBs should be affected differentially by LMX and LID.

#### Direct effect of LMX and LID

LMX is built on "actions contingent on the rewarding reactions of others" (Cropanzano and Mitchell, 2005, p. 890) and thus provides a more externally controlled motivation that at least partially concerns one's self-interest. Uhl-Bien and Maslyn (2003, p. 514) noted that "the highest level of relationship quality would be characterized by a high level of mutual-interest" instead of a high other-orientation. Thus, high LMX will directly generate more controlled prosocial motivation that concerns both parties' interests (Bolino and Grant, 2016).

It motivates followers to help coworkers as a way to reciprocate or benefit the leader and preserve the mutually beneficial exchange relationship (Masterson *et al.*, 2000):

H1a. LMX is positively related to helping.

High LID implies that the follower internalizes some of the leader's values, goals, and interests into his/her personal identity (Kark *et al.*, 2003). High-identifying employees often see the leader's success as their own and may self-initiate positive changes to the workplace as an expression of their authentic values and interests. They likely feel higher self-determination for taking charge to benefit the organization and also the leader. Thus, high LID produces the more autonomous prosocial motivation that predicts taking charge (Parker *et al.*, 2010):

*H1b.* LID is positively related to taking charge.

Consistent with our view that taking charge is less of an ideal behavioral currency than helping for employees to exchange rewards with the leader on regular basis, prior research suggests that LMX does not directly predict taking charge (Zhang *et al.*, 2015) and creativity (e.g. Atwater and Carmeli, 2009; Pan *et al.*, 2012) when controlling for guanxi, feelings of energy, and psychological empowerment, except when self-reported LMX and taking charge were used (Kim *et al.*, 2015). Burnett *et al.* (2015, p. 1808) noted, "social exchange explanations have been less predictive of [...] taking charge," probably because followers in high LMX tend to feel more content and less need for change. Moreover, LMX mainly focuses on the dyad, such that LMX predicts individual-focused helping better than organization-directed OCB (Ilies *et al.*, 2007), such as taking charge. Thus, when LID is accounted for, LMX is unlikely to directly predict taking charge.

Analogously, when LMX is included, LID may not predict helping. High-identifying followers may help others to gain the leader's approval (Brewer and Gardner, 1996), or to avoid guilty feelings if not helping would disappoint the leader (Grant and Wrzesniewski, 2010). However, these more controlled prosocial processes are hardly distinguishable from LMX processes in which followers help others in exchange for rewards that reflect the leader's approval. Also, when the more controlled motivation from LMX is salient, due to the "crowding out effect" (Cerasoli *et al.*, 2014, p. 983), the more autonomous prosocial motivation from LID will be less able to predict helping because helping may be governed by strong norms of reciprocity and role obligations in Chinese firms (Hackett *et al.*, 2003). Thus, we predict:

*H1c.* When the direct effects of LMX and LID on both outcomes are examined simultaneously, LMX only predicts helping and LID only predicts taking charge.

#### Leadership-LMX-helping indirect effect

From a social exchange perspective, leaders' individualized support, high performance expectations, and intellectual stimulation (individual-focused transformational leadership) are often viewed by followers as positive contributions that signal high-quality LMX (Wang *et al.*, 2005). The same is true for providing recognition and rewards contingent on one's performance (contingent reward), and displaying genuine care about followers' personal well-being (benevolent paternalistic leadership). All of these behaviors may activate followers' prosocial motives to help colleagues (Rioux and Penner, 2001), to benefit or reciprocate the leader, and to maintain the positive exchange relationship (Korsgaard *et al.*, 2010; Masterson *et al.*, 2000). Thus, LMX mediates leadership effects on helping (Gottfredson and Aguinis, 2017):

H2. LMX mediates the positive effects of (a) individual-focused transformational leadership, (b) benevolent paternalistic leadership, and (c) contingent reward leadership on helping.

#### Leadership-LID-taking charge indirect effect

Leadership behaviors with an interpersonal focus will activate followers' LID (Lord *et al.*, 1999; van Knippenberg et al., 2004). Individual-focused transformational leadership activates LID because leaders' individualized encouragement and support, positive expectations, and intellectual stimulation boost followers' positive views of self (Ashforth et al., 2016; Wang and Howell, 2012). Likewise, benevolent paternalistic leaders' genuine and somewhat overbearing care resembles that from a parent, triggering a transference of followers' identification with parents to LID (Pellegrini and Scandura, 2008). However, contingent reward is likely to suppress LID because it focuses followers on their self-interests, while prohibiting the activation of their social self (Lord *et al.*, 1999). Typical actions such as recognizing followers' good performance may appear to be capable of activating LID. However, after controlling for the other two leadership styles, pure contingent reward closely represents impersonal transactions (Yukl, 1999) that activate strong concerns for rational self-interest, which is largely incompatible with the strong other-orientation (Meglino and Korsgaard, 2006) in high LID. Thus, contingent reward should be negatively related to LID when modeled with the other two styles. Overall, the three leadership styles may indirectly affect taking charge through activating LID:

H3. LID mediates the positive effects of (a) individual-focused transformational leadership and (b) benevolent paternalistic leadership, and the negative effect of (c) contingent reward leadership on taking charge.

#### LMX-LID-taking charge indirect effect

While the preceding hypotheses consider the separate effects of LMX and LID, it is important to recognize that these constructs coexist in the dyadic role context. Leader-follower interactions are a primary way through which individuals develop a sense of self at work (Lord *et al.*, 1999; Sluss and Ashforth, 2008). Social exchange research argues that high LMX renders salient the mutual trust, respect, and internalization of shared goals, which effectively activates LID (Lavelle *et al.*, 2007). Therefore, LMX may indirectly provide more autonomous prosocial motivation for taking charge via LID:

H4. LMX has a positive indirect effect on taking charge through LID.

#### Leadership-LMX-LID-taking charge indirect effect

As proposed above, we expect the three leadership styles to be positively related to LMX. Given the prior discussion, it follows that these leadership styles may affect taking charge indirectly through three-stage paths:

H5. There are three-stage positive indirect effects from (a) individual-focused transformational leadership, (b) benevolent paternalistic leadership, and (c) contingent reward leadership through LMX and then LID to taking charge.

We focus on the LMX-LID directionality instead of the LID-LMX directionality because the former appears congruent with three prevalent views in the literature. First, LMX activates followers' self-concepts (Lord *et al.*, 1999; Sluss *et al.*, 2008). Second, the target similarity social exchange model proposes the LMX-LID-outcome directionality (Lavelle *et al.*, 2007). Third, LMX can be transformational (Graen and Uhl-Bien, 1995) and thus may transcend followers' self to include leaders' interests, as in LID. Hence, examining the LMX-LID-outcome effect tests the transformational view of LMX beyond the LMX-transformational leadership relationship (Howell and Hall-Merenda, 1999).

#### Method

#### Sample and procedure

The subjects in this study were managers enrolled in the part-time MBA program of a public university in Southwest China. Each participant anonymously and voluntarily rated his/her direct supervisor's leadership behaviors and his/her own perceptions of LMX and LID. Next, each participant delivered to his/her direct supervisor a sealed packet, which included a pre-addressed envelope and a survey about this particular subordinate's helping and taking charge. The voluntarily participating supervisors mailed the completed surveys to the authors. The subordinate and supervisor surveys were linked by a random code. In total, 702 paired surveys were distributed, and 395 matched usable surveys were received (effective response rate = 56.3 percent). The MBA program administrator informed us that about 95 percent of all enrolled managers worked for distinct organizations that represented a wide range of industries. Thus, each of our dyads was very likely independent, and our results were unlikely affected by factors at higher levels of analyses.

In the subordinate sample, 57.5 percent were 30 years old or younger and 50.3 percent were female. About 55.7 percent subordinates had an undergraduate degree while 14.4 percent completed graduate education. Among the supervisors, 55.4 percent were 36 or older, 65 percent were male, 61.3 percent reported undergraduate education, and 15 percent received graduate degrees. The average dyad tenure was 2.4 years (minimum = six months), suggesting that a steady state of leadership styles and dyad relationships were very likely reached.

#### Measures

All scales were back-translated using established procedures (Brislin, 1980). All indicators ranged from 1 = "strongly disagree" to 5 = "strongly agree." Subordinates rated leadership styles, LMX, and LID. Individual-focused transformational leadership was measured by Podsakoff *et al.*'s (1990) high performance expectations (three-item, e.g. insists on only the best performance), individualized support (four-item, e.g. behaves in a manner thoughtful of my personal needs), and intellectual stimulation (four-item, e.g. challenges me to think about old problems in new ways). These dimensions are chosen for two reasons. First, they attend to individuals' performance, ability, feelings, needs, and assumptions. Second, we pit contingent reward as a "principle transactional leader behavior" (Podsakoff *et al.*, 1990, p. 110) in contrast to the change-oriented individual-focused transformational leadership. Podsakoff *et al.* (1990) demonstrated good discriminant validity between contingent reward and these individual-focused dimensions. Contingent reward was assessed with the five-item scale from Podsakoff *et al.* (1990; e.g. gives me special recognition when my work is very good).

Benevolent paternalistic leadership was assessed by the 13-item scale (Aycan, 2006; e.g. my direct supervisor gives advice to me on different matters as if he/she were an elder family member) that demonstrated measurement invariance across Asian and western cultures (Pellegrini *et al.*, 2010). Benevolence and control are necessary components of this leadership style (Pellegrini and Scandura, 2008; Wagstaff *et al.*, 2015) and Aycan's (2006) scale captures benevolence and order keeping as a caring form of control in a holistic construct. Consistent with Atwater and Carmeli (2009), we assessed LMX with Liden and Maslyn's (1998) 11-item scale (e.g. I like my direct supervisor very much as a person). Lastly, six items (cf. Kark *et al.*, 2003; Wang and Howell, 2012) measured LID (e.g. my direct supervisor's successes are my successes).

Supervisors rated the ten-item taking charge from Morrison and Phelps (1999; e.g. often makes constructive suggestions for improving how things operate within the organization) and the four-item helping from Farh *et al.*'s altruism (1997; e.g. willing to help colleagues solve work-related problems).

#### JMP Analyses and results

Table I reports descriptive statistics of the study variables. Leader age, follower education. leader education, and dyad tenure significantly correlated with taking charge; thus, they were used as controls (Becker, 2005). Partial least squares structural equation modeling (PLS-SEM), SmartPLS 2.0 (Ringle et al., 2005), was used for data analyses. PLS-SEM is used often in leadership research for testing prediction-oriented models in early theory building stages (cf. Howell and Hall-Merenda, 1999; Sosik et al., 2009). It suits our study well because theories about LMX and LID as concurrent leadership mediators are severely lacking. Second, PLS-SEM is recommended for studies using strongly correlated leadership variables due to intersecting conceptual domains (Palanski and Yammarino, 2011; Sosik et al, 2009). Third, the product of the mediation link coefficients is often not normally distributed and PLS-SEM is suited for testing mediation because it does not require data normality (Hair et al., 2017). Fourth, PLS-SEM acknowledges that "psychometric properties of measures derive their meaning from the nomological network of relationships in which the measures are employed" (Sosik et al., 2009, p. 17) by simultaneously testing measurement and structural models. This serves our goal to understand LMX and LID within our proposed nomological network. PLS-SEM models are not evaluated by how well the model fits the data. Rather, they are evaluated by a number of validity benchmarks and statistical procedures (Hair et al., 2017), which we report below.

#### Measurement properties

As Table I shows, all scales demonstrated acceptable internal consistencies ( $\alpha > 0.70$ ). To examine construct validity, we analyzed the size and significance of outer loadings, cross-loadings, average variance extracted (AVE) (Hair *et al.*, 2017), and heterotrait-monotrait (HTMT) ratio of correlations (Henseler *et al.*, 2015). Individual-focused transformational leadership and LMX were modeled as second-order constructs (Hair *et al.*, 2017). PLS algorithm showed that one item of benevolent paternalistic leadership (bpl\_6:  $\lambda = 0.056$ , ns) and two reverse coded items of the individualized support dimension (tfl\_4:  $\lambda = 0.132$ , ns; tfl\_7:  $\lambda = 0.081$ , ns) had non-significant outer loadings. It is recommended that researchers delete the exceptionally weak items (Hair *et al.*, 2017). Hence, we excluded them from further analysis.

Table II presents the outer loadings, cross-loadings, AVEs, and composite reliabilities from the resulting model. All outer loadings (p < 0.01) were greater than cross-loadings; all AVEs exceeded 0.50; and all composite reliabilities well surpassed 0.70. These results suggest good convergent validity and preliminary discriminant validity. Given some of the high correlations, a rigorous test for discriminant validity is needed. We used the HTMT ratio analysis (Henseler *et al.*, 2015) instead of the AVE criterion (Fornell and Larcker, 1981) because a HTMT ratio of 0.90 has a 99.45 percent chance to detect a discriminant validity problem when there actually is one, compared to the AVE approach (20.82 percent chance). HTMT ratios lower than 0.90 indicate sufficient discriminant validity (Henseler *et al.*, 2015, p. 124). Table III strongly suggests our constructs were distinct (highest HTMT ratio = 0.851). We also checked the variance inflation factor (VIF) for the predictors and mediators. Because no VIF exceeded 3.601, lower than the threshold of 5.0, multicollinearity was unlikely a problem (Hair *et al.*, 2017).

#### Hypotheses tests

Table IV reports the direct and indirect effects and predictive relevance indicator of Stone-Geisser's  $Q^2$  (Hair *et al.*, 2017). Supporting *H1a*, LMX positively predicted helping ( $\beta = 0.311$ , p < 0.01). The LID-taking charge path was significant ( $\beta = 0.257$ , p < 0.01), consistent with *H1b*. Next, we added the LMX-taking charge and the LID-helping paths to the model (Figure 1). Neither path was significant ( $\beta = 0.069$ , ns and  $\beta = 0.023$ ,

identi	= graduate; "dya	aduate, and 4	, 3 = undergr	= high school	a high school, 2	: 1 = less tha	1 categories
ender was coded as: 0 = tenure was measured i	' = 56 and older, <sup>b</sup> = graduate; <sup>d</sup> dyac	= 51-55, and 7 aduate, and 4	, 5 = 46-50, 6 = , 3 = undergra	86-40, 4 = 41-45 2 = high school	2 = 31-35, 3 = 3 1 high school, 2	) or younger, : $1 = less that$	ories: 1 = 3 1 categories
1	- 0.484**	-0.247** 0.255**	0.305**	0.294** 0.294** 0.254**	0.214** 0.235**	$0.248^{**}$ $0.275^{**}$	0.835 0.930
				- 0.697**	0.689** 0.763** ^755**	$0.746^{**}$ $0.788^{**}$ $0.704^{**}$	0.872 0.928 0.904
14	13	12	11 	10 - 0.697**	9 	8 - 0.762 * 0.746 * 0.746 * 0.746 * 0.788 * 0.704 * * 0.7004 * * 0.704 * 0.704 * 0.704 * 0.704 * 0.704 * 0.704 * 0.704 * 0.704 * 0.704 * 0.704 *	lpha 0.912 0.872 0.928 0.904
0.101* 14	0.096***	-0.059	-0.063 11 	0.111*	0.069 9 0.689** 0.763**	0.664 8 8 0.762** 0.746** 0.788**	$\begin{array}{c} 2.988\\ \alpha\\ 0.919\\ 0.872\\ 0.928\\ 0.928\\ 0.928\\ 0.904\end{array}$
0.050 -0.029 0.018 -0.042 0.138** 0.101* 14	-0.020 0.025 0.096***	-0.037 0.058 -0.059 12	-0.139** 0.061 -0.063 11 	0.010 0.007 0.1111* 10 0.697**	-0.067 -0.082 0.069 - 0.763**	0.975 0.645 0.664 8 0.762*** 0.746*** 0.746***	$\begin{array}{c} 2.869\\ 3.882\\ 3.882\\ \alpha\\ \alpha\\ \alpha\\ 0.919\\ 0.912\\ 0.928\\ 0.928\\ 0.912\\ 0.928\\ 0.928\\ 0.928\\ 0.928\\ 0.904\end{array}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0.056 0.043 -0.020 0.026 0.096**** 13	$\begin{array}{c} 0.004\\ 0.003\\ -0.037\\ 0.058\\ -0.059\\ 12\end{array}$	-0.115* -0.105* -0.139** 0.061 -0.063 11 11 11	-0.033 -0.062 0.010 0.007 0.1111* 10 - 0.697**	-0.087*** -0.181** -0.067 -0.069 9 9 0.689** 0.763**	0.864 0.859 0.975 0.645 0.664 0.664 0.664 0.762** 0.762** 0.763***	3.603 3.349 3.349 3.3882 2.988 $\alpha$ $\alpha$ $\alpha$ $\alpha$ 0.919 0.912 0.912 0.912 0.928 0.928 0.928
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	-0.063 -0.015 0.056 0.043 -0.020 0.022 $0.096^{***}$ 13	-0.065 0.007 0.004 0.003 -0.037 -0.058 12 12	-0.207** -0.102* -0.115* -0.139** 0.061 11 11 11	-0.012 -0.004 -0.033 -0.062 0.010 0.0111* 10 10 0.697**	-0.083 -0.060 -0.087*** -0.087 -0.067 -0.069 - - 0.763*** 0.763***	0.855 0.814 0.864 0.864 0.859 0.975 0.645 0.645 0.645 0.748*** 0.746***	3.338 2.895 3.349 3.349 2.886 3.349 3.349 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.349 3.388 3.388 3.349 3.388 3.388 3.349 3.388 3.388 3.349 3.3882 3.388 3.3882 0.391200000000000000000000000000000000
$\begin{array}{c} 0.191 ** \\ 0.072 \\ -0.072 \\ -0.028 \\ 0.077 \\ -0.066 \\ 0.084 *** \\ 0.0618 \\ -0.027 \\ -0.027 \\ 0.018 \\ 0.018 \\ 0.0138 ** \\ 0.101 \\ 14 \\ 14 \end{array}$	$-0.308^{**}$ 0.063 -0.015 0.043 -0.025 $0.026^{****}$ 1.3	-0.035 -0.142** 0.005 0.004 0.003 -0.037 -0.058 -0.059 12	-0.078 -0.107* -0.207** -0.115* -0.115* -0.105* -0.161 0.061 11 11	0.039 0.194** -0.012 0.004 -0.053 0.010 0.007 0.111* 10 0.697**	0.1038 -0.083 -0.083 -0.067 -0.087*** -0.069 9 9 0.689*** 0.763***	2.434 0.855 0.855 0.814 0.864 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.869 0.664 0.762*** 0.746**	$\begin{array}{c} 2.922\\ 2.338\\ 3.603\\ 3.603\\ 3.603\\ 3.603\\ 3.603\\ 3.603\\ 3.603\\ 3.603\\ 3.603\\ 3.603\\ 3.603\\ 3.603\\ 0.912\\ 0.912\\ 0.912\\ 0.912\\ 0.912\\ 0.912\\ 0.904\end{array}$
$\begin{array}{c} - & - & - \\ 0.191 ** & -0.038 \\ 0.072 & -0.028 \\ -0.027 & -0.067 \\ 0.084 *** & -0.087 *** \\ 0.066 & -0.029 \\ 0.018 & -0.042 \\ 0.0138 ** & 0.101 * \\ 14 & 0.101 * \end{array}$	0.308** -0.012 -0.015 0.056 0.043 0.043 0.043 0.043 0.025 0.025 0.096***	-0.120** -0.120** -0.035 -0.042 0.007 0.007 0.0037 -0.037 -0.058 -0.058 12	-0.115* -0.078 -0.107* -0.207** -0.102* -0.102* -0.105* -0.105* -0.105* -0.105* -0.105* -0.105* -0.105* -0.105* -0.105* -0.107* -0.107* -0.107* -0.107* -0.107* -0.107* -0.107* -0.107* -0.107* -0.107* -0.107* -0.107* -0.107* -0.105* -0.063 -0.064	0.146** 0.039 0.039 0.004 0.004 0.002 0.007 0.010 0.007 0.011 0.007 0.007	-0.103** 0.038 0.0387*** -0.083 -0.067 -0.087**** -0.082 0.069 9 9 0.689*** 0.763***	0.748 0.660 0.660 0.855 0.814 0.864 0.864 0.859 0.859 0.864 0.859 0.859 0.859 0.859 0.859 0.859 0.645 0.645 0.645 0.764***	$\begin{array}{c} 2.820\\ 2.922\\ 2.922\\ 2.334\\ 3.338\\ 3.349\\ 3.338\\ 3.349\\ 3.338\\ 3.349\\ 3.338\\ 3.338\\ 3.338\\ 3.338\\ 3.338\\ 3.338\\ 3.338\\ 3.338\\ 3.338\\ 3.338\\ 3.338\\ 0.0912\\ 0.002\\ 0.002\\ 0$
0.191** 0.191** 0.072 0.072 0.022 0.022 0.024 -0.025 -0.066 0.087** 0.087** 0.087** 0.087** 0.042 0.042 0.101* 14 0.101* 0.101* 0.101* 0.101* 0.101* 0.101* 0.101* 0.101* 0.101* 0.101* 0.101* 0.101* 0.101* 0.101* 0.022 0.027 0.018 0.0108 0.018 0.018 0.018 0.018 0.018 0.018 0.018 0.018 0.018 0.018 0.018 0.018 0.018 0.0108 0.018 0.	$^{-}_{-0.012}$ 0.308** -0.012 -0.015 -0.015 0.056 0.043 0.043 0.043 0.043 0.043 0.043 0.025 0.096***	-0.120** -0.122** -0.065 -0.065 -0.065 0.004 0.003 -0.037 -0.037 0.003 -0.037 -0.059 -12	0.242** -0.115* -0.078 -0.107* -0.107* -0.105* -0.115* -0.115* -0.105* 11 11 11	-0.121* 0.146** 0.039 0.039 0.004 -0.012 0.004 0.004 0.0062 0.0062 0.0111* 10 0.007 0.007 0.0697**	-0.042 -0.103* 0.387*** -0.083 -0.083 -0.087 -0.087 -0.082 -0.082 0.069 9 9 0.689*** 0.763***	0.467 0.748 0.748 0.660 2.434 0.855 0.854 0.859 0.864 0.864 0.859 0.975 0.645 0.645 0.645 0.645 0.645 0.645 0.645 0.664 8 8 0.746***	$\begin{array}{c} 0.335\\ 2.820\\ 2.384\\ 3.338\\ 3.338\\ 3.349\\ 3.349\\ 3.349\\ 3.388\\ 3.349\\ 3.388\\ 3.349\\ 3.388\\ 3.349\\ 3.388\\ 0.012\\ 0.912\\ 0.$
$\begin{array}{c} -\\ 0.191^{**}\\ 0.072\\ -0.02\\ -0.02\\ 0.077\\ -0.066\\ 0.084^{***}\\ 0.084^{***}\\ 0.084^{***}\\ 0.087^{**}\\ 0.087^{**}\\ 0.087^{**}\\ 0.018\\ 0.018\\ 0.011^{*}\\ 0.101^{*}\\ 14\end{array}$	0.308** 0.308** -0.012 0.063 -0.015 0.043 0.043 0.043 0.043 0.025 0.025 13	-0.120** -0.120** -0.035 -0.035 -0.007 0.004 0.003 -0.037 -0.037 -0.058 -0.059 12	0.242*** -0.115* -0.078 -0.078 -0.107* -0.105* -0.115* -0.139*** 0.061 -0.139*** 0.061 -0.139*** 0.061 -0.139*** 0.061 -0.135* -0.17**	-0.050 -0.121* 0.146** 0.039 0.094* -0.012 0.004 0.007 0.010 0.007 0.011	0.346** -0.110* -0.042 -0.038 0.387** 0.387** 0.387** 0.387** -0.083 -0.069 9 9 9 0.689** 0.763**	1.321 0.492 0.748 0.748 0.748 0.855 0.855 0.859 0.864 0.864 0.864 0.864 0.864 0.864 0.864 0.864 0.864 0.875 0.664 0.875 0.664 0.875 0.664 0.875 0.748***	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Downloaded by Kent State University At 10:03 16 March 2018 (PT)

Table I. Means, standard iations, zero-order correlations, and Cronbach's  $\alpha$  of study variables

ПЛ								
JMP		Individual-focused transformational	Benevolent paternalistic	Contingent reward	LMX	Leader identification	Helping	Taking charge
	tfl 1	0.828	0.681	0.678	0.695	0.625	0.236	0 189
	tfl 2	0.780	0.589	0.573	0.610	0.559	0.133	0.165
	tfl_3	0.689	0.478	0.447	0.501	0.493	0.098	0.148
	tfl 5	0.746	0.470	0.691	0.716	0.582	0.030	0.140
	tfl 6	0.722	0.680	0.684	0.705	0.576	0.272	0.202
	tfl 8	0.752	0.519	0.495	0.493	0.485	0.131	0.212
	tfl 9	0.812	0.592	0.540	0.570	0.519	0.162	0.272
	tfl 10	0.852	0.621	0.645	0.619	0.544	0.102	0.267
	tfl 11	0.835	0.660	0.677	0.652	0.571	0.221	0.232
	bpl 1	0.621	0.818	0.637	0.616	0.581	0.210	0.150
	bpl_2	0.583	0.793	0.583	0.581	0.566	0.208	0.152
	bpl_3	0.630	0.756	0.644	0.689	0.561	0.256	0.181
	bpl_4	0.649	0.836	0.627	0.689	0.692	0.227	0.233
	bpl_5	0.673	0.836	0.618	0.706	0.647	0.257	0.238
	bpl_7	0.548	0.752	0.491	0.513	0.538	0.127	0.194
	bpl_8	0.343	0.525	0.275	0.388	0.409	0.129	0.061
	bpl_9	0.515	0.708	0.517	0.562	0.523	0.141	0.195
	bpl_10	0.574	0.747	0.577	0.592	0.598	0.144	0.182
	bpl_11	0.513	0.616	0.484	0.479	0.479	0.090	0.203
	bpl_12	0.690	0.774	0.670	0.672	0.625	0.197	0.180
	opi_15	0.339	0.380	0.251	0.260	0.517	0.009	0.055
	$cr_2$	0.723	0.727	0.910	0.695	0.539	0.215	0.155
	$cr_3$	0.725	0.727	0.930	0.686	0.558	0.260	0.200
	cr 4	0.683	0.683	0.872	0.616	0.547	0.255	0.288
	cr 5	0.149	0.123	0.300	0.183	0.075	0.209	0.064
	lmx_1	0.665	0.701	0.619	0.852	0.695	0.284	0.175
	lmx_2	0.685	0.723	0.648	0.853	0.673	0.244	0.159
	lmx_3	0.684	0.731	0.660	0.877	0.673	0.282	0.181
	lmx_4	0.635	0.677	0.567	0.795	0.675	0.219	0.178
	lmx_5	0.676	0.694	0.657	0.855	0.657	0.228	0.186
	lmx_6	0.602	0.656	0.584	0.818	0.607	0.267	0.215
	lmx_7	0.244	0.225	0.145	0.317	0.222	0.085	0.156
	lmx_8	0.556	0.484	0.470	0.647	0.539	0.234	0.202
	lmx_9	0.700	0.651	0.616	0.837	0.625	0.277	0.213
	Imx_10	0.608	0.553	0.530	0.773	0.521	0.222	0.136
	lillX_11	0.040	0.560	0.349	0.784	0.302	0.250	0.144 0.245
	lid 2	0.605	0.680	0.430	0.000	0.810	0.241	0.245
	lid_2	0.499	0.533	0.020	0.560	0.738	0.142	0.151
	lid 4	0.639	0.675	0.506	0.648	0.873	0.182	0.181
	lid 5	0.632	0.661	0.510	0.657	0.877	0.208	0.210
	lid_6	0.559	0.579	0.502	0.619	0.791	0.195	0.256
	hlp_1	0.258	0.244	0.251	0.275	0.211	0.823	0.362
	hlp_2	0.187	0.181	0.234	0.258	0.201	0.879	0.377
	hlp_3	0.169	0.152	0.168	0.197	0.185	0.747	0.418
	hlp_4	0.208	0.209	0.249	0.273	0.218	0.825	0.405
	tc_1	0.205	0.174	0.210	0.147	0.150	0.459	0.700
Table II	tc_2	0.149	0.148	0.138	0.126	0.162	0.437	0.745
Factor loadings	tc_3	0.219	0.192	0.204	0.136	0.192	0.475	0.835
cross-loadings,	tc_4	0.214	0.197	0.212	0.164	0.204	0.389	0.807
composite reliability.	10_0	0.148	0.110	0.121	0.110	0.100	0.198	0.764
and average								
variance extracted							( <i>cc</i>	ontinued)

leader	Taking charge	Helping	Leader identification	LMX	Contingent reward	Benevolent paternalistic	Individual-focused transformational	
identification	0.830	0.297	0.217	0.186	0.198	0.185	0.237	tc_6
	0.831	0.348	0.259	0.212	0.235	0.217	0.253	tc_7
	0.755	0.384	0.225	0.215	0.227	0.190	0.225	tc_8
	0.766	0.368	0.201	0.214	0.230	0.241	0.255	tc_9
	0.791	0.416	0.225	0.228	0.241	0.223	0.249	tc_10
								Composite
	0.941	0.891	0.927	0.943	0.911	0.928	0.934	reliability
	0.614	0.672	0.678	0.608	0.692	0.524	0.610	AVE
Table II.		¢ < 0.01	significant at j	ic were	Entries in ital	ance extracted; ]	95. AVE = average vari	Notes: $n = 3$
	6	5	4	3	2	1		

Individual-focused Transformational Benevolent paternalistic Contingent reward Leader-member exchange Leader identification Helping Taking charge <b>Notes:</b> Entries larger than 1 suggest dis sufficient discriminant validity between as	- 0.847 0.833 0.851 0.773 0.282 0.297 scriminant sociated cor	0.794 0.846 0.837 0.263 0.255 validity astructs	0.770 0.639 0.345 0.280 problems;	0.843 0.344 0.244 entries lower	0.284 0.278 than 0.90	0.551 indicate	<b>Table III.</b> Heterotrait-monotrait (HTMT) ratio of correlations
---	---	---	---	--	-----------------------------	-------------------	---

ns, respectively), but the LMX-helping and LID-taking charge paths remained significant (p < 0.01), supporting *H1c*. We report the results of the model in Figure 1.

We used path coefficients from the 5,000 bootstrapping resamples to calculate standard error and *t*-value of each indirect effect. Supporting *H2*, LMX mediated the effects of individualfocused transformational leadership ( $\gamma = 0.120$ , p < 0.01), benevolent paternalistic leadership ( $\gamma = 0.126$ , p < 0.01), and contingent reward ( $\gamma = 0.037$ , p < 0.05) on helping. *H3* posits indirect leadership effects on taking charge via LID. This hypothesis was also supported. Significant (p < 0.05) indirect effects were found for individual-focused transformational leadership ( $\gamma = 0.042$ ), benevolent paternalistic leadership ( $\gamma = 0.106$ ), and contingent reward ( $\gamma = -0.038$ ), each in the expected direction. LMX indirectly affected taking charge via LID ( $\gamma = 0.109$ , p < 0.01), supporting *H4*. The three-stage indirect effects of individual-focused transformational leadership ( $\gamma = 0.042$ ), benevolent paternalistic leadership ( $\gamma = 0.044$ ), and contingent reward ( $\gamma = 0.013$ ) were significant (p < 0.05), supporting *H5*. Although not hypothesized, all leadership-LMX-LID indirect effects were significant (p < 0.05).

As expected, contingent reward displayed a negative direct effect and a positive indirect effect on LID, suggesting an inconsistent mediation and a suppression situation (MacKinnon *et al.*, 2000). We regressed LID on its four predictors and found that the  $\beta$  weight (-0.138, p < 0.01) and part correlation (-0.076) of contingent reward were negative, opposite to its positive correlation with LID. This indicates that contingent reward was likely a negative suppressor (Pedhazur, 1997). Sobel's test results suggested that the suppression effect (i.e. the increment in the predictive validity of the other predictor(s) due to the inclusion of the suppressor, cf. MacKinnon *et al.*, 2000) was significant for individual-focused transformational (Z = 2.602) and benevolent paternalistic leadership (Z = 2.437), and approaching significance for LMX (Z = 1.808, p = 0.07). Thus, contingent reward very likely exerted negative suppression effects on these variables in predicting LID. All the Stone-Geisser's  $Q^2$  (Table IV) were larger than 0, indicating that the model possessed predictive relevance (Hair *et al.*, 2017).

JMP		Estimate	95% CI	SE	
		Boundate	0070 01	01	
	Direct effect				
	Transformational $\rightarrow$ LMX	0.386**	(0.256, 0.505)	0.063	6.112
	Benevolent $\rightarrow$ LMX	$0.405^{**}$	(0.313, 0.502)	0.048	8.415
	Contingent reward $\rightarrow$ LMX	0.120*	(0.024, 0.218)	0.049	2.440
	$LMX \rightarrow LID$	0.423**	(0.303, 0.547)	0.063	6.735
	Transformational $\rightarrow$ LID	0.163*	(0.035, 0.287)	0.064	2.555
	Benevolent $\rightarrow$ LID	0.412**	(0.304, 0.516)	0.054	7.636
	Contingent reward $\rightarrow$ LID	-0.149**	(-0.253, -0.046)	0.052	2.832
	$H1a: LMX \rightarrow helping$	0.311**	(0.207, 0.396)	0.046	6.757
	<i>H1b</i> : LID $\rightarrow$ taking charge	0.257**	(0.157, 0.359)	0.052	4.967
	<i>H1c</i> : LMX $\rightarrow$ taking charge	0.069	-	-	ns
	<i>H1c</i> : LID $\rightarrow$ helping	0.023	-	-	ns
	Indirect effect				
	$H2a$ : transformational $\rightarrow$ LMX $\rightarrow$ helping	0.120**	(0.068, 0.172)	0.027	4.589
	<i>H2b</i> : benevolent $\rightarrow$ LMX $\rightarrow$ helping	0.126**	(0.079, 0.172)	0.024	5.217
	<i>H2c</i> : contingent reward $\rightarrow$ LMX $\rightarrow$ helping	0.037*	(0.007, 0.072)	0.017	2.211
	$H3a$ : transformational $\rightarrow$ LID $\rightarrow$ taking charge	0.042*	(0.008, 0.083)	0.019	2.228
	<i>H3b</i> : benevolent $\rightarrow$ LID $\rightarrow$ taking charge	0.106**	(0.060, 0.160)	0.025	4.186
	<i>H3c</i> : contingent reward $\rightarrow$ LID $\rightarrow$ taking charge	-0.038*	(-0.071, -0.011)	0.015	-2.529
	H4: LMX $\rightarrow$ LID $\rightarrow$ taking charge	0.109**	(0.060, 0.168)	0.028	3.937
	Transformational $\rightarrow$ LMX $\rightarrow$ LID	0.163**	(0.097, 0.237)	0.036	4.519
	$Benevolent \rightarrow LMX \rightarrow LID$	0.172**	(0.109, 0.244)	0.035	4.915
	Contingent reward $\rightarrow$ LMX $\rightarrow$ LID	0.051*	(0.010, 0.095)	0.021	2.375
	$H5a$ : transformational $\rightarrow$ LMX $\rightarrow$ LID $\rightarrow$ taking charge	0.042**	(0.021, 0.070)	0.012	3.363
	<i>H5b</i> : benevolent $\rightarrow$ LMX $\rightarrow$ LID $\rightarrow$ taking charge	0.044**	(0.023, 0.072)	0.013	3.371
	<i>H5c</i> : contingent reward $\rightarrow$ LMX $\rightarrow$ LID $\rightarrow$ taking charge	0.013*	(0.002, 0.028)	0.007	1.987
	Predictive relevance $Q^2$ of endogenous constructs				
	LMX	0.436			
	LID	0.454			
	Helping	0.063			
Table IV	Taking charge	0.062			
Hypotheses tests and predictive relevance	<b>Notes:</b> $n = 395$ . Bootstrap resamples = 5,000; transfileadership; benevolent, benevolent paternalistic leadershi	formational, p; LID, leade	individual-focused r identification. *p <	transfor : 0.05; **/	mational 0 < 0.01

To compare leadership approaches, analyses of relative validities are needed (Graen *et al.*, 2010). We conducted relative weight analysis (Tonidandel and LeBreton, 2011) and present the results in Table V. Regarding the leadership-mediator links, individual-focused transformational and benevolent paternalistic leadership each explained about 50 percent more variance in LMX than contingent reward did. In predicting LID, benevolent paternalistic leadership and LMX accounted for more variance than contingent reward and individual-focused transformational leadership. With respect to the mediator-outcome links, the explained variance in helping attributable to LMX was twice as large as that attributable to LID. This pattern was reversed when taking charge was the dependent variable. Interestingly, LID accounted for 15.445 percent of explained variance in helping, although the LID-helping link was not significant. Perhaps, this relationship is more complex and moderated by other factors.

#### Discussion

Scholars have called for extensive integration of leadership theories and constructs such as LMX and LID (e.g. Dinh *et al.*, 2014; Meuser *et al.*, 2016). This study answers this call and



	L	MX	Leader i	Dependent v dentification	ariables He	lping	Takin	g charge
Predictors	RW	RS-RW	RW	RS-RW	RW	RS-RW	RW	RS-RW
LMX			0.228	33.915	0.033	29.728	0.011	12.240
Leader identification					0.017	15.445	0.022	24.073
Transformational	0.262	37.253	0.152	22.539	0.015	13.081	0.024	26.421
Benevolent	0.264	37.554	0.210	31.304	0.012	10.559	0.012	13.550
Contingent	0.177	25.193	0.082	12.242	0.035	31.187	0.021	23.717
Notes: RW raw rela	ative weig	ht <sup>.</sup> RS-RW	rescaled r	elative weight	LMX le	ader-memb	er excha	nge OCB

organizational citizenship behavior; transformational, individual-focused transformational leadership; benevolent, benevolent paternalistic leadership; contingent, contingent reward leadership Table V. Relative weight analysis

found that LMX and LID are very likely conduits of different motivational qualities for channeling leadership effects on helping and taking charge. Findings also revealed that the three conceptually diverse leadership styles influenced LMX and LID in distinct and previously undiscovered ways.

#### Theoretical implications

Our central contribution demonstrates that two conceptually distinct aspects of leader-follower role relationship work concurrently to explain how and why leaders affect two distinct OCBs. Some scholars emphasize the kinship between LMX and LID by suggesting that high LMX necessarily relates to high LID (Lavelle *et al.*, 2007). Others argue that the important theoretical differences between LMX and LID should be adequately recognized and researched (Uhl-Bien, 2006; van Knippenberg *et al.*, 2004). We integrate these views into a nuanced account of the mediating roles of LMX and LID. Regarding the two-stage leadership indirect effects, although LMX explained how leadership affected helping, it was unable to illuminate how leaders fostered taking charge. Consistent with Burnett *et al.*'s (2015) observation that social exchange mechanisms have not been predictive

of taking charge, we found that LMX was not directly predictive of taking charge. Conversely, LID mediated leadership impact on taking charge but not helping. These findings highlight a distinction between LMX and LID, specifically, LID seems to provide more autonomous prosocial motivation than LMX.

The efficacy and nature of LMX and LID as mediators also depended on the nature of the leadership styles. First, the focal leadership styles displayed differential relative validities on each mediator, especially on LID. Second, contingent reward directly suppressed LID but indirectly activated LID via LMX. Such paradoxical effects are consistent with Yukl's (1999, p. 289) observation that, "Providing praise and recognition is usually more personal and may involve transformational leadership as well as transactional leadership." Although the mismatch between contingent reward and followers' leader-referenced relational-self has been noted in theory (Lord *et al.*, 1999), we are the first to confirm this by extensively parsing out the relationship-conducive variance from contingent reward using two relationship-focused leadership styles and LMX. The fact that contingent reward was compatible with LMX but incompatible with LID also suggests that LID is more other-oriented than LMX. In addition, these findings suggest another distinction between LMX and LID. Namely, LMX is more pragmatic and compatible with both eastern and western leadership theories whereas the more other-oriented and affective LID is more strongly related to the eastern way of leading.

Our results also indicated that LMX and LID were closely knit parts of a three-stage leader-focused exchange process (Lavelle *et al.*, 2007). High-quality LMX can be transformational and indirectly motivate change by generating higher autonomy through activating a strong sense of "we" that includes the leader. A possible answer to van Knippenberg *et al.*'s (2004, p. 833) question: "to what extent high-quality LMX relationships reflect follower relational self-construal including the leader" is that high-quality LMX may reflect LID to the extent it can stimulate highly autonomous prosocial behaviors.

Overall, confirming Gottfredson and Aguinis's (2017) meta-analytical results, we found that LMX was the dominant explanation between leadership and helping. Extending their conclusion, we also found that LID explained leadership effects on taking charge. Integrating these two findings, our results suggest that LMX can activate LID, thereby evoking stronger other-orientated motivation for change-focused OCBs. Together, LMX and LID may represent the leader-follower alliance quality to a significant degree, and they serve as a motivation package for followers' prosocial behaviors. Furthermore, LMX and LID were differentially affected by various leadership styles. LID was more sensitive to the natures of leaders' behavior styles. Leader behaviors that focus followers on their self-interest are likely to reduce taking charge by suppressing LID.

#### Limitation and future research

One limitation is the high correlations among the independent variables (IVs) and the mediators. This is to be expected since the IVs are all positive leader behaviors and they implicate positive leader-follower relationships reflecting mutual respect, trust in each other's benevolent motives, and commitment to each other's welfare (Graen *et al.*, 2010). Moreover, these high correlations most likely exist when leadership styles crystalize and the leader-follower relationships reach a steady state. Although theoretically expected and commonly found in past research (cf. Dulebohn *et al.*, 2012; Judge and Piccolo, 2004; Pellegrini *et al.*, 2010; Wang and Howell, 2012), the high correlations raise concerns about discriminant validity and multicollinearity. However, the rigorous HTMT ratio analysis (Henseler *et al.*, 2015) strongly indicated that our subjects were able to differentiate the focal constructs. Importantly, we found unique predictive validity for each despite the highly correlated variables. Hence, we conclude that our construct validities were unlikely compromised by the high correlations. Further, high bivariate correlations do not

unequivocally indicate a multicollinearity problem (Grewal *et al.*, 2004), and other relevant information should be considered. For example, no VIF exceeded 5.0 (highest VIF = 3.601); composite reliabilities were very high (average = 0.925);  $R^2$  of LMX (0.717) and LID (0.670) were high; and our sample was relatively large (n = 395). These conditions together suggest that multicollinearity was very likely not a problem (Grewal *et al.*, 2004). Given these evidences, our comparison and integration of conceptually intersecting theories is a worthy attempt in the quest for parsimony of leadership theories (Graen *et al.*, 2010; Meuser *et al.*, 2016).

Second, the cross-sectional design introduces uncertainty about causality. Other research designs are needed to ascertain the suggested causality. Also, our results should be interpreted in the context of stable leadership styles and leader-follower relationships. They do not reflect the dynamic processes of relationship development.

Third, employees' individual differences such as the five-factor personality traits (e.g. Chiaburu *et al.*, 2011), trait other-orientation (Meglino and Korsgaard, 2004), and proactive personality (Li *et al.*, 2013; Zhang *et al.*, 2015) may affect prosocial motivation derived from LMX and LID, respectively. Due to the complexity and limited scope of this study, we could not incorporate individual difference variables. Future research is needed in this area.

Next, culture may affect leader-follower relationships (cf. Graen, 2008). For example, the LMX-OCB correlation is very likely stronger in western than in Asian samples (Rockstuhl *et al.*, 2012). However, the LMX-proactive behavior correlation appeared stronger in collectivistic compared to individualistic cultures (Chiaburu *et al.*, 2014). Collectivistic cultures prescribe stronger communally oriented and hierarchical norms that regulate interpersonal relationships when compared to more individualistic cultures such as the USA, where interpersonal relationships are more exchange based, pragmatic, and negotiated (Graen, 2008; Triandis, 1989). Thus, it is possible that the indirect effects through LMX may be stronger in individualistic cultures, whereas those via the more other-oriented LID may be weaker in individualistic cultures. Future studies may want to comprehensively examine how culture may modify the roles of LMX and LID in leadership processes.

Furthermore, it is possible that contextual factors such as organizational structure (cf. Pan *et al.*, 2012) and the nature of the business may have influenced our results. For example, service or manufacturing firms may emphasize helping, whereas technology firms may value taking charge due to a higher need for change. However, our dyads came from a broad cross-section of organizations, providing a natural control for such effects. Nevertheless, future studies should explicitly examine how contextual factors may affect the mediating roles of LMX and LID.

Lastly, it is possible that common method bias (CMB, Podsakoff *et al.*, 2012) may have affected our results. To combat CMB, performance data were collected from supervisors. Additionally, PLS-SEM is known for its bias to underestimate structural relationships (Hair *et al.*, 2017). This alleviates, at least to some extent, the concern that the structural estimates were inflated by CMB. HTMT ratios indicated that CMB was not enough to undermine discriminant validity. Although we cannot completely rule out CMB influence, it was unlikely a serious issue.

#### Practical implications

Our findings strongly support the value for leaders operating in China to combine western and traditional Chinese leadership approaches in order to be more effective via high-quality leader-follower relationships (Graen, 2008). First, when leaders' behavioral styles and leaderfollower relationships are stable, leaders need to realize that their leader-follower relationships involve at least two aspects. One is the reciprocal exchange-based LMX and the other is the followers' personal emotional bond with the leader (LID). If managers hope to increase helping, they are more effective when they make salient the high-quality reciprocal

exchanges with followers. If taking charge is of interest, managers should strive to activate followers' emotional bond with himself/herself.

Second, organizations may want to train managers on how to be more effective in activating LMX and LID. To render LMX more salient, managers should use contingent reward to provide a basic sense of fairness and trust. Then, they may use two sets of behaviors. One set includes providing individualized support, expressing positive views of followers' potentials, and intellectually challenging followers. The second set involves demonstrating genuine care about the followers' personal well-being. To activate followers' LID, managers need to know that overusing contingent reward may defeat this purpose. They may also use the above two sets of behaviors but the second set of behaviors is more effective.

Overall, LMX and LID together can signal the quality of the leader-member alliance. Employees who experience a stable and high-quality leader-member alliance tend to display more prosocial behaviors to benefit the workplace. Leaders are likely more effective when they properly manage followers' experience of LMX and LID (Graen and Canedo, 2017).

#### References

- Ashforth, B., Schinoff, B. and Rogers, K. (2016), "I identify with her,' I identify with him': unpacking the dynamics of personal identification in organizations", *Academy of Management Review*, Vol. 41 No. 1, pp. 28-60.
- Atwater, L. and Carmeli, A. (2009), "Leader-member exchange, feelings of energy, and involvement in creative work", *Leadership Quarterly*, Vol. 20 No. 3, pp. 264-275.
- Aycan, Z. (2006), "Paternalism: towards conceptual refinement and operationalization", in Kim, U., Yang, K. and Hwang, K. (Eds), *Indigenous and Cultural Psychology: Understanding People in Context*, Springer, New York, NY, pp. 445-466.
- Bass, B.M. (1985), Leadership and Performance Beyond Expectations, The Free Press, New York, NY.
- Bass, B.M. and Avolio, B.J. (1994), Improving Organizational Effectiveness through Transformational Leadership, Sage, Newbury Park, CA.
- Becker, T.E. (2005), "Potential problems in the statistical control of variables in organizational research: a qualitative analysis with recommendations", *Organizational Research Methods*, Vol. 8 No. 3, pp. 274-289.
- Bolino, M. and Grant, A. (2016), "The bright side of being prosocial at work, and the dark side, too: a review and agenda for research on other-oriented motives, behavior, and impact in organizations", *Academy of Management Annals*, Vol. 10 No. 1, pp. 599-670.
- Bono, J.E. and McNamara, G. (2011), "Publishing in AMJ part 2: research design", Academy of Management Journal, Vol. 54, pp. 657-660.
- Brewer, M. and Gardner, W. (1996), "Who is this 'We'? Levels of collective identity and self-representations", *Journal of Personality and Social Psychology*, Vol. 71, pp. 83-93.
- Brislin, R. (1980), "Translation and content analysis of oral and written materials", in Triandis, H.C. and Berry, J.W. (Eds), *Handbook of Cross-Cultural Psychology: Methodology*, Allyn & Bacon, Boston, MA, pp. 389-444.
- Burnett, M., Chiaburu, D., Shapiro, D. and Li, N. (2015), "Revisiting how and when perceived organizational support enhances taking charge: an inverted U-shaped perspective", *Journal of Management*, Vol. 41, pp. 1805-1826.
- Cerasoli, C., Nicklin, J. and Ford, M. (2014), "Intrinsic motivation and extrinsic incentives jointly predict performance: a 40-year meta-analysis", *Psychological Bulletin*, Vol. 140 No. 4, pp. 980-1008.
- Chiaburu, D.S., Oh, I.-S., Berry, C.M., Li, N. and Gardner, R.G. (2011), "The five-factor model of personality traits and organizational citizenship behaviors: a meta-analysis", *Journal of Applied Psychology*, Vol. 96 No. 6, pp. 1140-1166.

- Chiaburu, D.S., Smith, T.A., Wang, J. and Zimmerman, R.D. (2014), "Relative importance of leader influences for subordinates' proactive behaviors, prosocial behaviors, and task performance", *Journal of Personnel Psychology*, Vol. 13 No. 2, pp. 70-86.
- Cropanzano, R. and Mitchell, M. (2005), "Social exchange theory: an interdisciplinary review", Journal of Management, Vol. 31 No. 6, pp. 874-900.
- Dinh, J., Lord, R., Gardner, W., Meuser, J., Liden, R. and Hu, J. (2014), "Leadership theory and research in the new millennium: current theoretical trends and changing perspectives", *Leadership Quarterly*, Vol. 25 No. 1, pp. 36-62.
- Dulebohn, J., Bommer, W., Liden, R., Brouer, R. and Ferris, G. (2012), "A meta-analysis of antecedents and consequences of leader-member exchange: integrating the past with an eye toward the future", *Journal of Management*, Vol. 38 No. 6, pp. 1715-1759.
- Farh, J., Earley, P.C. and Lin, S. (1997), "Impetus for action: a cultural analysis of justice and organizational citizenship behavior in Chinese society", *Administrative Science Quarterly*, Vol. 42 No. 3, pp. 421-444.
- Fornell, C. and Larcker, D. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Gagné, M. and Deci, E. (2005), "Self-determination theory and work motivation", Journal of Organizational Behavior, Vol. 26 No. 4, pp. 331-362.
- George, J.M. and Jones, G.R. (2000), "The role of time in theory and theory building", Journal of Management, Vol. 26 No. 4, pp. 657-684.
- Gottfredson, R. and Aguinis, H. (2017), "Leadership behaviors and follower performance: Deductive and inductive examination of theoretical rationales and underlying mechanisms", *Journal of Organizational Behavior*, Vol. 38 No. 4, pp. 558-591.
- Graen, G. (2008), "Linking Chinese leadership theory and practice to the world: leadership secrets of the middle kingdom", in Chen, C.C. and Lee, Y.-T. (Eds), *Leadership and Management in China*, Cambridge University Press, Cambridge, pp. 272-297.
- Graen, G. and Canedo, J. (2017), "Charismatic and innovative team leadership by and for Millennials", in Griffin, R. (Ed.), Oxford Bibliographies in Management, Oxford University Press, New York, NY.
- Graen, G. and Uhl-Bien, M. (1995), "Relationship-based approach to leadership: development of leader-member exchange (LMX) theory of leadership over 25 years: applying a multi-level multi-domain perspective", *Leadership Quarterly*, Vol. 6 No. 2, pp. 219-247.
- Graen, G., Rowold, J. and Heinitz, K. (2010), "Issues in operationalizing and comparing leadership constructs", *Leadership Quarterly*, Vol. 21 No. 3, pp. 563-575.
- Grant, A. and Wrzesniewski, A. (2010), "I won't let you down... or will I? Core self-evaluations, other-orientation, anticipated guilt and gratitude, and job performance", *Journal of Applied Psychology*, Vol. 95 No. 1, pp. 108-121.
- Grewal, R., Cote, J. and Baumgartner, H. (2004), "Multicollinearity and measurement error in structural equation models: implications for theory testing", *Marketing Science*, Vol. 23 No. 4, pp. 519-529.
- Hackett, R.D., Farh, J.L., Song, L.J. and Lapierre, L.M. (2003), "LMX and organizational citizenship behavior: Examining the links within and across Western and Chinese samples", in Graen, G.B. and Graen, J.A. (Eds), *Dealing with Diversity, LMX Leadership: The Series*, IAP, Greenwich, CT, pp. 219-264.
- Hair, J., Hult, G.T.M., Ringle, C. and Sarstedt, M. (2017), A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), Sage, Los Angeles, CA.
- Henseler, J., Ringle, C. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135.
- Howell, J. and Hall-Merenda, K. (1999), "The ties that bind: the impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance", *Journal of Applied Psychology*, Vol. 84 No. 5, pp. 680-694.

- Hui, C., Lam, S. and Law, K. (2000), "Instrumental values of organizational citizenship behavior for promotion: a field quasi-experiment", *Journal of Applied Psychology*, Vol. 85 No. 5, pp. 822-828.
- Ilies, R., Nahrgang, J. and Morgeson, F. (2007), "Leader-member exchange and citizenship behaviors: a meta-analysis", *Journal of Applied Psychology*, Vol. 92 No. 1, pp. 269-277.
- Judge, T. and Piccolo, R. (2004), "Transformational and transactional leadership: a meta-analytic test of their relative validity", *Journal of Applied Psychology*, Vol. 89 No. 5, pp. 755-768.
- Kark, R., Shamir, B. and Chen, G. (2003), "The two faces of transformational leadership: empowerment and dependency", *Journal of Applied Psychology*, Vol. 88 No. 2, pp. 246-255.
- Kim, T., Liu, Z. and Diefendorff, J. (2015), "Leader-member exchange and job performance: the effects of taking charge and organizational tenure", *Journal of Organizational Behavior*, Vol. 36 No. 2, pp. 216-231.
- Korsgaard, M.A., Meglino, B., Lester, S. and Jeong, S. (2010), "Paying you back or paying me forward: understanding rewarded and unrewarded organizational citizenship behavior", *Journal of Applied Psychology*, Vol. 95 No. 2, pp. 277-290.
- Lavelle, J., Rupp, D. and Brockner, J. (2007), "Taking a multifoci approach to the study of justice, social exchange, and citizenship behavior: the target similarity model", *Journal of Management*, Vol. 33 No. 6, pp. 841-866.
- Li, N., Chiaburu, D.S., Kirkman, B.L. and Xie, Z. (2013), "Spotlight on the followers: an examination of moderators of relationships between transformational leadership and subordinates' citizenship and taking charge", *Personnel Psychology*, Vol. 66 No. 1, pp. 225-260.
- Liden, R. and Maslyn, J. (1998), "Multidimensionality of leader-member exchange: an empirical assessment through scale development", *Journal of Management*, Vol. 24 No. 1, pp. 43-72.
- Liden, R., Sparrowe, R. and Wayne, S. (1997), "Leader-member exchange theory: the past and potential for the future", in Ferris, G.R. (Ed.), *Research in Personnel and Human Resources Management*, JAI Press, Greenwich, CT, pp. 47-119.
- Lord, R., Brown, D. and Freiberg, S. (1999), "Understanding the dynamics of leadership: the role of follower self-concepts in the leader/follower relationship", *Organizational Behavior and Human Decision Processes*, Vol. 78 No. 3, pp. 167-203.
- McAllister, D.J., Kamdar, D., Morrison, E.W. and Turban, D.B. (2007), "Disentangling role perceptions: how perceived role breadth, discretion, instrumentality, and efficacy relate to helping and taking charge", *Journal of Applied Psychology*, Vol. 92 No. 5, pp. 1200-1211.
- MacKinnon, D., Krull, J. and Lockwood, C. (2000), "Equivalence of the mediation, confounding and suppression effect", *Prevention Science*, Vol. 1 No. 4, pp. 173-181.
- Martin, R., Guillaume, Y., Thomas, G., Lee, A. and Epitropaki, O. (2016), "Leader-member exchange (LMX) and performance: a meta-analytic review", *Personnel Psychology*, Vol. 69 No. 1, pp. 67-121.
- Masterson, S.S., Lewis, K., Goldman, B. and Taylor, M. (2000), "Integrating justice and social exchange: the differing effects of fair procedures and treatment on work relationships", Academy of Management Journal, Vol. 43 No. 4, pp. 738-748.
- Meglino, B.M. and Korsgaard, M.A. (2004), "Considering rational self-interest as a disposition: organizational implications of other orientation", *Journal of Applied Psychology*, Vol. 89 No. 6, pp. 946-959.
- Meglino, B.M. and Korsgaard, M.A. (2006), "Considering situational and dispositional approaches to rational self-interest: an extension and response to De Dreu (2006)", *Journal of Applied Psychology*, Vol. 91 No. 6, pp. 1253-1259.
- Meuser, J., Gardner, W., Dinh, J., Hu, J., Liden, R. and Lord, R. (2016), "A network analysis of leadership theory: the infancy of integration", *Journal of Management*, Vol. 42 No. 5, pp. 1374-1403.
- Michel, J.W. (2017), "Antecedents of organizational citizenship behaviors: examining the incremental validity of self-interest and prosocial motives", *Journal of Leadership & Organizational Studies*, Vol. 24 No. 3, pp. 385-400.

- Moon, H., Kamdar, D., Mayer, D. and Takeuchi, R. (2008), "Me or we? The role of personality and justice as other-centered antecedents to innovative citizenship behaviors within organizations", *Journal of Applied Psychology*, Vol. 93 No. 1, pp. 84-94.
- Moorman, R.H. (1991), "Relationship between organizational justice and organizational citizenship behaviors: do fairness perceptions influence employee citizenship?", *Journal of Applied Psychology*, Vol. 76 No. 6, pp. 845-855.
- Morrison, E. and Phelps, C. (1999), "Taking charge at work: extrarole efforts to initiate workplace change", Academy of Management Journal, Vol. 42 No. 4, pp. 403-419.
- Organ, D.W. (1988), Organizational Citizenship Behavior: The Good Soldier Syndrome, Lexington Books, Lexington, MA.
- Organ, D.W. (1997), "Organizational citizenship behavior: it's construct clean-up time", *Human Performance*, Vol. 10 No. 2, pp. 85-97.
- Palanski, M. and Yammarino, F. (2011), "Impact of behavioral integrity on follower job performance: a three-study examination", *Leadership Quarterly*, Vol. 22 No. 4, pp. 765-786.
- Pan, W., Sun, L. and Chow, I. (2012), "Leader-member exchange and employee creativity: test of a multilevel moderated mediation model", *Human Performance*, Vol. 25 No. 5, pp. 432-451.
- Parker, S., Bindl, U. and Strauss, K. (2010), "Making things happen: a model of proactive motivation", *Journal of Management*, Vol. 36 No. 4, pp. 827-856.
- Pedhazur, E. (1997), Multiple Regression in Behavioral Research: Explanation and Prediction, Harcourt Brace College Publishers, Fort Worth, TX.
- Pellegrini, E. and Scandura, T. (2008), "Paternalistic leadership: a review and agenda for future research", *Journal of Management*, Vol. 34 No. 3, pp. 566-593.
- Pellegrini, E., Scandura, T. and Jayaraman, V. (2010), "Cross-cultural generalizability of paternalistic leadership: an expansion of LMX theory", *Group & Organization Management*, Vol. 35 No. 4, pp. 391-420.
- Podsakoff, N., Whiting, S., Podsakoff, P. and Blume, B. (2009), "Individual- and organizational-level consequences of organizational citizenship behaviors: a meta-analysis", *Journal of Applied Psychology*, Vol. 94 No. 1, pp. 122-141.
- Podsakoff, P., MacKenzie, S. and Podsakoff, N. (2012), "Sources of method bias in social science research and recommendations on how to control it", *Annual Review of Psychology*, Vol. 63, pp. 539-569.
- Podsakoff, P., MacKenzie, S., Moorman, R. and Fetter, R. (1990), "Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors", *Leadership Quarterly*, Vol. 1 No. 2, pp. 107-142.
- Raub, S. and Robert, C. (2010), "Differential effects of empowering leadership on in-role and extra-role employee behaviors: exploring the role of psychological empowerment and power values", *Human Relations*, Vol. 63 No. 11, pp. 1743-1770.
- Ringle, C., Wende, S. and Will, A. (2005), "SmartPLS 2.0", SmartPLS, Hamburg.
- Rioux, S. and Penner, L. (2001), "The causes of organizational citizenship behavior: a motivational analysis", *Journal of Applied Psychology*, Vol. 86 No. 6, pp. 1306-1314.
- Rockstuhl, T., Dulebohn, J.H., Ang, S. and Shore, L.M. (2012), "Leader-member exchange (LMX) and culture: a meta-analysis of correlates of LMX across 23 countries", *Journal of Applied Psychology*, Vol. 97 No. 6, pp. 1097-1130.
- Sluss, D. and Ashforth, B. (2008), "How relational and organizational identification converge: processes and conditions", Organization Science, Vol. 19 No. 6, pp. 807-823.
- Sluss, D., Klimchak, M. and Holmes, J. (2008), "Perceived organizational support as a mediator between relational exchange and organizational identification", *Journal of Vocational Behavior*, Vol. 73 No. 3, pp. 457-464.
- Sosik, J., Kahai, S. and Piovoso, M. (2009), "Silver bullet or voodoo statistics? A primer for using the partial least squares data analytic technique in group and organization research", Group & Organization Management, Vol. 34 No. 1, pp. 5-36.

- Tonidandel, S. and LeBreton, J. (2011), "Relative importance analysis: a useful supplement to regression analysis", *Journal of Business and Psychology*, Vol. 26 No. 1, pp. 1-9.
- Triandis, H.C. (1989), "The self and social behavior in differing cultural contexts", *Psychological Review*, Vol. 96 No. 3, pp. 506-520.
- Uhl-Bien, M. (2006), "Relational leadership theory: exploring the social processes of leadership and organizing", *Leadership Quarterly*, Vol. 17 No. 6, pp. 654-676.
- Uhl-Bien, M. and Maslyn, J. (2003), "Reciprocity in manager-subordinate relationships: components, configurations, and outcomes", *Journal of Management*, Vol. 29 No. 4, pp. 511-532.
- Van Dyne, L., Cummings, L.L. and McLean Parks, J. (1995), "Extra-role behaviors: in pursuit of construct and definitional clarity (a bridge over muddied waters)", in Cummings, L.L. and Staw, B.M. (Eds), *Research in Organizational Behavior*, JAI Press Inc., Greenwich, CT, pp. 215-285.
- van Knippenberg, D., van Knippenberg, B., De Cremer, D. and Hogg, M. (2004), "Leadership, self, and identity: a review and research agenda", *Leadership Quarterly*, Vol. 15 No. 6, pp. 825-856.
- Wagstaff, M., Collela, A., Triana, M.D.C., Smith, A. and Watkins, M. (2015), "Subordinates' perceptions of supervisor paternalism: a scale development", *Journal of Managerial Psychology*, Vol. 30 No. 6, pp. 659-674.
- Wang, H., Law, K.S., Hackett, R.D., Wang, D. and Chen, Z.X. (2005), "Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior", *Academy of Management Journal*, Vol. 48, pp. 420-432.
- Wang, X. and Howell, J. (2012), "A multilevel study of transformational leadership, identification, and follower outcomes", *Leadership Quarterly*, Vol. 23 No. 3, pp. 775-790.
- Weber, M. (1968), "The types of legitimate domination", in Roth, G. and Wittich, C. (Eds), *Economy and Society*, Bedminster Press, New York, NY, Bedminster, NJ, pp. 212-216.
- Yukl, G. (1999), "An evaluation of conceptual weaknesses in transformational and charismatic leadership theories", *Leadership Quarterly*, Vol. 10 No. 2, pp. 285-305.
- Yukl, G. (2010), Leadership in Organizations, Prentice Hall, Upper Saddle River, NJ.
- Zhang, X.-A., Li, N. and Harris, T. (2015), "Putting non-work ties to work: the case of guanxi in supervisor–subordinate relationships", *Leadership Quarterly*, Vol. 26 No. 1, pp. 37-54.
- Zhu, W., Wang, G., Zheng, X., Liu, T. and Miao, Q. (2012), "Examining the role of personal identification with the leader in leadership effectiveness: a partial nomological network", *Group & Organization Management*, Vol. 38 No. 1, pp. 36-67.

#### Corresponding author

Jie Li can be contacted at: drjieli@umflint.edu

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm Or contact us for further details: permissions@emeraldinsight.com