

Implications of Cognitive and Affective Mechanisms for Interpersonal Exchange Relationships in Teams

Herman H. M. Tse*
UQ Business School
The University of Queensland
St Lucia, QLD 4072, Australia
Email: h.tse@business.uq.edu.au

Marie T. Dasborough
William S. Spears School of Business
Oklahoma State University
Stillwater, Oklahoma 74078-4011, USA
Email: m.dasborough@okstate.edu

Neal M. Ashkanasy
UQ Business School
The University of Queensland
St Lucia, QLD 4072, Australia
Email: n.ashkanasy@uq.edu.au

Implications of Cognitive and Affective Mechanisms for Interpersonal Exchange Relationships in Teams

ABSTRACT

In this study, we investigated the effect of leader-member exchange (LMX) on team-member exchange (TMX), and tested the mediation effects of social identification and positive affect in the relationships between LMX and TMX. Our sample comprised of 291 front-line employees working within local branches of an Australian banking organisation. Results showed that LMX was positively related to social identification, positive affect, and TMX. We found further that social identification and positive affect mediated relationships between LMX and TMX. Our findings suggest that employees enjoying high-quality LMX relationships tend to develop high-quality TMX relationships; and that this is because they socially identify with their work groups, and experience positive emotions in the relationships that strengthen their relationships with other team members.

(120 words)

Keywords: Leader Member Exchange (LMX), Team Member Exchange (TMX), Social Identification and Affect

Over the last two decades, a considerable amount of research has examined the importance of leader-member exchange (LMX) in the workplace. LMX theory focuses on differentiated exchange relationships that leaders develop and maintain with their subordinates within work teams (Dansereau, Graen, & Haga, 1975). Graen and Uhl-Bien (1995) and Gerstner and Day (1997) reviewed the empirical evidence, and concluded that LMX relationship quality has profound implications for employees' job satisfaction, organisational commitment, in-role performance, and organisational citizenship behaviours. According to Kramer (1995) and Sias and Jablin (1995), however, the majority of this research has tended to look at the supervisor-subordinate dyadic relationships in isolation from the larger social context in organisations. As such, this research may have neglected the possibility that such relationships may influence people outside the LMX relationship. In this respect, research by Sparrowe and Liden (1997) and McClellan (1991) suggests that interpersonal exchange relationships between leaders, subordinates, and co-workers are embedded within the organisations wider social network. This is because employees do not act in isolation, but rather they interact with supervisors and colleagues to perform their tasks (Janssen & VanYperen, 2004). Therefore, a dyadic relationship between a leader and a subordinate may have implications for employee performance as well as their relationships with other team members. This suggests that Team Member Exchange (TMX) quality, defined by Seers (1989) as the relationship quality between an individual and her or his team members, may be influenced by the quality of LMX relationships.

LMX researchers such as Dienesch and Liden (1986) argue that supervisors tend to develop high-quality relationships with only a few subordinates within a work team, and that these relationships serve as channels for supervisors to distribute organisational resources, work-related information, and psychological support to subordinates. Therefore, high-quality LMX relationships become effective because they engender mutual trust, respect, and obligation. Sias and Jablin (1995) and McClellan (1991) suggest further that the quality of LMX relationships may enhance subordinates' status and induces

positive emotional experiences that, in turn, influence subordinates' perception of TMX development. On this basis, it seems reasonable to argue that a combination of social identity theory (SIT: Tajfel, 1972) and affective events theory (AET: Weiss & Cropanzano, 1996) may provide appropriate theoretical foundation to explain the nexus between LMX and TMX. In line with both theories, we suggest two mechanisms by which LMX may exert its influence on individuals' perception of TMX: (1) social identification (which concerns group values and collective interest) (Brewer & Gardner, 1986), and (2) positive affect (positive emotions experienced by individuals when interacting with their supervisors; see Tse, Dasborough, & Ashkanasy, 2005).

In the present study, therefore, we aim to advance interpersonal exchange research by contributing to the literature on social exchange, social identity, and emotions in teams in four ways. First, we test the relationship between vertical supervisor-subordinate relationships (LMX) and lateral team member relationships (TMX). This is in order to address Kramer's (1995) concern that LMX theory has not incorporated LMX into a larger organisational social context (see also Sias & Jablin, 1995). Second, our research responds to Gerstner and Day's (1997) call to identify the underlying process variables linking LMX and work outcomes. Here, we test social identification and individuals' positive affect as mediators influencing in the relationships between LMX and TMX. Third, we investigate the relationship between LMX and social identification in the mediation model. This builds on earlier work by Kark, Shamir, and Chen (2003), who examined the relationships between transformational leadership and personal and social identification. Finally, by exploring the role of positive affect in LMX-TMX relationships, we contribute to the growing body of research on individual affective states and emotional contagion within the team work context (e.g., see Barsade, 2002; Mason & Griffin, 2003 for examples).

HYPOTHESES DEVELOPMENT

LMX and TMX

TMX was first proposed by Seers (1989), and is a theoretical extension of LMX. It concerns the relationship between an individual and her or his team members and; it thus indicates the effectiveness of

the members' ongoing relationships within the team. Specifically, TMX focuses on an individual's willingness to assist other members, to share ideas and feedback and, in turn, to provide information to other members and to receive recognition from them (Seers, 1989; Seers Petty, & Cashman, 1995). More recently, Murphy and colleagues, (2002) and Liden, Wayne, and Sparrowe (2000) found that TMX significantly influences employees' work attitudes and behaviours. These findings are important for the advancement of TMX theory, although our understanding of the factors that influence the quality of TMX remains underdeveloped (Murillo & Steelman, 2004; Hiller & Day, 2003).

In line with Kramer's (1995) contention that the LMX dyadic relationship is interconnected and embedded within a larger social context in organisations (see also Sias & Jablin, 1995), we argue that differences in quality of LMX relationships constitute a driving force that influences the way subordinates perceive and experience TMX relationships. This is also consistent with Dienesch and Liden's (1986) point that supervisors, by virtue of their position, decide how to distribute organisational resources, work-related advantages, and psychological support to their subordinates. This therefore can be seen to create differences in the quality of LMX relationships within a team. In this respect, Erdogan (2001) and Erdogan and Liden (2002) have shown that individual team members' perceptions of their leader's behaviours and decisions (i.e., development of the LMX relationship) affect their self-esteem and their underlying emotional state. Thus, high-quality LMX relationships enhance the status of team members and trigger positive emotions, which determine how subordinates develop and maintain exchange relationships with their fellow team members (e.g., Kramer, 1995; Sias & Jablin, 1995; McClane, 1991). Early evidence to support these claims has been found in an empirical study of 110 co-worker dyads by Sherony and Green (2002), who found that relationship quality between two co-workers was predicted by the quality of their individual LMX relationships with their supervisor. Building upon the theoretical discussion and the empirical study, we making the following hypothesise:

Hypothesis 1: LMX will be positively related to TMX.

LMX, Social Identification, and Social Exchange

Social identification is theoretically derived from the Social Identity Theory (SIT) and is defined by Tajfel (1978: 63) as the “cognition of membership of a group and the value and emotional significance attached to this membership.” Brewer and Gardner (1986) note further that social identification occurs when individuals share strong beliefs with groups to which they belong and define they define their self-concept based on the group values and collective interests. When individuals identify with a group, they are more likely to base their self-concept and self-esteem partly on their belonging to the group, and therefore to perceive and to experience group successes and failures as their own successes and failures (Mael & Ashforth, 1992; Ashforth & Humphrey, 1993).

Finally, with respect to the effect of LMX on social identification, Social Exchange Theory (SET) provides a foundation to explain that the quality of relationship between supervisors and subordinates can create and communicate a shared identity or shared values through the ongoing reciprocal exchange process (Ellemers, de Gilder, & Haslam, 2004). The exchange process serves as a platform upon which subordinates’ social identification can be enhanced by fulfilling their reciprocity obligations above or beyond supervisors’ expectations. For example, as Graen and Uhl-Bien (1995) point out, in high-quality exchanges, supervisors like to appeal to the higher-order social needs of subordinates by motivating them to place collective interests over short-term personal interests, and by connecting their self-interest to the group values. Once a subordinate has socially identified with the group, s/he would promote and advocate the importance of collective welfare and group values (Wang et al., 2005). Thus:

Hypothesis 2: LMX will be positively related to social identification.

LMX and Positive Affect

LMX theory posits that there is a reciprocal process in the dyadic exchanges between leaders and followers, where they interact with each other for different kinds of exchanges. The reciprocal process therefore not only reflects how interests and expectations are met between the leaders and followers, but also indicates their feelings about being in these relationships (Graen, 1976; Graen & Uhl-Bien, 1995). More recent research by George (2002) also suggests that social interaction between leaders, individuals,

supervisors and co-workers evokes different emotions within emotional impact for each individual. Given the affective characteristics of social exchange, it is reasonable to believe that individual team members' emotional reactions are a direct affective consequence of their exchange quality with their supervisors. We therefore argue that individuals experiencing positive and high-quality relationships with their supervisors can be expected to maximise their self-esteem which, in turn, induces positive emotional experiences. For example, individuals frequently experience positive affect, defined as a subjective feeling state that includes both intense emotions and diffuse moods, such as excitement, pleasure, enthusiasm or satisfaction (Ashforth & Humphrey, 1993). This is because they find their exchange relationships with supervisors to be valuable and rewarding (Uhl-Bien, 1995; Kelly & Barsade, 2001). Although the positive relationship between LMX and positive affect has not been examined systematically, we believe that this theoretical reasoning supports the following hypothesis.

Hypothesis 3: LMX will be positively related to individuals' positive affect.

The Mediating Role of Social Identification

A review of LMX research suggests that supervisor-subordinate dyadic exchange relationships may exert influence in part via the subordinates' identification with the work group (Graen & Scandura, 1987; Ellemers, de Gilder, & Haslam, 2004). Therefore, we conceptualised social identification as a proximal outcome through which LMX influences more distal outcomes (i.e., TMX). Hogg and Abrams (1990) argue that the effect of social identification on group outcomes can be explained in terms of cognitive and affective identification with the group which in turn increases individual self-esteem and sense of self-efficacy. The increased levels of self-esteem and sense of self-efficacy will motivate the individual to engage in ongoing social exchange processes with other team members, and help the individual perform better. In this respect, Seers (1989) found that team identification was positively related to TMX.

Furthermore, the mediating influence social identification in the relationships between LMX and TMX is premised on the notion that social identification reflects a high-quality LMX relationship based on mutual benefits of reciprocity. Such identification is likely to have evolved in an individual who is

concerned with her or his own concerns with collective values and group interests (Brewer & Gardner, 1986). This may encourage individuals to integrate their status as team members into their own self-concept, elevating their commitment to TMX relationship development.

As noted earlier, high-quality LMX relationships help team members identify with their groups by creating shared trust and mutual respect. Group members feel proud of being part of a group that is perceived to have valuable characteristics, and tend to equate team success with personal success (Ashforth & Mael, 1989; Ashforth & Humphrey, 1993). We argue that such experience improves team members' self-esteem, which consequentially leads them to attribute more positive qualities to the group. This attribution reinforces the increases in member self-esteem (by bringing to the TMX relationships different kinds of resources for exchange). Thus:

Hypothesis 4: Social identification will be positively related to TMX, and will mediate the LMX-TMX relationship.

The Mediating Role of Positive Affect

In the last decade, researchers have paid increased attention to the role of affective states in the workplace (e.g., see Ashkanasy, Härtel, & Daus, 2002). A specific focus has been on how affective states play vital roles in motivational processes for individual and team effectiveness (e.g., see Brockner & Higgins, 2001; Barsade, 2002). The explanation for the influence of positive affect on TMX has been supported in many theoretical and empirical studies. In this respect, Spector and Fox (2002) suggest that positive emotional experiences facilitate positive work attitudes and behaviours. This is because individuals experiencing positive emotions will engage in behaviours that tend to support their positive moods. For example, individuals in a positive affective state may choose to help others so as to maintain their positive state (Isen, 1984).

Furthermore, team members' positive affect is expected to be related to TMX, because positive affect contributes to important interpersonal functions. For instance, Panksepp (1998) argues that positive emotions such as love, joy or, excitement evolved to increase social bonding. This argument is also supported by Kemper (1984), who advocates two major types of emotion classification. The former is

integrative emotions that draw people together (e.g., love, joy, and pride); the latter is differentiating emotions that pull people apart (e.g., anger, distress, and anxiety). In line with this classification, Staw, Sutton, and Pelled (1994) point to evidence that people find others with positive emotions more appealing. This is consistent with the notion that individuals prefer to stay in positive emotional states, thus avoiding the need for emotion maintenance and mood repair (Weiss & Cropanzano, 1996). In this regard, Lazarus (1991) has shown that people who display positive emotions are considered more attractive, and they also tend to be more attracted to others than those who do not. Thus, emotions have important relational meanings (Lazarus, 1991), positive emotions may increase the quality of the relationship between team members. We believe that individuals experiencing positive emotions, such as pleasure, interest, or excitement are likely to form and maintain high-quality TMX relationships with other team members.

Finally, we expect to find in the present study that positive affect will serve as a mediator between LMX and TMX. One focus of AET is that affective states serve as a mediating mechanism by which stable features of the work environment can influence job attitudes and behaviours (Weiss & Cropanzano, 1996). More specifically, Weiss and Cropanzano (1996) suggest that positive or negative emotions result from affective events, and that the environment features determine the frequency and intensity of the affective event occurrences. We argue that this theory can be used to explain the mediating role of positive affect in the hypothesised relationships within our model.

In this instance, we argue that LMX can be regarded by subordinates as sources of hassles or uplifts. The quality of LMX relationships brings about frequent emotional reactions in the individuals. For example, individuals may feel pleased and enthused if their supervisor recognised their potential or empowered them. Resultantly, these positive emotions are likely to encourage positive behaviours from the individuals as they attempt to satisfy their supervisor's expectations. High-quality LMX relationships induce different positive emotions, such as joy, pride, or enthusiasm that are likely to lead to spontaneous affect-driven behaviours such as reciprocal social exchange with team members. Thus, our final hypothesis is:

Hypothesis 5: Individuals' positive affect will be positively related to TMX, and will mediate the LMX-TMX relationship.

METHOD

Sample and Procedure

Participants in our study were front-line employees of an Australian banking organisation. The bank provides a wide range of retail services, including promoting different types of bank accounts, home loan packages, credit card services, and it offers investment advice for both personal and corporate customers. Within the sample, employees had job titles such as tellers, investment consultants, insurance planners, credit card salespersons, and customer service officers. Branch managers were formally appointed by the organisation to manage the staff, and to coordinate their respective branches' daily operations. Each branch consisted of seven to ten employees, with each employee directly reporting to their branch manager on a daily basis. Employees who had been in their branch for less than 6 months were excluded from our sample, to ensure employees were sufficiently acquainted with their managers and co-workers to develop adequate exchange relationships.

Survey packs were developed and sent to potential respondents (i.e., the bank employees) via the bank's internal mail system. These were enclosed with a cover letter outlining the purpose of the research, voluntary participation, and an assurance of confidentiality. Each survey pack contained a self-report questionnaire, designed to collect information about the social exchange relationships from employees' perspectives. The questionnaire measured employees' perceptions of LMX, social identification, affect, and TMX.

Out of the 682 employee questionnaires we distributed, 320 employee questionnaires were returned (46% response rate). After excluding incomplete questionnaires, the sample comprised of 291 employee dyads. Eight-seven percent of the employees in the sample were women, 75% were aged 45 years or below, and 70% had a secondary education qualification or above. They had been employed by the organisation for 2.8 years.

Measures

Leader-member exchange. We used the LMX-7 scale (Graen & Uhl-Bien 1995) to measure the relationship quality between branch managers and their employees. LMX was measured using a five-point scale, which ranged from 1 (Not at all) to 5 (Extremely). Each employee was asked to indicate his/her perception of their relationship with his/her manager. Sample item include: “To what extent does your manager understand your work problems and needs”. Alpha reliability for this scale was .94.

Social identification. This was measured using the 3-item identification scale developed by Mael and Ashforth (1989), and subsequently modified by Randel and Jaussi (2003). This scale captures the social identity theory principle that “social identification is seen as personally experiencing the success and failures of a particular group or subgroup” (Mael & Ashforth, 1989: 21). The variable was assessed based on employees’ perspectives through their responses on a seven-point scale which ranging from 1 (Strongly disagree) to 7 (Strongly agree). Sample items include: “When other members in my team are recognised for their accomplishments. The alpha reliability for this scale was .74.

Positive affect. This was measured with a 10-item scale adopted from the PANAS (Watson, Clark, & Tellegen, 1988). Participants were asked to indicate how they “feel when interacting with their team members”, on five-point scale which ranged from 1 (Not at all) to 5 (Extremely). For the purpose of this study, only positive affect was measured because it has been proved to help increase social bounding (Panksepp, 1998). An individuals’ positive affect reflects the extent to which the employee feels alert, active and enthusiastic in response to their co-workers. Examples of items include “interested”, “excited”, “proud” and “strong”. The alpha reliability for this scale was .94

Team member exchange. The ten-item TMX scale developed by Seers, Petty, and Cashman (1995) was used to measure the perception of the reciprocal exchange relationship between an individual employee and her or his team members. Responses to the items were on a seven-point scale that ranged from 1 (Strongly disagree) to 7 (Strongly agree). Sample items include: “In busy situations, other team members often volunteer to help me out”. The alpha reliability for this scale was .84.

RESULTS

To examine construct validity, we conducted confirmatory factor analyses using AMOS (Bollen, 1989). Fan, Thompson, and Wang (1999) suggest the fit indices of RMSEA, IFI, TLI and CFI are less sensitive to sample size than others. We therefore used those indices to evaluate the fit adequacy of our measurement model for subsequent analysis. Results of chi-square and fit indices were $\chi^2 = 1101.81$, $df = 399$; RMSEA = .08; CFI = .98; IFI = .98 and TLI = .97. The fit indices are significantly higher than the recommended .90 which suggest that our measurement model has an adequate fit.

Correlational Analysis

Correlational results show that all four variables were significantly and positively correlated. Also, and as expected, LMX was positively related to both mediating variables of social identification ($r = .34$, $p < .01$) and positive affect, ($r = .46$, $p < .01$) as well as to TMX ($r = .39$, $p < .01$). Also as predicted, social identification and positive affect were positively associated with TMX ($r = .45$, $p < .01$) and ($r = .43$, $p < .01$). These results provide initial evidence for Hypotheses 1 to 3, and also support three conditions for testing mediation Hypotheses 4 and 5 using the Baron and Kenny (1986) approach, because there was a significant relationship between LMX, social identification, positive affect and TMX

Test of Hypotheses

With respect to Hypothesis 1, results show that LMX was found to be positively and significantly related to TMX ($\beta = .37$, $p < .01$). Thus, Hypothesis 1 was supported. Also, as we predicted LMX was positively associated with social identification ($\beta = .35$, $p < .01$) and positive affect ($\beta = .47$, $p < .01$) respectively. These results provide evidence supporting the positive relationship between LMX, social identification and positive affect, and hence support Hypothesis 2 and 3.

To test Hypothesis 4, we regressed TMX on LMX (Step 1), and social identification (Step 2). Next, we tested the relationship between social identification and TMX, and whether social identification mediated the relationship between LMX and TMX. The results of show that social identification had a positive and significant relationship with TMX ($\beta = .36$, $p < .01$); and the direct effect of LMX on TMX was reduced from ($\beta = .37$ in step 2 to $\beta = .25$ in Step 3). The beta coefficient remained significant in the

presence of social identification as a mediator at Step 3, however. In this regard, Shrout and Bolger (2002) have highlighted the need to conduct a Sobel test to determine whether the reduction of the beta coefficient is significant (in this case, LMX, Steps 2 and 3). Results reveal that the reduction of the beta coefficient for the effects of LMX on TMX was statistically significant ($Z = 4.67, p < .01$). This indicates that social identification *partially* mediated the relationship. Hence Hypothesis 4 was supported because social identification was positively related to TMX and it mediated the relationship between LMX and TMX.

We repeated the above regression steps in our test of Hypothesis 5. Results indicate that positive affect was positively associated with their ratings of TMX ($\beta = .22, p < .01$) after controlling for LMX at Step 2. These results also reveal that the direct effect of LMX on TMX was reduced from ($\beta = .37$ in Step 2 to $\beta = .22$ in Step 3), but again the beta coefficient remained significant in the presence of positive affect at Step 3. We again conducted the Sobel test and its results show that the reduction of the beta coefficient for the effect of LMX on TMX was statistically significant ($Z = 4.41, p < .01$), so we were able to conclude that positive affect partially mediated the relationship. Therefore, Hypothesis 5 was supported insofar as positive affect was found to be positively related to TMX and it also partially mediated the relationship between LMX and TMX.

DISCUSSION AND CONCLUSION

In this study, we investigated the relationships between LMX and TMX, and explored the underlying implications of social identification and positive affect within the team-member relationships. More specifically, our study suggests how social identification and positive affect mediate the relationship between LMX and TMX. As expected, our results are consistent with our three central propositions, that: (1) LMX is a driving force behind subordinates' social identification and positive affect; (2) LMX are positively related to social identification, positive affect and TMX; and (3) LMX promotes the development of TMX relationships through psychological processes of social identification (cognitive mechanism) and positive affect (affective mechanism).

Implications for Theory and Research

This research contributes to the literature on interpersonal exchange relationships, emotions in teams, and social identification in three ways. First, our findings provide new insights into social exchange theory, where the various interpersonal exchange relationships that exist between leaders, subordinates, and team members have largely been neglected in the past (Kramer, 1995; Sias & Jablin 1995, Sparrowe et al., 2001). The study we report here provides evidence that LMX is significantly related to the quality of social exchanges that team members develop and maintain with their coworkers. This goes beyond the extant social exchange research that has often recognised LMX and TMX as antecedents of employees' work attitudes and behaviours (e.g., Murphy et al., 2002), and it also lays a foundation for new research to unravel the mysteries of how interpersonal exchange relationships are interconnected and embedded within the larger social context in organisations.

Second, we have shed new light on the relationship between LMX and social identification based on social identity and social exchange theories. Social identity theorists such as Mael and Ashforth (1992) argue that individuals with high levels of social identification are strongly motivated to define themselves in line with group values, and they tend to internalise group successes and failures. At present, social identity theory has been applied in the literature on diversity, and therefore, researchers have focused on identifying similarities of demographic factors or functional specialisations as antecedents of social identification (Van der Vegt et al., 2003; Randel & Jaussi, 2003). In the present research, we took a step forward in response to the call by Kark and his colleagues' (2003) to study social identification in conjunction with leader-follower relationships in order to understand the implications of social identification within the interpersonal social exchange processes. Our findings demonstrate that the effect of LMX on social identification can be interpreted as accommodating to the needs of self enhancement in keeping with social identity theory. High-quality LMX relationships thus can be seen to be perceived by subordinates as a social currency to nourish their sense of identification within groups.

Finally, although researchers have studied individual affective states and emotional contagion in the team work context (e.g., Barsade, 2002; Mason & Griffin, 2003), little attention has been directed

towards the role of individual affective reactions in team member exchange development (Ashkanasy & Tse, 2000). For example, if an individual experiences positive or negative emotions from interactions with a leader, this may influence how they form relationships with other team members. As we expected in our study, employees' positive affect was positively associated with TMX. This suggests that team member affect plays a role in determining how individuals perceive TMX development. The present study adds value therefore in that it explicates positive affect as a mechanism mediating the relationship between LMX and TMX. This signifies that individuals who experience high quality relationship with their supervisors are likely to experience positive affect which, in turn, positively influences their perceptions of and reactions to developing relationships with other team members.

Implications for Practice

The findings of our study also have practical implications. First, it appears from our results that LMX not only facilitates employees' performance, but it also contributes to the development of team member exchange relationships. Therefore, it is important for supervisors to be sensitive to how subordinates see the way supervisors differentiate between low and high LMX subordinates. If subordinates perceive supervisors' differentiation criteria are unfair, this could be divisive to the team. In contrast, if subordinates see the supervisor's differentiation criteria as fair, they are more inclined to be motivated to continue exchanges (Erdogan, Liden, & Kraimer, 2006). Hence, supervisors need to understand how to develop and to manage different quality relationships with subordinates based on objective criteria, such as performance standards (Erdogan, 2002). This may help encourage subordinates to form high-quality team member exchange relationships, minimizing unfavorable perceptions regarding fairness of LMX differentiation.

Another practical implication relates to the development and maintenance of high-quality team member exchange relationships. Although a number of variables have been found to be related to TMX relationships, but have paid little attention to how leaders might establish high-quality exchange relationships among team members (Seers et al., 1995). Researchers in the literature on social identification and emotions in teams suggest that both variables are important for team research (e.g., see

Van der Vegt et al., 2003; George, 2002). Our findings suggest that social identification and team member affect are mechanisms that can be used by leaders to promote high-quality TMX relationships. An implication of this is that strategies for understanding and enhancing employees' sense of identification and emotional experience within supervisor-subordinate exchange relationships should be incorporated into leadership development programs. Such programs would be useful for helping supervisors to develop high-quality team member exchanges, and ultimately to enable them to improve team and organizational effectiveness.

Conclusions

This study contributes to the literature on social exchange, social identity theory, and emotions in teams by developing a model in which social identification and positive affect are conceptualised to mediate the relationships between LMX and TMX. The results of this study lend support to the hypothesised relationships between LMX, social identification, positive affect, and TMX. Our results showed that employees' perceptions of (vertical) supervisor-subordinate relationships determine their perceptions of (lateral) team member relationship exchanges. Further, support was found for the hypothesised underlying roles of social identification and positive affect as mediators of the relationship between LMX and TMX. The findings of this study start to shed some light on the effect cognitive and affective processes by which leaders may determine facilitate effective team member relationship development. We hope that our findings encourage researchers to pay closer attention to the relationship between LMX and TMX in the future, and to try to uncover other possible mediating variables within this organisational network of exchanges.

REFERENCES

- Ashforth, B. E., & Humphrey, R. H. 1993. 'Emotional labour in service roles: The influence of identity'. *Academy of Management Review*, 18, pp 88-115.
- Ashforth, B. E., & Mael, F. 1989. 'Social identity theory and the organisation'. *Academy of Management Review*, 14, pp 20-39.

- Ashkanasy, N. M., Härtel, C. E. J., & Daus, C. S. 2002. 'Diversity and emotion: The new frontiers in organisational behaviour research'. *Journal of Management*, 28, pp 307-338.
- Ashkanasy, N. M. & Tse, B. 2000. 'Transformational leadership as management of emotion: A conceptual review'. In N. M. Ashkanasy, C. E. J. Härtel, & W. Zerbe, (Eds.) *Emotions in the workplace: Research, theory and practice* (pp.221-236). Westport, CT: Quorum Books.
- Baron, R. M., & Kenny, D. A. 1986. 'The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations'. *Journal of Personality and Social Psychology*, 51, pp 1173-1182.
- Barsade, S. G. 2002. 'The ripple effect: Emotional contagion and its influence on group behaviour'. *Administrative Science Quarterly*, 47, pp 644-675.
- Bass, B. M. 1998. '*Transformational leadership: Industrial, military, and educational impact*'. Mahwah, NJ: Lawrence Erlbaum.
- Bollen, K. A. 1989. '*Structural equations with latent variables*'. Chichester, UK: John Wiley & Sons.
- Brewer, M. B., & Gardner, W. 1986. 'Who is this "we"? Levels of collective identity and self-representations'. *Journal of Personality and Social Psychology*, 71, pp 83-93.
- Brief, A. P., & Weiss, H. M. 2002. 'Organisational behaviour: Affect in the workplace'. *Annual Review of Psychology*, 53, pp 279-307.
- Brockner, J., & Higgins, E. T. 2001. 'Regulatory focus theory: Implications for the study of emotions at work. *Organisational Behaviour and Human Decision Processes*', 86, pp35-66.
- Dansereau, F., Graen, G. B., & Haga, W. J. 1975. 'A vertical dyad linkage approach to leadership within formal organisations'. *Organisational Behaviour and Human Performance*, 13, pp 46-78.
- Dienesch, R. M., & Liden, R. C. 1986. 'Leader-member exchange model of leadership: A critique and further development'. *Academy of Management Review*, 11, pp618-634.
- Ellemers, N., de Gilder D., & Haslam, A. 2004. 'Motivating individuals and groups at work: A social identity perspective on leadership and group performance'. *Academy of Management Review*, 29, pp 459-478.

- Erdogan, B. 2001. '*LMX differentiation fairness: Initial evidence of a new construct*'. Paper presented at the annual meetings of the Academy of Management, Washington, D.C.
- Erdogan, B., & Liden, R. C. 2002. 'Social exchange in the workplace: A review of recent development and future research direction in leader-member exchange theory'. In L. L. Neider & C. A. Schriesheim (Eds.), *Leadership* (pp. 65-114). Greenwich, CT: Information Age.
- Erdogan, B., & Liden, R. C., & Kraimer, M. L. 2006. 'Justice and leader-member exchange: The moderating role of organisational culture'. *Academy of Management Journal*, 49, pp 407-410.
- Fan, X, B., Thompson, B., & Wang, L. 1999. 'Effects of sample size, estimation method, and model specification on structural equation modelling fit indexes'. *Structural Equation Modelling*, 6, pp 56-83.
- George, J. M. 2002. Affect regulation in groups and teams. In R. G. Lord, R. J. Klimoski & R. Kanfer (Eds.), *Emotions in the workplace: Understanding the structure and role of emotions in organisational behaviour* (pp.183-217). San Francisco: Jossey-Bass.
- Gerstner, C. R., & Day, D. V. 1997. Meta-analytic review of leader-member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82, pp 827-844.
- Graen, G., & Scandura, T. 1987. 'Toward a psychology of dyadic organising'. In B. M. Staw & L.L. Cummings (Eds.) *Research in organisational behaviour*, 9 (pp.175-208). Greenwich, Conn.: JAI Press.
- Graen, G. B., & Uhl-Bien, M. 1995. 'Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective'. *Leadership Quarterly*, 6, pp 219-247.
- Heilman, M. E., Block, C. J., & Lucas, J. A. 1992. 'Presumed incompetent? Stigmatisation and affirmative action efforts'. *Journal of Applied Psychology*, 77, pp536-544.
- Hiller, N. J., & Day, D.V. 2003. 'LMX and teamwork: The challenges and opportunities of diversity'. In G.B. Graen, (Eds.), *Dealing with diversity: A volume in LMX leadership: The series* (pp. 29-57). Greenwich, CT: Information Age Publishing.

- Hogg, M., & Abrams, D. 1990. 'Social motivation, self-esteem and social identity'. In D. Abrams & M. A. Hogg (Eds.), *Social identity theory: Constructive and critical advances* (pp. 28-47). Chichester, UK: John Wiley & Sons.
- Isen, A. M. (1984). 'Toward understanding the role of affect in cognition'. In J. R. S. Wyer & T. K. Srull (Eds.), *Handbook of social cognition* (pp.179-236). Hillsdale NJ: Lawrence Erlbaum.
- Janssen, O., & VanYperen, 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, pp 368-384.
- Kark, R., Shamir, B., & Chen G. 2003. 'The two faces of transformational leadership: Empowerment and Dependency'. *Journal of Applied Psychology*, 88, pp 246-255.
- Kelly, J. R., & Barsade, S. G. 2001. 'Moods and emotions in small groups and work teams'. *Organisational Behaviour and Human Decision Processes*, 86, pp 99-130.
- Kemper, T. D. 1984. 'Power, status and emotions: A sociological contribution to a psycho-physiological domain'. In K.R. Scherer and P. Ekman (Eds.), *Approaches to emotions* (pp.369-384). Hillsdale, NJ: Erlbaum.
- Kenny, D. A., Kashy, D. A., & Bolger, N. 1998. 'Data analysis in social psychology'. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology*, (Vol. 1, pp. 233-265). Boston, MA: McGraw-Hill.
- Kramer, M. W. 1995. 'A longitudinal study of supervisor-subordinate communication during job transfers'. *Human Communication Research*, 22, pp 39-64.
- Lazarus, R. S. 1991. 'Progress on a cognitive-motivational-relational theory of emotion'. *American Psychologist*, 46, pp 819-834.
- Liden, R. C., Wayne, S. J., & Sparrowe, R. T. 2000. 'An examination of the mediating role of psychological empowerment on the relations between job, interpersonal relationships and work outcomes'. *Journal of Applied Psychology*, 85, pp 407-416.

- Lind, M. P., & Zmud, R.W. 1995. 'Improving interorganisational effectiveness through voice mail facilitation of peer-to-peer relationships'. *Organisation Science*, 6, pp 445-461.
- Mael, F., & Ashforth, B.E. 1992. 'Alumni and their alma mater: A partial test of the reformulated model of organisational identification'. *Journal of Organisational Behaviour*, 13, pp 103-123.
- Mason, C. M., & Griffin, M. A. 2003. 'Group absenteeism and positive affective tone: A longitudinal study'. *Journal of Organisational Behaviour*, 24, pp 667-687.
- McClane, W. E. 1991. 'Implications of member role differentiation. Analysis of a key concept in the LMX model of leadership'. *Group and Organisation Studies*, 16, pp102-113.
- Murillo, P. J., & Steelman, P. 2004. 'Antecedents and consequences of TMX'. Paper presented at the annual meeting of Southern Management Associating Conference, San Antonio, Texas.
- Murphy, S. M., Wayne, S. J., Liden, R. C., & Erdogan, B. 2002. 'Understanding social loafing: The role of justice perceptions and exchange relationships'. *Human Relations*, 56, pp 61-84.
- Panksepp, J. 1998. *Affective neuroscience: The foundations of human and animal emotions*. New York: Oxford University Press.
- Randel, A., E. & Jaussi, K. S. 2003. 'Functional background identity, diversity and individual performance in cross-functional teams'. *Academy of Management Journal*, 46, pp 763-774.
- Scandura, T.A. & Graen, G. B. 1984. 'Moderating effects of initial Leader-member exchange status on the effects of a leadership intervention'. *Journal of Applied Psychology*, 69, pp 428-436.
- Seers, A. 1989. 'Team-member exchange quality: A new construct for role-making research'. *Organisational Behaviour and Human Decision Processes*, 43, pp 118-135.
- Seers, A., Petty, M. M., & Cashman, J. F. 1995. 'Team-member exchange under team and traditional management'. *Group & Organisation Management*, 20, pp 18-38.
- Sherony, K. M., & Green, S. G. 2002. 'Co-worker Exchange: Relationships between co-workers, leader-member exchange, and work attitudes'. *Journal of Applied Psychology*, 87, pp 542-548.
- Shrout, P. E., & Bolger, N. 2002. 'Mediation in experimental and non-experimental studies: New procedures and recommendations'. *Psychological Methods*, 7, pp 422-445.

- Sias P. M., & Jablin, F. M. 1995. 'Differential supervisor-subordinate relations, perceptions of fairness and coworker communication'. *Human Communication Research*, 22, pp 5-38.
- Spector, P.E. & Fox, S. 2002. 'An emotion-centered model of voluntary work behaviour: Some parallels between counterproductive work behaviour and organisational citizenship behaviour'. *Human Resource Management Review*, 12, pp 269-292.
- Sparrowe, R. T., & Liden, R. C. 1997. 'Process and structure in leader-member exchange'. *Academy of Management Review*, 22, pp 522-552.
- Sparrowe, R.T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. 2001. 'Social networks and the performance of individuals and groups'. *Academy of Management Journal*, 44, pp 316-325.
- Spreitzer, G. N. De Janasz S. C., & Quinn R E. 1999. 'Empowered to lead: The role of psychological empowerment in leadership'. *Journal of Organisational Behaviour*, 20, pp 511-526.
- Stamper, C. L., & Masterson, S. S. 2002. 'Insider or outsider? How employee perceptions of insider status affect their work behaviour'. *Journal of Organisational Behaviour*, 23, pp 875-894.
- Staw, B. M., Sutton, R. I., & Pelled, L. H. 1994. 'Employee positive emotion and favourable outcomes in the workplace'. *Organisation Science*, 5, pp 51-71.
- Tajfel, H. 1972. 'Social categorisation. English translation of 'La categorisation sociale''. In S. Moscovici (Eds.), *Introduction la psychologie sociale* (pp.272-302). Paris: Larousse.
- Tajfel, H. 1978. 'The achievement of group differentiation'. In H. Tajfel (Eds.), *Differentiation between social groups: Studies in social psychology of inter-group relations* (pp. 77-98). London: Academic Press.
- Tse, H. M., Dasborough, M. T., & Ashkanasy, N. M. 2005. 'The role of affect and fairness in team member exchange'. In N.M. Ashkanasy, C.E. J Härtel, & W.J. Zerbe (Eds), *Research on emotion in organisations: The effect of affect in organisational settings* (Vol.1, pp.226-267). Oxford, U.K: Elsevier Publication.

- Van Der Vegt, G. S., Van De Vliert, E., & Oosterhof, A. 2003. 'Informational dissimilarity and organisational citizenship behaviour'. The role of intrateam interdependence and team identification. *Academy of Management Journal*, 46, pp 715-727.
- Wang, H., Law, K.S., Hackett, R., Wang, D.X., & Chen, Z.X. 2005. 'Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organisational citizenship behaviour'. *Academy of Management Journal*, 48, pp 420-432.
- Watson, D., Clark, L. A., & Tellegen, A. 1988. 'Development and validation of brief measures of positive and negative affect: The PANAS scale'. *Journal of Personality and Social Psychology*, 54, pp 1063-1070.
- Weiss, H. M., & Cropanzano, R. 1996. 'Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work'. In B. M. Staw & L. L. Cummings (Eds.), *Research in organisational behaviour* 19 (pp.1-74). Greenwich, CT: JAI Press