# LMX and Work Attitudes:

Is there anything left unsaid (or unexamined)?

# Olga Epitropaki

Durham University Business School

Durham University,

Mill Hill Lane, DH1 3LB

olga.epitropaki2@durham.ac.uk

&

# **Robin Martin**

Manchester Business School,

University of Manchester,

Booth Street West,

Manchester, M15 6PB,

robin.martin@mbs.ac.uk

PLEASE CITE AS: Epitropaki, O. & Martin, R. (2015). Leader-Member Exchanges and work attitudes: Is there anything left unsaid or unexamined? In Bauer, T. & Erdogan, B. (Eds). *Oxford Handbook of Leader-Member Exchange*. Oxford University Press.

# LMX and Work Attitudes:

# Is there anything left unsaid (or unexamined)?

# Abstract

The relationship between LMX and work attitudes has been the focus of numerous LMX studies and meta-analyses. The present chapter attempts a closer look into the "black box" of the LMX – work attitudes relationships and reviews existing research focusing on both direct relationships and boundary conditions and explanatory mechanisms. It also includes a summary of existing theoretical perspectives on LMX and explicitly addresses level-of-analysis issues in the LMX and attitudes research. Future research suggestions and theoretical extensions are discussed.

Keywords: LMX, work attitudes, job satisfaction, organizational commitment

#### LMX and Work Attitudes

Forty years after its initial launch as Vertical Dyad Linkage (VDL) theory (Dansereau, Graen & Haga, 1975; Graen & Cashman, 1975), LMX theory remains one of the most popular lines of leadership research. As Dihn et al. (2014) point out, LMX is "... the archetypal social exchange leader-follower dyadic approach" (p. 39) that focuses on the leader-follower relationship rather than individual leader or follower traits, styles or behaviors as other leadership theories. The vast majority of empirical research on LMX, especially during the initial period from 1975 to 1985- which even now remains dominant - focused on the outcomes or consequences of LMX (i.e., job attitudes, perceptions, and behaviors). The central theoretical premise behind relations between LMX and outcomes is that leader-follower roles based strictly on the employment contract will result in less positive consequences for followers than will roles that have developed beyond what is expected by the employment contract (Liden et al., 1997). Quite simply, followers who receive more information and support from their leader and who engage in tasks that require challenge and responsibility are expected to have more positive work attitudes and engage in more positive work behaviors than followers whose support is limited to what is required by the employment contract.

A particularly popular strand of research on LMX and outcomes has been the one examining the impact of LMX on job attitudes such as job satisfaction and organizational commitment. Out of the 865 articles on LMX that can be found in PsycInfo in February 2014, 209 of them examine job satisfaction as an outcome and 127 focus on organizational commitment. Prior research has strongly supported the positive effects of LMX on follower job satisfaction (Aryee & Chen, 2006; Epitropaki & Martin, 2005; Lapierre & Hackett, 2007; Liden, Wayne & Sparrowe, 2000; Major, et al., 1995; Mardanov, Heischmidt, & Henson, 2008; Martin et al., 2005; Masterson, Lewis, Goldman, & Taylor, 2000; Murphy & Ensher, 1999) and organizational commitment (Epitropaki & Martin, 2005; Kacmar, Carlson, & Brymer, 1999; Liden, et al., 2000; Major et al., 1995; Martin et al., 2005; Wayne et al., 1997). Older (e.g., Gerstner & Day, 1997) and recent meta-analyses (Dulebohn et al, 2012; Rockstuhl, Dulebohn, Ang, & Shore, 2012) report similar findings regarding the strength of the relationship between LMX and attitudes. Thus, if the relationship between LMX and job attitudes has been so thoroughly examined in the past and the findings remain consistent over time, should we then consider it as a saturated line of research in the LMX field and move our research focus to different directions? Have we already said and examined everything worth examining about this specific relationship? Have we shed full light in the 'black box' of the relationship between LMX and work attitudes? These are the questions, and related ones, that we will try to address in the present chapter.

We will first review existing research on LMX and work attitudes and outline its main theoretical underpinnings. We will then highlight limitations of existing research, examine different levels of analysis, and offer suggestions for future work that can further open the blackbox of the link between LMX-attitudes.

#### **Review of Research on LMX and Work Attitudes**

# **Direct Relationships**

From the early stages of leadership theorizing and research, its impact on employee work attitudes has been recognized and repeatedly investigated. Although an important body of knowledge has been accumulated in this respect, the absence of solid conclusions and final answers keeps the research interest alive. As Judge and Kammeyer-Mueller (2012) stress, "... job attitudes matter because jobs matter – to people's identities, to their health and to their evaluations of their lives" (p. 344). The premise that attitudes lead to behavior is grounded in the social psychological literature (Fishbein, 1973; Fishbein & Ajzen, 1975). Recent meta-analyses (e.g., Harrison, Newman & Roth, 2006) challenged prior findings of job attitudes predicting only 3-4% of performance variance (e.g., Locke & Latham, 1990) and have shown job attitudes to predict a higher order behavioral construct of desirable contributions made to one's work role (r=.59). Judge et al. (2001) also report a mean true correlation between overall job satisfaction and job performance of .30. Riketta (2008) reports a weak but significant effect of job attitudes on subsequent performance (with baseline performance controlled) of .06 and concludes that job attitudes are more likely to influence performance than vice versa. Further, macro-level studies have highlighted the importance of work attitudes not only for individual performance but for organizational as well. Specifically, Patterson, West, Lawthom, and Nickell (1997) found 12% and 13% of the variation between companies in their profitability was explained by variations in job satisfaction and organizational commitment, respectively. Job satisfaction was also found to explain 25% of the variance in company productivity, while organizational commitment explained 17% of the variance. Even after controlling for the effects of prior profitability and productivity, work attitudes still had predictive utility regarding performance (in the range of explaining 5% to 16% of the variance). Schneider, Hanges, Smith, and Salvaggio (2003) also showed aggregated attitudes to be related to organizational performance and further uncovered reciprocal relationships between the two. As implications of work attitudes exceed the microorganizational level, a better understanding of their antecedents such as the leader-follower relationship quality becomes critical for organizational performance and survival in difficult economic conditions.

In our review we will adopt the definition of job attitudes proposed by Judge and Kammeyer-Mueller (2012) as "evaluations of one's job that expresses one's feelings toward, beliefs about and attachment to one's job" (p. 344). In accordance with this definition, we will focus on constructs with an evaluative component such as job satisfaction and organizational commitment and will not examine perceptions (e.g., justice), intentions (e.g., turnover intentions), motivational constructs (e.g., work engagement and well-being), or mental wellbeing (e.g., strain) that will be discussed in other chapters of this handbook.

# **Job Satisfaction**

Locke (1976) defined job satisfaction in a general sense as a "... pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1300). As such, job satisfaction is presumed to be a global construct encompassing specific facets of satisfaction, such as satisfaction with work, pay supervision, promotion opportunities, working conditions, etc. Clegg and Wall (1981) viewed job satisfaction as representing "... a positive affective orientation" towards the job, or to intrinsic and extrinsic facets of the job. Job satisfaction has also been sometimes described as the degree to which individuals like their job (e.g., Agho, Price, & Mueller, 1992).

As far as research on leadership and job satisfaction is concerned, the relationship between the two is of continuing interest. Early studies assessed relationships between traditional leadership behaviors (e.g., initiating structure and consideration) and follower job satisfaction (Coltrin & Glueck, 1977; Griffin & Bateman, 1986; Petty & Bruning, 1980; Schriesheim & Murphy, 1976). Several studies also report a positive relation between dominant leadership constructs such as transformational leadership and job satisfaction (e.g., Avolio & Howell, 1992; Bass, 1985; Braun et al., 2013; Hater & Bass, 1988; Seltzer & Bass, 1990; Seltzer et al., 1989). Job satisfaction has been repeatedly investigated as a consequence of Leader-Member Exchanges (LMX) (e.g., Danserau et al, 1975: Major et al., 1995; Schriesheim et al, 1992; Seers & Graen, 1984) and positive relations are reported. Gerstner and Day's (1997) meta-analysis reported an average correlation of .46 between LMX and job satisfaction. Similarly, Dulebohn et al.'s (2012) recent meta-analysis reports a significant relation between LMX and job satisfaction ( $\rho = .49$ ) as well as satisfaction with the supervisor ( $\rho = .68$ ). They reviewed 88 studies that examined the relationship between LMX and overall job satisfaction (e.g., Aryee & Chen, 2006; Epitropaki & Martin, 2005; Erdogan & Enders, 2007; Lapierre & Hackett, 2007; Liden, Wayne, & Sparrowe, 2000; Major, et al., 1995; Mardanov, Heischmidt, & Henson, 2008; Martin et al., 2005; Masterson et al., 2000; Murphy & Ensher, 1999), 32 studies that reported significant positive effects of LMX on satisfaction with supervisor (e.g., Graen & Novak, 1982), and eight studies that examined satisfaction with pay as an outcome of LMX (e.g., Sparrowe, 1994; Stepina, Perrewe, Hassell, Harris, & Mayfield, 1991). The direct relationship between LMX and job satisfaction has, thus, been well-established and consistently found to be positive.

### **Organizational Commitment**

Organizational commitment has been viewed as having three major components: (a) a person's strong belief in and an acceptance of the organization's goals, (b) a person's willingness to exert considerable effort on behalf of the organization, and (c) a person's desire to maintain membership in the organization (Porter, Steers, Mowday, & Boulian, 1974). Organizational commitment research has been dominated by the Allen and Meyer (1997) model which distinguishes between affective, normative, and continuance organizational commitment. Affective commitment taps upon emotional ties the employee develops with the organization primarily via positive work experiences whereas normative commitment captures the perceived obligation the individual feels towards the organization. Finally, continuance commitment addresses the cost-benefit (both economic and social) analysis the individual engages in before they decide to leave an organization. Mowday, Porter, and Steers (1982) have suggested that gaining a greater understanding of the processes related to organizational commitment has implications for both employees and organizations. On one hand, employees' level of commitment to an organization may make them more eligible to receive various rewards (both extrinsic and intrinsic) associated with membership. On the other hand, organizations value commitment among their employees, since it is typically assumed to reduce withdrawal behaviors such as lateness and turnover. In addition, committed employees may be more likely to engage in "extra-role" behaviors, such as OCB, creativity or innovativeness which can increase the competitive advantage of the organization (Mathieu & Zajac, 1990). As an antecedent, organizational commitment has been studied as a determinant of variables such as: turnover, absenteeism, and performance (Griffin & Bateman, 1986; Mathieu & Zajac, 1990). On the other hand, as a consequence, organizational commitment has been linked to several personal and organizational variables ranging from job characteristics to organizational structures. Leadership has also been studied as a determinant of organizational commitment and consistent support has been found for a positive association between LMX and organizational commitment (e.g., Duchon et al., 1986; Green et al. 1996; Kinicki & Vecchio, 1994; Major et al. 1995; Wayne et al., 2009).

Gerstner and Day's (1997) meta-analysis reported an average correlation of .35 between LMX and overall organizational commitment. Similarly, Dulebohn et al.'s (2012) recent metaanalysis reports a significant relation between LMX and overall organizational commitment ( $\rho$  = .47),  $\rho$  =.41 for affective and  $\rho$  =.33 for normative commitment. They further highlighted two main reasons why LMX is positively related to commitment: (a) leaders' encouragement of commitment during the role-making process (Graen, 1976) and employees' attachment and loyalty to the leader that serves as a proxy for the organization, and (b) the leaders' assigning of challenging tasks and offering feedback to high LMX followers that results in a heightened sense of commitment to the organization. Prior research has, overall, lent strong support for a positive direct relationship between LMX and organizational commitment.

# Opening the "Black-Box" of the Relationship Between LMX and Work Attitudes

When opening the "black box" of the relationship between LMX and job satisfaction and commitment, several variables (individual and organizational characteristics) have been examined as explanatory mechanisms. For example, Graen, Novak and Sommerkamp (1982) examined employee growth need strength and showed its moderating effect on the relationship between LMX and satisfaction with the leader. Ozer (2008) examined locus of control as a moderator between LMX and satisfaction but his results did not provide support for this effect. Prior research has also examined the interactive effects of political skill with LMX and showed that employees high in political skill report lower job satisfaction when LMX is high (Harris et al., 2009). It is employees who lack political skill that rely mostly on their quality with the leader as a factor for their job satisfaction. More recently, Kimura (2013) reported that the negative effects on organizational commitment caused by politics perceptions attenuate only when LMX and political skill are at a high degree, and not when only one of these is high.

When it comes to organizational variables, special attention has been paid to the role of Perceived Organizational Support (POS) and research has provided evidence for the mediating role of POS in the relationships between LMX and job satisfaction (e.g., Andrews & Kacmar, 2001). Wayne, Shore, and Liden (1997) further showed that POS but not LMX was positively related to affective commitment. It therefore seems that in the case of organizational commitment, the exchanges that employees have with the organization (POS) are more powerful predictors than the exchanges with the direct manager (LMX). Supervisor POS has, however, been found to be an important moderator of the relationship between LMX and satisfaction. Erdogan and Enders (2007) found the positive relationship between LMX and satisfaction to be stronger when the supervisor had high POS. Furthermore, Aryee and Chen (2006), using a Chinese sample, found psychological empowerment to mediate the relationship between LMX and job satisfaction whereas in an earlier study Liden, Wayne, and Sparrowe did not find support for the mediating role of empowerment in the relationships between LMX, TMX and job satisfaction and commitment when controlling for job characteristics. Frequency of interaction between leader and follower has further been found to be an important boundary condition for the relation between LMX and job satisfaction (Golden & Veiga, 2008; Mossholder, Niebuhr, & Norris, 1990). Especially in a virtual context of limited face-to-face interaction, employees were found to rely more on LMX for their evaluation of job satisfaction and organizational commitment (Golden & Veiga, 2008). Ozer (2008) further found the positive relationship between LMX and satisfaction to be stronger when task autonomy was high.

In addition to individual and organizational variables, national culture characteristics have been examined as possible boundaries of exchange processes between leaders and followers and the positive relationships between LMX and work attitudes have been found to be somewhat differential across cultures (although still significant). Rockstuhl et al. (2012), in a meta-analysis of the role of national culture in moderating relationships between LMX and outcomes, found a stronger effect of LMX on job satisfaction in horizontal-individualistic (e.g., Western) contexts than in vertical-collectivistic (e.g., Asian) contexts. As an explanation for this effect they argued that "even though members in both cultures are sensitive to leader treatment, members' responses in vertical-collectivistic cultures are more likely to be influenced by collective interests and role-based loyalty" (p. 1098). National culture did not, however, affect the relationship between LMX and organizational commitment. Figure 1 presents the set of mediators and moderators examined within the LMX-work attitudes context.

### <INSERT FIGURE 1 HERE>

# LMX as a Mediating or Moderating Mechanism

The importance of LMX as a powerful mediating mechanism has been documented by numerous studies. For example, Zhang, Wang, and Shi (2012) have recently examined LMX as mediator in the relationship between leader—follower proactive personality congruence and follower job satisfaction and affective commitment. Epitropaki and Martin (2005) also reported LMX to mediate the relationship between Implicit-Explicit Leadership Theories congruence and work attitudes and Martin et al. (2005) found LMX to be a mediator of the relationship between locus of control and intrinsic/extrinsic job satisfaction and commitment. Green, Anderson, and Shivers (1996) focused on relational demography and found LMX to mediate the relationship between gender dissimilarity and job satisfaction and commitment. Janssen and Yperen (2004) found LMX to mediate the positive relationships between a mastery orientation and job satisfaction. Their findings suggested that employees focused on the development of competence through task mastery are more satisfied with their job because they tend to establish higher quality exchanges with their leaders.

Tekleab, Takeuchi, and Taylor (2005) examined the chain of relationships between organizational justice, social exchange variables and work outcomes in a longitudinal study and found support for the mediating role of LMX in the relationship between interactional justice and job satisfaction. Conversely, Perceived Organizational Support (POS) and psychological contract violation were more powerful mediators of the relationship between procedural justice and job satisfaction. Masterson et al. (2000) had reached a similar conclusion regarding the differential mediating effects of LMX and POS in the relationships between interactional, procedural justice and job satisfaction and organizational commitment.

LMX has also been many times examined as a moderator and boundary condition. Epitropaki and Martin (1999) examined LMX as a moderator of the relationship between relational demography and work attitudes and found age dissimilarity to have a stronger negative effect for low LMX employees. Schriesheim, Neider, and Scandura (1998) found LMX to moderate the relationship between delegation and employee intrinsic and extrinsic satisfaction. Although originally hypothesized, their results did not support the moderating role of SLMX in the above relationship but documented its important role for the delegation-job performance relationship. Major et al. (1995) found LMX to moderate the relationship between newcomer expectations and job satisfaction four weeks after organizational entry. On the other hand, Team-Member Exchange (TMX) was found to be a more powerful moderator of the relationship between newcomer expectations and organizational commitment.

#### **Theoretical Underpinnings of the LMX-Attitudes Relationship**

**Social exchange.** Social exchange theory, SET (Blau, 1964) is arguably one of the fundamental conceptual paradigms underlying Leader-Member Exchanges. At the heart of social exchange theory are the concepts of equity and reciprocity. Individuals are more comfortable when they perceive they are receiving benefits from the relationship equal to what they are putting into the relationship. They are also motivated to gain rewards or avoid costs in social exchanges (Homans, 1961). Gouldner (1960) further argued that the norm of reciprocity is

universal and that people should return help received and avoid hurting the ones that have helped them. In the LMX context, SET suggests that leader-follower relationships develop from interactions between the two parties and are motivated by the mutual benefits derived from these exchanges (Blau, 1964; Brown & Trevino, 2006; Cropanzano & Mitchell, 2005). Early on in leader-member relationships, basic economic exchanges characterized by low trust are common, but over time, and as a result of matched behaviors on a *quid pro quo* (mutual reciprocity) basis and mutual risk - taking (Brown & Mitchell, 2010; Brower, Schoorman, & Tan, 2000; Mayer et al., 1995), leader-follower relationships reach high levels of trust, lower levels of control, and long-term obligations.

**Resources theory of social exchange.** A theory that has been recently utilized in the LMX context is Foa and Foa's resource theory of social exchange (Wilson et al., 2010). Foa and Foa (1974) proposed that resources exchanged in relationships can be classified into one of six basic categories, money, goods, services, status, information and love (affiliation/socio-emotional resources). They further distinguished between two broad categories of resources: whether a resource is concrete or abstract and whether it is particular or universal. Concrete resources include tangible activities or products such as goods and services, whereas abstract are more symbolic, such as status and information. Particularistic resources are those where the identity of the individual in the exchange relationship is important to the resource exchange, e.g., socio-emotional resources (love). Universal resources are unaffected by who provides the resource, e.g., money. Wilson et al., (2010) applied this categorization to LMX and argued that leaders and members frequently exchange resources within and across these categories. Epitropaki and Martin (2013) also used this theoretical framework to explain differences in the

upward influence tactics followers of high vs. low Relative LMX used towards their transformational leaders.

**Relative deprivation theory.** Bolino and Turnley (2009) utilized relative deprivation theory, defined by Crosby (1976) as "...a tension state that exists in someone who perceives a discrepancy between the way things are and the way things ought to be" (p. 56), to explain consequences for the low-LMX groups. Rather than focusing on the benefits for people in high quality LMX relations - as most prior research – Bolino and Turnley (2009) focused on employees in low quality exchanges who experience deprivation in comparison to their coworkers and highlighted a series of possible responses to deprivation, both positive (e.g., engaging in self-improvement) and negative (e.g., counterproductive work behaviors). In relation to work attitudes, their model clearly predicted a negative effect of feelings of relative deprivation on job attitudes (e.g., reduced job satisfaction) but also stressed the importance of three moderators: (a) the degree of effort employees have made towards LMX development, (b) the extent to which leaders re-evaluate their LMX relationships and (c) employees' self-efficacy. Vidyarthi et al. (in press) utilized relative deprivation theory to examine the dynamics of LMX relationships in a dual leadership context and found that alignment of the two LMXs explained variance in job satisfaction beyond that explained by both LMXs. They further reported a 3-way interaction between the two LMXs and the frequency of communication with the agency leader on job satisfaction.

### Levels of Analysis

The importance of explicitly addressing levels of analysis has been acknowledged in leadership research (see Dansereau & Yammarino, 1998; Yammarino & Dansereau, 2008). Levels of analysis are entities (in this case human beings) that are typically located in hierarchical order such that higher levels (e.g., work teams) include lower levels (e.g., followers). With respect to leadership research the key levels of analysis are the individuals or persons (independent subordinates, leader), dyads (leader-subordinate, follower-follower relationships), groups (work groups and teams) and organizations (collectives larger than groups and groups of groups). LMX has received substantial criticism regarding a lack of clarity on the levels of analysis incorporated in theory and research and in many cases a misalignment between the two et al., in press). While LMX has been defined as the quality of the dyadic relationship between the leader and the follower and as a result the research unit should be the dyad, in reality the majority of studies have examined individual perceptions of the LMX quality, hence the misalignment between the basic premises of the theory and research application. Gooty et al. (2012) highlight three major challenges in LMX research: (a) the misalignment between theory/hypotheses and measurement/data analysis has worsened in the last seven years (2005-2012) and roughly 50% of the articles specify it incorrectly or misalign levels; (b) lack of discussion on emergent processes that move LMX from the individual level, to the dyadic and the group level; (c) there are methodological challenges with the analysis of dyadic data that have prevented researchers from delving into that unit of measurement. The above challenges are also obvious in the LMX-work attitudes research as the majority of studies have adopted a member-perspective and have looked at the link between LMX and attitudes on solely the individual level of analysis. However, the recent focus on group-level constructs such as LMX Differentiation has reignited interest on attitudinal outcomes and has opened up new possibilities for LMX research. In this section, we will specifically address issues related to levels-ofanalyses, review studies that have examined the effects of LMX on work attitudes at different levels and offer suggestions for the future.

**Individual-level.** The vast majority of the research presented in Section X above has focused on the individual level of analysis and has mainly examined the impact of member-LMX on work attitudes (e.g., Aryee & Chen, 2006; Lapierre & Hackett, 2007; Liden et al., 2000; Liden et al., 2000; Major, et al., 1995; Mardanov et al., 2008; Martin et al., 2005; Masterson et al., 2000; Murphy & Ensher, 1999; Wayne et al., 1997). One could argue that this is the appropriate level of analysis as work attitudes represent individual evaluations of the job and the work environment. It is not uncommon however for these individual evaluations to be influenced by group-level constructs (such as justice climate) through social comparison processes (Vidyarthi et al., 2010; Vidyarthi et al., in press) so it is important that we expand our lens. Even at this level there is further research to be conducted focusing on the leader's perspective that has been completely ignored by previous research. In addition to their managerial role, managers are also employees of an organization and as a result form their own evaluations about their job and their organizational environment. These evaluations are inevitably affected by critical relationships with their own superiors but also with their followers. It would thus be of interest to examine the effect of the quality of LMXs a leader has with his/her followers on his/her own work attitudes. Research could also examine the average type of relationships as well as variability of relationships as an antecedent of managerial work attitudes.

Three other LMX constructs have been operationalized at the individual-level although they refer to group processes: *Relative LMX* (Henderson et al., 2008; Epitropaki & Martin, 2013), *perceived LMX Differentiation* (Hooper & Martin, 2008) and Team-Member Exchange (TMX) (Seers, 1989; Seers, Petty & Cashman, 1995). Relative LMX (RLMX) represents the degree to which an employee's LMX differs from average leader-subordinate LMX in the work group. Based on the norm of reciprocity, researchers have argued that employees with higher quality exchange relationships with their leaders than the group average will feel obligated to respond with behaviors that are valued by leaders (e.g., Henderson et al., 2008; Vidyarthi et al., 2010). Henderson et al. (2008) reported a positive relationship between RLMX and psychological contract fulfillment when controlling for individual LMX and recently Tse, Ashkanasy, and Dasborough (2012) found RLMX to be positively related to organizational identification. No prior study has explicitly addressed the role of RLMX for work attitudes.

Hooper and Martin (2008) conceptualized perceived LMX Differentiation as "the amount of variability in LMX relationships perceived by team members (termed perceived LMX variability)" (p. 21). Across two-samples, they found perceived LMX variability to account for additional variance in employee outcomes above that accounted for by personal LMX quality. They specifically found perceived LMX variability to be related to employee job satisfaction (global and extrinsic, but not intrinsic) and well-being, and this relationship was mediated by perceptions of relational team conflict. Perceived LMX Differentiation is a promising construct that warrants further investigation as it captures members' perceptions of the shared reality of LMXs in their workgroups and engages them in an explicit social comparison process.

Team-Member Exchange (TMX) is defined as an individual member's perceptions of his or her exchange relations within the group or team (Seers, 1989). It encompasses TMX contributions and TMX receipts (Ford & Seers, 2006). Contributions refer to actions a member engages in to support work group members whereas receipts refer to the reciprocal opposites. Seers (1989) found longitudinally that TMX, above and beyond LMX, predicted job satisfaction. Major et al. (1995) found that new employees who had high perceived TMX experienced higher job satisfaction and commitment, and Liden, Wayne, and Sparrowe (2000) also reported a positive relation between TMX and work satisfaction and commitment. On the other hand, Golden (2006) found the relation between TMX and job satisfaction to be more complicated and reported a curvilinear relationship such that job satisfaction increased as a function of TMX quality but decreased at higher levels. Witt et al. (1999) further found that TMX quality was positively related to individuals' commitment to teams although this relation was moderated by team identification. A recent meta-analysis (Banks et al., 2014) found TMX to show incremental validity above and beyond LMX for work attitudes (organizational commitment and job satisfaction), but not for job performance and turnover intentions. Thus, perceptions of the horizontal relationships among team members (TMX) seem to play an important role for job attitudes over and above vertical exchanges (LMX).

**Dyad-level.** Research that has truly focused on a dyad level has mainly examined leaderfollower LMX agreement and its consequences through mainly polynomial regression procedures. A consistent finding is that leader and member views of the relationship often do not converge. Gerstner and Day (1997) reported a weighted sample correlation of .29 (.37 when corrected for measurement unreliability) and recently Sin, Nahrgang, and Morgeson (2009) in an analysis of 10,884 dyads found an overall agreement of  $\rho = 37$ . Zhou and Schriesheim (2010) also found strong support for a lack of convergence between the two perspectives and further indicated that leaders tended to focus more on task-oriented dimensions whereas followers were more oriented towards social aspects of the LMX relationship. Cogliser et al. (2009) using a sample of 285 matched pairs examined balance in perceptions and found that highly balancedhigh LMX relationships were associated with high levels of job satisfaction and organizational commitment whereas high balanced-low LMX relationships were related to low levels of attitudes. In unbalanced relationships results were generally intermediate. In relation to attitudes, their results showed that when followers overestimated the quality of the relationship they reported higher levels of job satisfaction and commitment. Recently, Gooty and Yammarino (2011) introduced the concept of *dyadic dispersion* to describe the degree to which leaders and followers do not share similar perceptions of LMX and talked about the lack of a *shared reality* within the dyad. They further developed a multisource, cross-level model examining dyadic dispersion of LMX as a moderator of the relationship between individual LMX and job performance. They do not, however, formulate hypotheses for the role of dyadic dispersion on work attitudes.

Another construct that has been hypothesized to operate on a dyadic level is Co-worker Exchanges (CWXs). It captures the dyadic exchanges among co-workers who report to the same manager (Seers, 1989). Sherony and Green (2002) examined 110 coworker dyads and found that greater diversity in a worker's CWX relationship, after controlling for LMX, was negatively related to his/her organizational commitment but not job satisfaction. They further reported that the quality of a worker's CWX did not moderate the relationship between CWX diversity and attitudes. Despite the initial promise of the construct, research has not taken off in the LMX field and research in this area has been scarce. Recently, Tse, Lam, Lawrence, and Huang (2013), by adopting a balance theory and social comparison perspective, examined differences among coworkers' perceptions of the quality of LMX and their impact on contempt towards the co-worker and perceptions of help received from the co-worker. Results provided strong support for the moderating role of employees' social comparison orientation (SCO). Vidyarthi et al. (in press) added another dyadic component of interest, i.e., dual leadership exchanges in matrix organizational contexts. They found the level of alignment or misalignment between the two relationships (LMX-client and LMX-agency) to impact employees' job satisfaction.

The need for an alignment of theory/hypotheses with measurement and data analyses in studies in LMX research has been raised above. At the most basic level, LMX theory is located at the dyadic level with the focus on the relationship between a manager and each of his/her followers. Typically research examines LMX from the followers' perspective, and less frequently from the leaders', and correlates this with work attitudes. However, there are many potential benefits of examining LMX from both the follower and leader perspectives and how these might impact upon work attitudes. Thus a simple, but important research question, is which is the better predictor of follower work attitudes, follower LMX or leader LMX?

To enable an examination of both the follower and leader perspectives, Thomas et al. (2013) have suggested the dyadic methodology developed in research on interpersonal relations by Kenny and colleagues (Kenny, 1994; Kenny & Cook, 1999; Kenny, Kashy, & Cook, 2006) might be particularly useful. The essential aspect of this methodology is the collection of reciprocal data; i.e., data on the outcome variable (in this case LMX) from both members of a dyad (in this case leader and follower) on the dyadic variables of interest (in this case follower work attitudes). For instance, one might collect ratings of LMX from the follower and leader (and indeed, across many leader-follower dyads for the same manager) and relate these to work attitudes (such as, followers' job satisfaction). These data structures, when subjected to the appropriate data analysis method, such as the Actor-Partner Interdependence Model (APIM; when leader and follower belong to only one dyad), the One-With-Many model (OWM; when the leader has many followers), or the Social Relations Model (SRM; when the focus on relationships between all team members including the leader, sometimes referred to as a 'round robin' approach), allow the examination of how both parties of a dyad contribute to a relationship or influence each other (for examples of these approaches in relation to LMX see;

Balkundi, Barsness, & Michael, 2009; LeDoux, Gorman, & Woehr, 2012; Richards & Hackett, 2012).

The OWM approach is particularly relevant in this context as it allows ratings of LMX to be collected from the 'one' (in this case the leader) and from the 'many' (in this case the followers) and thus allows the partition of variances into different aspects. For example, 'actor' and 'partner' effects reflect a person's general tendency to provide or elicit similar responses across partners while 'relationship' effects reflect the unique relationships between two individuals (leader/follower) controlling for actor and partner effects. Thomas et al. (2013) provide an example of how the OWM approach might aid understanding of the relationship between LMX differentiation and work outcomes. As reviewed earlier, research has only looked at LMX differentiation, a follower's actual or perceived LMX quality variation on work outcomes. In the OWM method, the relationship effect captures similar variance; i.e., variation that is due to the unique relationship between a follower and a leader. Therefore, it is possible to include follower-, leader-, dyadic-, and group-level variables in these analyses to explain this variation and also to examine how the residuals of the relationship effect influence relevant work outcomes. The OWM approach enables researchers to examine relationship-based leadership phenomena in a more comprehensive way than traditional single-level models, and therefore can address theoretically interesting research questions concerning the relationship between LMX and work attitudes.

**Group-level.** LMX Differentiation has recently received substantial interest as a grouplevel construct of LMX. It is defined as the degree of within-group variation that exists when a leader forms different quality of relationships with different members (e.g., Erdogan & Bauer, 2010; Liden, Erdogan, Wayne, & Sparrowe, 2006; Martin et al., 2010). A high degree of variability creates conditions that promote competition and antagonism among team members, as individuals contest for a larger proportion of available attention and resources, whereas low levels of variability might enhance cooperation and social harmony in the group (Hooper & Martin, 2008). Researchers have further argued that variability is not necessarily a bad thing (e.g., Erdogan & Bauer, 2010; Erdogan & Liden, 2002) and that for some group members the presence of differentiation may be acceptable and even expected. Prior research has examined both perceived LMX differentiation (Hooper & Martin, 2008), as well as the actual level of differentiation (e.g., Erdogan & Bauer, 2010; LeBlanc & González-Romá, 2012), but the overall evidence regarding the role of LMX differentiation for individual outcomes remains inconclusive (e.g., Harris et al., 2013). Some researchers have advocated for the positive role of differentiation (e.g., Henderson et al., 2008; LeBlanc & González-Romá, 2012; Ma & Qu, 2010), whereas others supported the negative impact of LMX differentiation on work attitudes, and its positive effect on work behaviors (e.g., Erdogan & Bauer, 2010; Hooper & Martin, 2008; Nishii & Mayer, 2009). Conversely, the role of mitigating factors like organizational justice has been stressed unequivocally by most authors (e.g., Erdogan & Bauer, 2010; Scandura, 1999). In particular, work attitudes have been suggested to be highest when group members perceive differentiated LMX relationships to be fair (e.g., Liden et al., 2006). Clearly further research is needed to uncover the effects of LMX differentiation on work attitudes.

Figure 2 presents different levels of analysis in the context of LMX-work attitudes research.

#### < INSERT FIGURE 2 HERE>

# Discussion

# **Future Theoretical Directions**

We suggest that the following three theoretical streams could be utilized in the LMX context and help cast additional light on the LMX-work attitudes relationship: (a) social identity theory, (b) intergroup leadership and (c) relationship science and close relationships literature.

Social identity theory, SIT (Hogg, 2001; Tajfel & Turner, 1985). A recently developed approach to leadership is based on the role of identification and how this develops between leaders and group members concerns the *social identity theory of leadership* which has been developed principally by Hogg, van Knippenberg, and colleagues (Hogg, 2001; Hogg & van Knippenberg, 2003; Hogg, van Knippenberg ,& Rast, 2012; for empirical overviews see Ellemers, de Gilder, & Haslam, 2004; Hogg et al., 2012; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2005). It proposes that effective leaders are highly group prototypical, i.e., they embody the desirable characteristics and behaviors of group members and therefore are in a position to influence group members.

The theory is based upon social identity theory (Tajfel & Turner, 1979) and social categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). The premise of these approaches is that groups help to define and shape the thoughts, feelings and behaviors of group members. Social identity refers to the part of a person's conception of their self that is based on their group memberships that gives them a sense of 'we'. The more people identify with a particular social group, the more they see themselves as embodying the norms and values that are part of being in that group. People represent social groups in terms of prototypes which are "...context specific, multidimensional fuzzy sets of attributes that define and prescribe attitudes, feelings, and behaviors that characterize one group and distinguish it from other groups" (Hogg, 2001, p. 187). A prototype, therefore, is a person's cognitive representation of what they believe to be the normative properties of the group. Prototypes in this approach are not anomalous to the

concept of Implicit Leadership Theories (ILTs, Epitropaki & Martin, 2004; 2005; Epitropaki et al., 2013; Lord et al., 1984). Whereas ILTs refer to a representation of a business leader (that might apply across many contexts), prototypes refer to what group members believe are the desirable ways to think, feel and behave in *their* group and therefore set the norms for group behavior. Prototypical leaders are more central and important to self-definition than nonprototypical leaders because they embody group norms and are more likely to favor the in-group and promote the well-being of the group. Numerous studies, across different occupations and cultures, have shown that prototypical leaders are perceived as more desirable and effective than non-prototypical leaders (see Hogg et al., 2012a, for a recent review). Social identity theory can open new horizons for LMX research. Some initial research has examined the conditions under which the social identity and LMX approaches predict effective leadership and impact on work attitudes (Hogg & Martin, 2003; Hogg, Martin, Epitropaki, Mankad, Svenson, & Weeden, 2005). For example, Hogg et al. (2005) predicted that the effectiveness of a personal style (treat people as individuals with their own needs, LMX approach) or a depersonalized style (treat the group as a whole, social identity approach) would depend on the group salience to the followers. They found that as group salience increased so did the effectiveness of the depersonalized leader. In other words, depersonalized leaders, that are group focused, were more effective when group salience is high. Future research could examine this more explicitly in relation to the leaderfollower relationship with the expectation that group salience and identification should moderate when the effectiveness of prototypical and non-prototypical leaders employ different leadership styles that emphasize them being group vs. individual orientated. Future research could also address implications for LMX differentiation. One could assume that in work groups with high group salience, highly prototypical leaders will engage in more or less uniform exchanges with

members (low LMX differentiation) whereas groups with low group salience and low leader prototypicality will be characterized by highly differentiated exchanges.

*Intergroup Leadership*. It is an increasingly common feature of the workplace that managers lead diverse groups from two or more distinct and self-contained groups that have their own individual identities. For example, in a manufacturing context, a site manager might lead several groups including a group of production managers and a group of quality controllers. Each group will be composed of people doing similar work and likely to have their own specific group (or social) identities. This managerial situation is termed intergroup leadership and it is developing into a new research area. Much of the progress in this area builds upon the social identity approach to leadership described earlier (Hogg, van Knippenberg, & Rast, 2012b; Platow, Reicher, & Haslam, 2009) and in political leadership (Pittinsky, 2010; Pittinsky & Simon, 2007). While there have been calls to expand research into LMX into the group level (Graen & Uhl-Bien, 1995), very little attention has focused on intergroup contexts.

One of the issues in intergroup leadership situations is when the leader is a member of one of the groups and therefore identifies more strongly with their own group (ingroup) than alternative groups (outgroup). This might lead to intergroup competition and conflict that could be detrimental to performance. Research into intergroup relations shows that the categorization of people into different groups can lead to processes that promote intergroup conflict and prejudice. For example, when people are categorized into two groups, especially ones where membership of one's own group is psychologically important, leads to a cognitive process of minimising differences between members of one's own group ('we' are all similar) and maximising the difference with members of the outgroup ('they' are very different to 'us'). This can increase perceptions of 'us' and 'them' and while this might increase within group cohesion it can lead to decreased cohesion between group cohesion.

Of relevance to the theme of this chapter is the likely impact the above processes might have on perceptions of the LMX. As the relationship with the leader is likely to be important to followers' identity and group membership, there may be a tendency for perceptions of LMX to become more similar around an ingroup mean in highly cohesive groups and different from those in outgroups. In other words, perceptions of similar LMX amongst members of the same group come to reflect ingroup membership (we all like our manager) and as a way to differentiate from the members of the outrgroup (they all dislike their manager). This leads to interesting research questions concerning the role of intergroup processes shaping LMX perceptions within and between groups and the consequence these processes might have on work attitudes.

**Relationship science.** In their recent review Thomas et al. (2013) proposed a crossfertilization between close relationships literature and leadership processes with a special emphasis on the dyadic relationship between a leader and a follower. They specifically suggested that theories of close relationships like attachment theory (see Hazan & Shaver, 1994; Mikulincer & Shaver, 2007, for a review) and relationship maintenance perspectives (e.g., Rusbult & Arriaga, 1997; Rusbult et al., 1991) can offer significant insights on the development of LMX relationships as well as their impact on work outcomes and attitudes. For example, it has been argued that the leader-follower relationship can also be conceptualized as an attachment relationship (see Game, 2011; Mayseless, 2010). According to this view, leaders are perceived as attachment figures because they perform two key care giving functions; first, as a safe haven to provide support and comfort followers, especially in times of stress and uncertainty and second, as a secure base to provide an opportunity to engage in creative exploration, skill acquisition and self-development (Popper & Mayseless, 2003). By contrast, an insensitive and unresponsive leader is likely to produce insecurity and demoralization in followers (Davidovitz et al., 2007) as well as negative work attitudes.

Thomas et al. (2013) further argued that a cross-fertilization of relationship maintenance theoretical perspectives (see Berscheid, 1999) and leadership research might help address the frequent calls for LMX theory and research to go beyond the formative stages and explain the dynamics of how LMX develops over time (e.g., Martin, et al, 2010; Nahrgang, Morgeson & Ilies, 2009). Prior theoretical models (e.g., Graen & Uhl-Bien, 1991; Uhl-Bien & Graen, 1993) have focused on the early stages of LMX development and little is known about relationship development in mature LMX relationships as well as possible implications of relationship dynamics on job attitude change.

# **Suggestions for Future Research**

We believe that it has become obvious from the above review that research on the relationship between LMX and work attitudes has not been saturated and there are several new avenues that future research can pursue. First, there is at the moment a lack of studies examining (or controlling for) the possible biasing effect of mood and emotions in the relation between LMX and attitudes although recent evidence has indicated that job attitudes and mood/emotions covary (Judge & Kammeyer-Mueller, 2012). Future LMX research can thus incorporate affective processes when examining work attitudes and possibly utilize experience-sampling methodology (ESM) where LMX, affect and attitudes are measured once a day over a period of a few weeks. Such designs can cast additional light on the LMX development process and permit multilevel modeling of attitudes that allows for both within-individual (state) and between-individual (trait) effects (Judge & Kammeyer-Mueller, 2012). There is generally very small number of

longitudinal studies (e.g., Epitropaki & Martin, 2005) that have examined the possibility of reciprocal effects between LMX and attitudes as well as the temporal variations in job attitudes as a function of LMX development. Thus, the scope for longitudinal research is vast and, indeed crucial, to understanding the causal relationship between LMX and work attitudes.

Future research can also expand the lens to include broader concepts of satisfaction and "eudemonic" well-being (e.g., Ilies et al., 2005) or of good quality of life, i.e., *meaning in life* and *life satisfaction*. In the last decade, the construct of meaning in life has received renewed attention and legitimacy, in conjunction with a growing focus on positive psychology (Ryan & Deci, 2001; Seligman & Csikszentmihalyi, 2000). Life satisfaction has also been proposed as an important construct for organizational psychology by Erdogan, Bauer, Truxillo, and Mansfield (2012) who stated that "…management as a field has tended to define a "happy worker" as someone satisfied with one's job but has paid scant attention to the more holistic concept of happiness in the form of life satisfaction" (p. 1039). In their comprehensive review they proposed that life satisfaction is a potential powerful mechanism through which people's work experiences are translated into desirable work behaviors and suggested that life satisfaction should be routinely included as an outcome together with job satisfaction in future research.

Research can also focus on other constructs alongside commitment that capture employees' attachment with the organization. Organizational identification, for example, is a construct has been frequently confused with organizational commitment (Allen & Meyer, 1990; Mowday, Steers, & Porter, 1979) but research has shown that they are two separate constructs (e.g., Bergami & Bagozzi, 2000; Mael & Tetrick, 1992). According to Pratt (1998), the most salient distinction between the two is probably that identification explains the individualorganization relation in terms of an individual's self-concept whereas commitment does not. Commitment refers to "acceptance" of organizational values. Identification goes beyond mere acceptance and is equated with "sharing" or "possessing" organizational values and beliefs. Ashforth and Mael (1989) have also proposed that the core difference between identification and commitment lies in the fact that identification is a cognitive/perceptual construct reflecting the extent to which the organization is incorporated in the self-concept whereas commitment is more typically viewed as an attitude towards the organization. Van Knippenberg and Sleebos (2006) further concluded that identification reflects psychological oneness whereas commitment reflects a relationship between separate psychological entities. There has been one recent study that has examined the role of LMX for organizational identification. Specifically, Loi, Chen and Lam (2014) in a two time-points investigation found a positive effect of LMX Time 1 on organizational identification Time 2 (after controlling for organizational identification Time 1). They also found job security to moderate the relationship between LMX and organizational identification. Employees with lower levels of job security were found to rely more on the relationship with the leader for crucial information regarding their job future and organizational membership. Organizational identification was further found to mediate the relationship between LMX Time 1 and job satisfaction Time 2. Organizational identification is thus a variable that holds promise for future LMX research. Tse, Ashkanasy, and Dasborough (2012) also found Relative LMX to be positive related to social identification after controlling for individual LMX.

Another outcome of potential interest in the specific context is job embeddedness. Job embeddedness captures the extent to which individuals are enmeshed in their current jobs (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). Mitchell et al. (2001) defined job embeddedness as the combination of three organizational forces that keep people in their current jobs. (a) *Fit*, i.e., the extent to which a person's abilities and interests match organizational requirements and rewards, respectively; (b) Links, i.e., the number of ties people have with other employees and activities at work; and (c) Sacrifice, i.e., what people would have to give up if they had to leave the organization. In other words, highly embedded employees experience high fit with their current job, focus their energy on cultivating relationships within their current organization (rather than outside) - and their current leaders - and think they have a lot to lose if they lost their job. They, thus, have little desire to move elsewhere. Early studies have shown job embeddedness to have positive employee and organizational consequences such as performance and low turnover (e.g., Crossley, Bennett, Jex, & Burnfield, 2007; Halbesleben & Wheeler, 2008; Lee et al., 2004). Recent studies have, however, shown the 'dark side' of job embeddedness and have found it to negatively affect individuals' career development behaviors (e.g., Ng & Feldman, 2010). Highly embedded employees have been found to engage less in activities to build social capital and networks that can help them find other employment. They have also been found to engage less in human capital development behaviors (e.g., attending training courses and engaging in job rotation). It will be of interest to explore the role of LMX for job embeddedness and the possible buffering role of good quality of relationship with the leader for the possible negative effects of job embeddedness. It is possible that a high quality exchange with leader and the increased access to resources and rewards that such a relationship entails shields employees from the possible negative effects of job embeddedness on career outcomes.

#### Conclusion

Although much is known about the direct relationships between LMX and work attitudes, we believe that this area of study is far from being extinct. In our review, we presented prior research and its theoretical underpinnings and most importantly offered new theoretical and empirical perspectives that can infuse new energy in this field of study.

# References

- Allen, N. J., & Meyer, N. J. (1990). Organizational socialization tactics: A longitudinal analysis of links to newcomers' commitment and role orientation. *Academy of Management Journal*, *33*, 847-858.
- Andrews, M. C., & Kacmar, K. M. (2001). Discriminating among organizational politics, justice, and support. *Journal of Organizational Behavior*, 22, 347–366
- Agho, A. O., Price, J. L. & Mueller, C. W. (1992). Discriminant validity of measures of job satisfaction, positive affectivity and negative affectivity. *Journal of Occupational and Organizational Psychology*, 65, 185–195.
- Aryee, S., & Chen, Z.X. (2006). Leader-member exchange in a Chinese context: Antecedents, the mediating role of psychological empowerment and outcomes. *Journal of Business Research*, *59*, 793-801.
- Ashforth, B. E., & Mael, F. A. (1989). Social identity theory and the organization. *Academy of Management Review*, 14, 20-39.
- Avolio, B. J., & Howell, J. M. (1992). The effects of leadership behavior and leader-follower personality congruence on predicting follower satisfaction and consolidated business unit performance. Center for Creative Leadership' Second Research Conference on Leadership, Colorado Springs, CO
- Balkundi, P., Barsness, Z., & Michael, J. H. (2009). Unlocking the influence of leadership network structures on team conflict and viability. *Small Group Research*, 40, 301-322.
- Banks, G. C., Batchelor, J. H., Seers, A., O'Boyle, E. H., Pollack, J. M. and Gower, K. (2014), What does team–member exchange bring to the party? A meta-analytic review of team and leader social exchange. *Journal of Organizational Behavior*, *35*, 273–295.
- Bass, B.M. (1985). Leadership and performance beyond expectations. NY: Free Press.
- Bauer, T.N., & Green, S.G. (1996). Development of Leader-Member Exchange: A longitudinal test. *Academy of Management Journal, 39*, 1538-1567.
- Bergami, M., & Bagozzi, R. P. (2000). Self-categorization, affective commitment and group selfesteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology*, *39*, 555-577.
- Berscheid, E. (1999). The greening of relationship science. American Psychologist, 54, 260-266.
- Blau, P. (1964). Exchange and power in social life. NY: Wiley.
- Bolino, M.C. & Turnley, W.H. (2009). Relative deprivation among employees in lower-quality leader-member exchange relationships. *The Leadership Quarterly*, 20, 276-286.
- Braun, S., Peus, C., Weisweiler, S. & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. *The Leadership Quarterly*, *24*, 270–283.
- Brower, H.H., Schoorman, F.D., & Tan, H.H. (2000). A model of relational leadership: The integration of trust and leader-member exchange. *Leadership Quarterly*, *11*, 227-250.
- Brown, M.E. & Mitchell, M.S. (2010). Ethical and Unethical Leadership: Exploring New Avenues for Future Research. *Business Ethics Quarterly*, 20, 583-616.
- Clegg, C.W., & Wall, T.D. (1981). A note on some new scales for measuring aspects of psychological well-being at work. *Journal of Occupational Psychology*, *54*, 221-225.
- Cogliser, C.C., Schriesheim, C.A., Scandura, T.A. & Gardner, W.L. (2009). Balance in leader and follower perceptions of leader-member exchange: Relationships with performance and work attitudes. *The Leadership Quarterly*, 20, 452-465.

- Coltrin, S. & Glueck, W.F. (1977). The Effect of Leadership Roles on the Satisfaction and Productivity of University Research Professors. *Academy of Management Journal, 20*, 101-116.
- Crossley, C. D., Bennett, R. J., Jex, S. M., & Burnfield, J. L. (2007). Development of a global measure of job embeddedness and integration into a traditional model of voluntary turnover. *Journal of Applied Psychology*, *92*, 1031–1042.
- Dansereau, F., Graen, G.B., & Haga, W. (1975). A vertical dyad linkage approach to leadership in formal organizations. *Organizational Behavior and Human Performance*, *13*, 46-78.
- Dansereau, F., & Yammarino, F.J. (eds.) (1998). Leadership: The multiple-level approaches (Part B: Contemporary and alternative). *Monographs in Organizational Behavior and Industrial Relations*, vol. 24. Stamford, CT: JAI Press.
- Davidovitz, R., Mikulincer, M., Shaver, P. R., Izsak, R., & Popper, M. (2007). Leaders as attachment figures: Leaders' attachment orientations predict leadership-related mental representations and followers' performance and mental health. *Journal of Personality* and Social Psychology, 93, 632-650.
- Dihn, J., Lord, R.G., Gardner, W., Meuser J.D., Liden, R.C. & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, *25*, 36-62.
- Duchon, D., Green, S.G., & Taber, T.D. (1986). Vertical Dyad Linkage: A longitudinal assessment of antecentents, measures and consequences. *Journal of Applied Psychology*, 71, 56-60.
- Dulebohn, J.H., Bommer, W.H., Liden, R.C., Brouer, R.L., & Ferris, G.R. (2012). A metaanalysis of antecedents and consequences of Leader-Member Exchange: Integrating the past with an eye toward the future. *Journal of Management*, *38*, 1715-1759.
- Ellemers, N., De Gilder, D., & Haslam, S. A. (2004). Motivating individuals and groups at work: A social identity perspective on leadership and group performance. Academy of Management Review, 29, 459-478.
- Erdogan, B., & Bauer, T. N. (2010). Differentiated leader-member exchanges (LMX): The buffering role of justice climate. *Journal of Applied Psychology*, 95, 1104-1120.
- Erdogan, B., & Bauer, T. N. (2013). Leader-member exchange (LMX) theory: The relational approach to leadership. In D. Day (Ed.), *Oxford Handbook of Leadership and Organizations*. Oxford: UK: Oxford University Press.
- Erdogan, B., Bauer, T. N., & Walter, J. (in press). Deeds that help and words that hurt: Helping and gossip as moderators of the relationship between LMX and advice network centrality. *Personnel Psychology*.
- Erdogan, B., Bauer, T. N., Truxillo, D. M., & Mansfield, L. (2012). Whistle while you work: A review of the life satisfaction literature. *Journal of Management*, *38*, 1038-1083.
- Erdogan, B., & Enders, J. (2007). Support from the top: Supervisors' perceived organizational support as a moderator of leader-member exchange to satisfaction and performance ratings. *Journal of Applied Psychology*, *92*, 321-330.
- Erdogan, B., & Liden, R.C. (2002). Social exchanges in the workplace: A review of recent developments and future research directions in Leader-Member Exchange theory. In L.L. Neider & C.A. Schriescheim (eds.), *Leadership* (p. 65-114). Greenwich, CT: Information Age Publishing.
- Epitropaki, O., & Martin, R. (1999). The impact of relational demography on the quality of

leader-member exchanges (LMX) and employees' work attitudes and well being. *Journal of Occupational and Organizational Psychology*, 72, 237-240.

- Epitropaki, O., & Martin, R. (2004). Implicit leadership theories in applied settings: factor structure, generalizability and stability over time. *Journal of Applied Psychology*, 89, 293-310.
- Epitropaki, O., & Martin, R. (2005). From ideal to real: A longitudinal study of the role of implicit leadership theories on leader-member exchanges and employee outcomes. *Journal of Applied Psychology*, *90*, 659–676.
- Epitropaki, O., Sy, T., Martin, R., Tram-Quon, S. & A. Topakas. (2013). Implicit Leadership and Followership Theories "in the wild": Taking stock of information-processing approaches to leadership and followership in organizational settings. *The Leadership Quarterly*, 24, 858-881.
- Fishbein, M. A. (1973). The prediction of behavior from attitudinal variables. In C. D. Mortensen and K. Sereno (Eds.), *Advances in communication research* (p.p., 3-31). New York: Harper and Row.
- Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley.
- Foa, E.B. & Foa, U.G. (1974). *Societal structures of the mind*. Springfield, Ill: Charles C. Thomas.
- Ford, L.R., & Seers, A. (2006). Relational leadership and team climate: Pitting differentiation versus agreement. *Leadership Quarterly*, *17*, 258-270.
- Game, A. M. (2011). Leadership and attachment theory: Understanding interpersonal dynamics in Leader–Follower relations. The SAGE Handbook of Leadership, 326.
- Gerstner, C.R., & Day, D.V. (1997). Meta-analytic review of Leader-Member Exchange Theory: Correlates and construct issues. *Journal of Applied Psychology*, 82, 827-844.
- Golden, T. D. (2006). The role of relationships in understanding telecommuter satisfaction. *Journal of Organizational Behavior*, 27,319-340
- Golden, T.D., & Veiga, J.F. (2008). The impact of superior-subordinate relationships on the commitment, job satisfaction, and performance of virtual workers. *Leadership Quarterly*, 19, 77-88.
- Gooty, J., Serban, A., Thomas, J.S., Gavin, M.B., & Yammarino, F.J. (2012). Use and misuse of levels of analysis in leadership research: An illustrative review of leader-member exchange. *The Leadership Quarterly*, *23*, 1080-1130.
- Gooty, J., & Yammarino, F.J. (in press). The Leader-Member Exchange relationship: A multisource, cross-level investigation. *Journal of Management*.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161-178.
- Graen, G. B. (1976). Role-making processes within complex organizations. In M. D. Dunnette (ed.), *Handbook of Industrial and Organizational Psychology*. Chicago: Rand McNally, 1201-1245.
- Graen, G. B., & Cashman, J.F. (1975). A role-making model of leadership in formal organisations: a developmental approach. In J.G. Hunt & L.L Larson (eds.), *Leadership frontiers* (pp. 143-165). Kent, Ohio: Kent State Univ. Press.
- Graen, G.B., Novak, M.A., & Sommerkamp, P. (1982). The effects of leader-member exchange and job design on productivity and satisfaction: Testing a dual attachment model. *Organizational Behavior and Human Performance, 30*, 109-131.

- Graen. G.B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multilevel multi-domain perspective. *Leadership Quarterly*, 6, 219-247.
- Green, S.G., Anderson, S.E., & Shivers, S.L. (1996). Demographic and organizational influences on leader-member exchange and related work attitudes. *Organizational Behavior and Human Decision Processes*, 66, 203-214.
- Griffin. R. W., & Bateman, T. S. (1986). Job satisfaction and organizational commitment. In C. L. Cooper & I. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 157-188). New York: Wiley.
- Harris, K.J., Harris, R.B., & Brouer, R.L. (2009). LMX and subordinate political skill: Direct and interactive effects on turnover intentions and job satisfaction. *Journal of Applied Social Psychology*, *39*, 2373-2395.
- Harrison, D.A., Newman, D.A., & Roth, P.L. (2006). How important are job attitudes? Metaanalytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49, 305-325.
- Hater, J.J., & Bass, B.M. (1988). Superiors'evaluations and subordinates' perceptions of transformational and transactional leadership. *Journal of Applied Psychology*, 73, 695-702.
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, *5*, 1-22.
- Henderson, D.J., Liden, R.C., Glibkowski, B.C., & Chaudhry, A. (2009). LMX differentiation: A multilevel review and examination of its antecedents and outcomes. *Leadership Quarterly*, 20, 517–534.
- Henderson, D.J., Wayne, S.J., Shore, L.M., Bommer, W.H., & Tetrick, L.E. (2008). Leader-Member Exchange, differentiation, and psychological contract fulfillment: A multilevel examination. *Journal of Applied Psychology*, 93, 1208-1219.
- Halbesleben, J. R. B., & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. Work and Stress, 22, 242–256.
- Homans, G. (1961). Social Behavior. New York: Harcourt, Brace & World.
- Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5, 184-200.
- Hogg, M. A., Martin, R., Epitropaki, O., Mankad, A., Svensson, A., & Weeden, K. (2005).
  Effective leadership in salient groups: Revisiting leader-member exchange theory from the perspective of the social identity theory of leadership. *Personality and Social Psychology Bulletin, 31*, 991-1004.
- Hogg, M. A., & van Knippenberg, D. (2003). Social identity and leadership processes in groups. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 35, pp. 1-52). San Diego, CA: Academic Press.
- Hogg, M.A., van Knippenberg, D., & Rast, D.E. (2012). The social identity theory of leadership: Theoretical origins, research findings, and conceptual developments. *European Review of Social Psychology*, 23, 258-304.
- Hooper, D., & Martin, R. (2008). Beyond personal Leader-Member Exchange (LMX) quality: The effects of perceived LMX variability on employee reactions. *Leadership Quarterly*, 19, 20-30.
- Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-

member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47, 368-384.

- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, *127*, 376-407
- Judge, T.A. & Kammeyer-Mueller, J.D. (2012). Job Attitudes. *Annual Review of Psychology*, 63, 341-367.
- Kacmar, K.M., Carlson, D.S., & Brymer, R.A. (1999). Antecedents and consequences of organizational commitment: A comparison of two scales. *Educational and Psychological Measurement*, 59, 976-994.
- Kenny, D. A. (1994). *Interpersonal perception. A social relations analysis*. New York: The Guilford Press.
- Kenny, D. A., & Cook, W. L. (1999). Partner effects in relationship research: Conceptual issues, analytic difficulties, and illustrations. *Personal Relationships*, *6*, 433-448.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). Dyadic data analysis. New York: Guilford Press.
- Kimura, T. (2013). The moderating effects of political skill and Leader-Member Exchange on the relationship between organizational politics and affective commitment. *Journal of Business Ethics*, *116*, 587-599.
- Kinicki, A. J., & Vecchio, R. P. (1994). Influences on the quality of supervisor-subordinate relations: The role of time-pressure, organizational commitment, and locus of control. *Journal of Organizational Behavior*, 15, 75-82.
- Lapierre, L.M., & Hackett, R.D. (2007). Trait conscientiousness, leader-member exchange, job satisfaction and organizational citizenship behaviour: A test of an integrative model. *Journal of Occupational and Organizational Psychology*, 80, 539-554.
- Le Blanc, P.M., & Gonzalez-Roma, V., (2012), A team level investigation of the relationship between Leader–member exchange (LMX) differentiation, and commitment and performance, *The Leadership Quarterly*, 23, 534-544.
- LeDoux, J., Gorman, C. A., & Woehr, D. J. (2012). The relative importance of dyadic relationships in predicting team process outcomes. *Small Group Research*, *43*, 356-382
- Lee, T. W., Mitchell, T. R., Sablynski, C. J., Burton, J. P., & Holtom, B. C. (2004). The effects of job embeddedness on organizational citizenship, job performance, volitional absences, and voluntary turnover. *Academy of Management Journal*, 47, 711–722.
- Liden, R.C., Erdogan, B., Wayne, S.J., & Sparrowe, R.T. (2006). Leader-member exchange, differentiation and task interdependence: Implications for individual and group performance. *Journal of Organizational Behavior*, 27, 723-746.
- Liden, R.C., Sparrowe, R.T., & Wayne, S.J. (1997). Leader-member exchange theory: The past and potential for the future. *Research in Personnel and Human Resources Management*, *15*, 47-119.
- Liden, R.C., Wayne, S.J., & Sparrowe, R.T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relations, and work outcomes. *Journal of Applied Psychology*, *85*, 407-416.
- Liden, R.C., Wayne, S.J., & Stilwell, D. (1993). A longitudinal study on the early development of Leader-Member Exchanges. *Journal of Applied Psychology*, 78, 662-674.
- Locke, E.A. (1976). The nature and causes of job satisfaction. In M.D. Dunnette (Ed.),

Handbook of industrial and organizational psychology (pp.1297-1349). Chicago: Rand McNally.

- Locke, E.A. & Latham, G.P. (1990). *A theory of goal-setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Loi, R., Chan, K. W. and Lam, L. W. (2014), Leader–member exchange, organizational identification, and job satisfaction: A social identity perspective. *Journal of Occupational* and Organizational Psychology, 87, 42–61
- Lord, R.G., Foti, R. J., & De Vader, C.L. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior and Human Performance*, 34, 343-378.
- Mael, F. A., & Tetrick, L. E. (1992). Identifying organizational identification. *Educational & Psychological Measurement*, *52*, 813-824.
- Maio, G.M., Thomas, G., Fincham, F.D., & Carnelley, K.B. (2008). Unravelling the role of forgiveness in family relationships. *Journal of Personality and Social Psychology*, 94, 307-319
- Major, D.A., Kozlowski, S.W.J., Chao, G.T., & Gardner, P. D. (1995). A longitudinal investigation of newcomer expectations, early socialization outcomes, and the moderating effects of role development factors. *Journal of Applied Psychology*, 80, 418-431.
- Mardanov, I.T., Heischmidt, K., & Henson, A. (2008). Leader-Member Exchange and job satisfaction bond and predicted employee turnover. *Journal of Leadership & Organizational Studies, 15*, 159-175.
- Martin, R., & Epitropaki, O. (2001). Role of organizational identification, on Implicit Leadership Theories (ILTs), transformational leadership and work attitudes. *Group Processes and Intergroup Relations*, *4*, 247-262.
- Martin, R., Thomas, G., Charles, K., Epitropaki, O., & McNamara, R. (2005). The role of leadermember exchanges in mediating the relationship between locus of control and work reactions. *Journal of Occupational and Organizational Psychology*, 78, 141–147.
- Masterson, S.S., Lewis, K., Goldman, B.M., & Taylor, M.S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, *43*, 738-748.
- Mathieu, J.E., & Zajac, D.M. (1990). A review and meta-analysis of the antecedents and consequences of organizational commitment. *Psychological Bulletin*, *108*, 171-194.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709–734.
- Mayseless, O. (2010). Attachment and the leader-follower relationship. *Journal of Social and Personal Relationships*, 27, 271-280.
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. *Advances in Experimental Social Psychology*, *35*, 53-152.
- Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why people stay: Using organizational embeddedness to predict voluntary turnover. *Academy of Management Journal*, 44, 1102–1121.
- Mowday, R. T., Porter, L.W., & Steers, R. M. (1982). *Employee-organizational linkages*. NY: Academic Press.
- Mossholder, K.W., Niebuhr, R.E., & Norris, D.R. (1990). Effects of dyadic duration on the

relationship between leader behavior perceptions and follower outcomes. *Journal of Organizational Behavior*, 11, 379-388.

- Murphy, S.E., & Ensher, E.A. (1999). The effects of leader and subordinate characteristics in the development of leader-member exchange quality. *Journal of Applied Social Psychology*, 29, 1371-1394.
- Ng, T.W.H. & Feldman, D. C. (2010). The Effects of Organizational Embeddedness on Development of Social Capital and Human Capital. *Journal of Applied Psychology*, 95, 696–712.
- Ozer, M. (2008). Personal and task-related moderators of leader-member exchange among software developers. *Journal of Applied Psychology*, *93*, 1174-1182.
- Patterson, M., West, M., Lawthom, R. & Nickell, S. (1997). *Impact of people management practices on business performance*. London: Institute of Personnel and Development.
- Petty, M.M. & Bruning, N.S. (1980). Relationships between employees' attitudes and error rates in public welfare programs. *Academy of Management Journal*, 23, 556-560.
- Pittinsky, T.L. (2010). A two-dimensional model of intergroup leadership: The case of national diversity. *American Psychologist*, 65, 194-200.
- Pittinsky, T.L., & Simon, S. (2007). Intergroup leadership. *The Leadership Quarterly*, 18, 586-605.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59, 603-609.
- Pratt, M.G. (1998). To be or not to be: Central questions in organizational identification. In D. A. Whetten, & P. C. Godfrey (Eds.), *Identity in organizations: Building theory through conversations* (pp. 171-208). Thousand Oaks, CA: Sage Publications, Inc.
- Richards, D., & Hackett, R.D. (2012). Attachment and emotion regulation: Compensatory interactions and leader-member exchange. *Leadership Quarterly*, 23, 686-701.
- Riketta, M. (2008). The causal relation between job attitudes and performance: A meta-analysis of panel studies. *Journal of Applied Psychology*, 93, 472-481.
- Rockstuhl, T., Dulebohn, J.H., Ang, S. & Shore, L.M. (2012). Leader–Member Exchange (LMX) and culture: A meta-analysis of correlates of LMX across 23 countries. *Journal of Applied Psychology*, 97, 1097-1130.
- Rusbult, C.E., & Arriaga, X.B. (1997). Interdependence theory. In S. Duck (eds.), *Handbook of Personal Relationships: Theory, research, and interventions* (2<sup>nd</sup> ed., pp. 221-250). Chichester, England: Wiley.
- Rusbult, C.E., Verette, J., Whitney, G.A., Slovik, L.F., & Lipkus, I. (1991). Accommodation processes in close relationships: theory and preliminary empirical support. *Journal of Personality and Social Psychology*, *60*, 53-78.
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. In S. Fiske (Ed), *Annual review of psychology* (pp. 141-166), Palo Alto, CA: Annual Reviews, Inc.
- Scandura, T.A., (1999). Rethinking leader-member exchange: An organizational justice perspective. *Leadership Quarterly*, *10*, 25-40.
- Schneider, B., Hanges, P.J., Smith, D.B., & Salvaggio, A.N. (2003). Which comes first: Employee attitudes or organizational financial and market performance? *Journal of Applied Psychology*, 88, 836-851.
- Schriesheim, C.A., Neider, L.L., & Scandura, T.A. (1998). Delegation and leader-member

exchange: Main effects, moderators, and measurement issues. Academy of Management Journal, 41, 298-318.

- Schyns, B., Paul, T., Mohr, G., & Blank, H. (2005). Comparing antecedents and consequences of leader-member exchange in a German working context to findings in the US. *European Journal of Work and Organizational Psychology*, 14, 1-22.
- Seers, A. (1989). Team-member exchange quality: A new construct for role-making research. *Organizational Behavior and Human Decision Processes, 43*, 118-135.
- Seers, A., & Graen, G. B. (1984). The dual attachment concept: A longitudinal investigation of the combination of task characteristics and leader-member exchange. *Organizational Behavior and Human Performance*, 33, 283-306.
- Seers, A., Petty, M M., and Cashman, J. F. (1995). Team-member exchange under team and traditional management: A naturally occurring quasi-experiment. *Group & Organization Management*, 20, 18-38.
- Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Seltzer, J., & Bass, B.M. (1990). Transformational leadership: Beyond initiation and consideration. *Journal of Management*, *16*, 693-703.
- Sherony, K. M., & Green, S. G. (2002). Coworker exchange: Relationships between coworkers, leader-member exchange, and work attitudes. *Journal of Applied Psychology*, 87, 542–548.
- Schriesheim, C.A., & Murphy, C. J. (1976). Relationship between leader behavior and subordinate satisfaction and performance: A test of some situational moderators. *Journal of Applied Psychology*, 61, 634-641.
- Sin, H-P., Nahrgang, J.D., & Morgeson, F.O. (2009). Understanding why they don't see eyeto-eye: An examination of Leader-Member Exchange (LMX) agreement. *Journal of Applied Psychology*, 94, 1048-1057
- Sparrowe, R.T., & Liden, R.C. (1997). Process and structure in leader-member exchange. *Academy of Management Review*, 22, 522-552.
- Stepina, L., Perrewe, P. L., Hassell, B. L., Harris, J. R., & Mayfield, C. R. (1991) A Comparative Test of the Independent Effects of Interpersonal, Task, and Reward Domains on Personal and Organizational Outcomes. *Journal of Social Behavior and Personality*, 6, 93-104.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33–47). Monterey, CA: Brooks/Cole.
- Tekleab, A. G., Takeuchi, R., & Taylor, M. S. (2005). Extending the chain of relationships among organizational justice, social exchange, and employee reactions: The role of contract violations. *Academy of Management Journal*, *48*, 146-157.
- Thomas, G., Martin, R., Epitropaki, O., Guillaume, Y. & Lee, A. (2013). Social cognition in leader-follower relationships: Applying insights from relationship science to understanding relationship-based approaches to leadership. *Journal of Organizational Behavior, 34*, S63-S81.
- Tse, H.M., Ashkanasy, N.M., & Dasborough, M.T. (2012). Relative leader-member exchange, negative affectivity and social identification: A moderated-mediation examination. *Leadership Quarterly*, *23*, 354-366.
- Tse, H.M., Lam, C.K., Lawrence, S.A., & Huang, X. (2013). When my supervisor dislikes you

more than me: The effect of dissimilarity in Leader-Member Exchange on coworkers' interpersonal emotion and perceived help. *Journal of Applied Psychology*, *98*, 974-988.

- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D. & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Blackwell.
- van Knippenberg, D., & Sleebos, E. (2006). Organizational identification versus organizational commitment: Self-definition, social exchange, and job attitudes. *Journal of Organizational Behavior*, *27*, 571-584.
- van Knippenberg, B., van Knippenberg, D., De Cremer, D. & Hogg, M.A. (2005). Research in leadership, self, and identity: A sample of the present and a glimpse of the future. *The Leadership Quarterly*, *16*, 495-499.
- Vidyarthi, P.R., Erdogan, B., Anand, S., Liden, R. C., & Chaudhry, A. (in press). One member, two leaders: Extending leader-member exchange theory to a dual leadership context. *Journal of Applied Psychology*.
- Vidyarthi P.R., Liden, R.C., Anand, S., Erdogan, B. & Ghosh, S. (2010). Where do I stand? Examining the effects of leader-member exchange social comparison on employee work behaviors. *Journal of Applied Psychology*, 95, 849-61.
- Wayne, S.J., Shore, L.M., Bommer, W.H., & Tetrick, L.E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of Applied Psychology*, 87, 590-598.
- Wayne, S.J., Shore, L.M., & Liden, R.C. (1997). Perceived organizational support and Leader-Member Exchange: A social exchange perspective. Academy of Management Journal, 40, 82-111.
- Wilson, K., Sin, H. & Conlon, D. (2010). What about the leader in Leader-Member Exchange? The impact of resource exchanges and substitutability on the leader. *Academy of Management Review*, 35, 358-372.
- Witt, L.A., Hochwarter, W. A., Hilton, T.F., & Hillman, C. M. (1999). Team-member exchange and commitment to a matrix team. *Journal of Social Behavior and Personality*, 14, 63-74.
- Yammarino, F.J., & Dansereau, F. (2008). Multi-level nature of and multi-level approaches to leadership. *The Leadership Quarterly*, *19*, 135-141.
- Zhang, Z., Wang, M., & Shi, J. (2012). "Why (not) change?" effects of leader-follower congruence in proactive personality on LMX and work outcomes. Academy of Management Journal. 55, 111-130.
- Zhou, X., & Schriesheim, C.A. (2010). Quantitative and qualitative examination of propositions concerning supervisor-subordinate convergence in descriptions of leader-member exchange (LMX) quality. *The Leadership Quarterly*, 21, 826-843.

LMX and work attitudes

Figure 1. Opening the "black box" of the LMX and attitudes relationship



LMX and work attitudes

# Figure 2. Different levels of analysis in LMX-work attitudes research

Group level

• LMX Differentiation -

Dyad level

- LMX -LMXS congruence +
- LMX-LMXS1-LMXS2 congruence +
- CWX congruence +

Individual level

- LMX-M +
- LMX-S +
- Relative LMX +
- Perceived LMX Differentiation -
- TMX +

- Job satisfaction
- Organizational commitment