A Study of Exchange and Emotions in Team Member Relationships

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Abstract

In this article we aim to generate theory about how individuals perceive their relationships with team members, and their emotional experiences within the team member exchange (TMX) process. Findings from qualitative and quantitative analyses are presented, with data collected from 25 full-time employees working within five teams in two organizations. The qualitative results reveal a variety of exchanges that occur within the team member relationships, including relationship-oriented exchanges and task-oriented exchanges. Team members highlighted the importance of friendship within the team context, and that they experienced both positive and negative emotions in response to their TMX relationships. The quantitative results also indicated that positive emotions, rather than negative emotions, were associated with high quality TMX relationships.

Keywords: Team member exchange (TMX); emotions; friendship; teams
The quality of relationships between individuals and their team members has been termed ‘team member exchange’ (TMX) (Seers, 1989; Seers, Petty, & Cashman, 1995). Reviews of empirical research suggests that TMX enhances individual performance and team functioning because individuals who are in high quality TMX relationships are more willing to assist each other and to share information, ideas and feedback within work teams (e.g., Jordon, Field, & Armenakis, 2002; Liden, Wayne & Sparrowe, 2000; Seers, 1989). Given the importance of quality of TMX relationships for team effectiveness, we argue that it is critical to understand individual team members’ perceptions and experiences of their exchange relationships with other team members. Using a grounded theory approach, we aim to extend current TMX theory by focusing on the exchanges that take place and the emotional responses team members have to the exchanges.

There is reciprocity between an individual and his/her team members (George, 2002; George & Brief, 1992), and this social interaction evokes different emotional responses within the individuals. Ashkanasy, Härtel and Daus, (2002) have highlighted the importance of identifying the underlying effect of emotions within teams and have regarded this as a salient unexplored research area. The dynamic emotional experiences of individual team members have strong implications for team member relationship development. Little attention, however, has been directed to understanding the role of team member emotional experiences during team member exchanges (Tse, Dasborough & Ashkanasy, 2005).

In this study, we employ qualitative methods to generate theory about TMX processes and emotions. There are few studies in the area of teams that employ a grounded theory approach as the focus has been on quantitative methods; hence, our research fills a gap in the team literature. To generate new TMX theory, first we identify the nature of
individual team members’ perceptions and experiences of their exchange relationships with their team members. Second, we delineate and explore the emotional experiences of individuals in relation to their TMX relationships. In doing so, we further the understanding of the role of emotions in TMX processes. Third, we use both qualitative and quantitative analytical methods to understand the dynamic and complex nature of individuals’ perceptions and emotional reactions to TMX relationships. Finally, we propose a model of the antecedents and consequences of TMX as a basis for future research.

Theoretical Development

*The Nature of Team Member Exchange Relationships*

Team-member exchange refers to exchange relationships among work group members (Seers, 1989). It emphasizes exchange relationships between team members (rather than their position), reciprocal commitment between members in the exchange relationships, and perceives reciprocity as resources and expertise contributing to the exchange relationships (Seers, 1989; Seers et al., 1995). The quality of the exchange relationship indicates the effectiveness of each members’ working relationships within groups (Wech, 2003). The relationships involve different members in a group and they will vary based on the abilities and interests of the individuals, as well as the needs of the other members (Seers, 1989; Seers et al., 1995).

In this regard, Liden and his colleagues (2000) suggest that TMX quality may vary in terms of content and process of exchange among individual team members. For example, low quality TMX is limited to exchanges based on requirement for work task completion, whereas high quality TMX involves exchange of resources and support that goes beyond
what is required for task completion. By offering work-related assistance, team members provide conditions necessary for enhanced perceptions of TMX. These perceptions may be important to developing a group identity, in addition to providing meaning to the individual team members about their importance within the group (Wech, 2003).

The literature on TMX advocates that when parties perform behaviors that benefit each other, the exchange relationships increase in quality. On the other hand, Maslyn and Uhl-Bien (2001) posit that high quality exchanges involve more than reciprocation processes between the parties. They suggest that psychological processes are also involved, including the relative effort exerted by both parties and the level of expectations met for each other. In other words, whether individuals develop high quality relationships with their other team members will be determined by the level and nature of exchange characteristics with their team members, and whether these characteristics meet their expectations (Maslyn & Uhl-Bien, 2001). This suggests the fundamental assumption that ongoing team member exchanges are based on how individuals perceive and experience the exchanges they share with their team members.

Thus, understanding how individuals themselves perceive their TMX relationships is important. Most TMX researchers have adopted quantitative methods utilizing numerical scales to assess an individual’s perception about his/her work relationship with other team members (e.g., Wech, 2003; Murphy et al., 2002). It is arguable, however, that this method may result in abstract and oversimplified descriptions that do not truly reflect the dynamism and complexity of the TMX relationships. We suggest that qualitative methods can provide a deeper understanding of how individual team members perceive and experience the actual exchanges they share with team members. Based on the foregoing, we aim to understand
team member relationships from individual team members’ perspectives. The first research question to be explored is:

Research Question 1: How do individual team members perceive their team member relationships in the workplace?

Emotional Responses in Team Member Exchange Processes

Individuals experience a variety of emotional responses when they interact in teams, because interpersonal exchanges are dynamic and complex. As individual team members experience various emotions as they interact, through emotional contagion, emotions are induced and transferred to other team members. Barsade (2002) demonstrated the emotional contagion process within teams. In a TMX setting, therefore, other team members may influence the emotional experience of an individual team member through the social exchange process and by their expression of emotions. Further, these emotional responses of team members may impact on how individual team members interact and exchange with other team members, whether they cooperate or not, and their commitment to engage in social and economic exchanges with other team members (Lawler, 2001). Building on Barsade’s (2002) findings, we argue that TMX influences team member emotions and individual team members have emotional experiences in response to team member exchanges. This leads to the second research question:

Research Question 2: What kinds of emotional responses do individual team members experience in relation to TMX relationships?

Relative Importance of Positive and Negative Emotional Experiences in TMX
Kemper (1984) proposed that there are two major types of emotions: integrative emotions that draw people together (e.g., love, joy, and pride); and differentiating emotions that pull people apart (e.g., anger, distress, and anxiety). In line with this classification, there is evidence that people find others with positive emotions more appealing (Staw, Sutton, & Pelled, 1994). This is also consistent with the notion that people desire to stay in positive emotional states and avoid negative ones, to avoid the need for emotion maintenance and mood repair (see Weiss & Cropanzano, 1996). People displaying positive emotions are considered attractive, and they also tend to be more attracted to others (Lazarus, 1991). On the other hand, negative emotions arising from group conflict may undermine the relationship quality among team members.

Positive and negative emotions may either increase or decrease the quality of the relationship between team members because emotions have important relational meanings (Lazarus, 1991). According to Lazarus (2006), the meaning of interactions for individuals will determine which emotions are experienced and/or displayed in any encounter with others. Hence, emotions have relational meaning. In a team context, emotional responses of team members reflect the current interactions between team members, as well as pave the way for future team member relationship development.

George and Brief (1992) have argued that positive affect is associated with increased team member commitment and satisfaction. This is because positive affect of team members strengthens feelings of control and may be a necessary precursor of team cohesiveness and effectiveness (George & Brief, 1992). Building on their work, we suggest that individual team members who experience positive emotional responses in relation to TMX may be more committed to putting in effort to developing high quality relationships
with other team members. On the contrary, individual team members who experience negative emotional responses in relation to TMX, may be less likely to invest effort in developing high quality relationships with other team members. As a result, understanding which type of emotional responses (positive or negative) individual team members experience in relation to TMX is important, as the emotional response may influence the quality of the TMX relationships they are involved in. Based on the foregoing discussion, we ask:

Research Question 3: What is the relative importance of positive and negative emotional responses when examining TMX relationship quality?

Methods

Traditionally, quantitative methods have been used to study teams and team processes in organizations (see Forsyth, 1999). Qualitative methods, however, are also useful as they can provide rich detail and in-depth information for understanding dynamic and complex team phenomena (Currall, Hammer, Baggett, & Doniger, 1999). Both quantitative and qualitative methods have their unique advantages and disadvantages for studying team processes (see Forsyth, 1999). Although researchers have highlighted the benefits of using quantitative and qualitative methods, few team research scholars have linked both methods within a single study (see Currall, et al., 1999). In this study, we follow the recommendations of Currall and his colleagues (1999), using mixed methods for data collection and analysis.
Participants

The sample comprised 25 full-time employees working within a variety of team settings, involving different types of interdependent tasks. There were five teams, each consisting of 5 members. The teams came from two organizations - a large private health service provider (four teams) and a medium sized construction material company (one team). All team members were selected by the Human Resource Managers of the organizations, and their participation was voluntarily. The sample included 8 male and 17 female participants, with ages ranging from 20 years to 58 years. Participants’ work experience with their team members ranged from 6 months to 7 years. The issue of sample size was largely dependent on criteria of information redundancy and theoretical saturation (Flick, 2002). Sandberg (2000) also suggests at least 20 participants are required to capture the variation in the phenomenon being studied.

Data Collection

Interview guide

A semi-structured interview protocol was designed to elicit accounts of TMX relationships. The protocol consisted of three sections. Section 1 was designed to explore participants’ perceptions in relation to their team member exchanges. Sample questions were, 1) “How would you describe your relationship quality with your team members?” and 2) “Do you like working and interacting with them? Why? Give me some examples please?”). Section 2 asked participants about their emotional experiences when interacting with their team members. A sample question was, “How do you feel when you are working
with your team members? Please give me some examples”. Section 3 was designed to collect participant demographic information.

At the end of each interview, participants were also asked to complete a brief survey. This quantitative data served to supplement the qualitative data, furthering our understanding of the participants’ perceptions in relation to their TMX relationships and their emotional experiences in such exchanges. We measured TMX relationship quality as the dependent variable. Relationships with other team members, positive and negative emotions were the independent variables. All variables were measured with existing scales as outlined below.

Measures

Team member affect (TMA)

To measure emotions associated with TMX, we used the Watson, Clark and Tellegen (1988) 20 item measure of state affect, the PANAS. Positive and negative emotions are measured on a five-point scale (1 = very slightly or not at all, 5 = extremely). Positive affect (PA) reflects the extent to which an individual member feels alert, active and enthusiastic (Watson et al., 1988). Negative affect (NA) reflects the extent to which an individual member feels subjective distress and unpleasurable or aversive mood states (Watson et al., 1988). Here, affect is specified in a team context, where individual team members were asked to describe their own affect in relation to their team member exchanges. Participants were specifically asked “how do you feel about your relationship with your team members?”. The alpha reliabilities Watson and colleagues reported in their
initial study are .83 (PA) and .84 (NA). In this study, alphas for the positive and negative affect scales were .91 and .78, respectively.

Team member exchange (TMX)

TMX was measured using 10-items from Seers et al. (1995). The scale measures the perception of the reciprocal exchange relationship between an individual member and his/her team members. Responses were measured on a five-point scale. Sample items include: “In busy situations, how often do you volunteer your efforts to help others in your team” and “How willing are you to help finish work that had been assigned to others”. The alpha reliability Seers et al. reported is .83; in this study, the alpha reliability is .84.

Relationship with team members

A new measure was developed to assess the general relationship between an individual team member and each one of his/her team members. Unlike the TMX scale, this does not focus on task-related exchanges between members. Rather, it allows for task and relationship-oriented exchanges by providing an overall assessment of team member relationships. The new measure was used in connection with a diagram (See Figure 1), asking each participant to rate his/her own relationship with each individual team member by filling in the appropriate number in the box provided, ranging from (1 = very poor to 7= very good). This measure also differs from the TMX scale, as it asks about the participants’ relationship with each individual team member, rather than all other members combined as a whole, to provide a rating reflecting the unique relationships. Ratings by each individual were then aggregated to determine an average team member relationship score.
Control Variables

Demographic factors may influence individuals’ experience of team member affect and perceptions of TMX (Lucas & Lovaglia, 1998). Given these influences, gender, age and work experience with team members were also included as controls.

Interview Process

Prior to data collection, the interview guide containing the open-ended questions and the survey were developed. The content of the interview was evaluated by three independent employees working in similar team contexts to our sample to ensure that it was appropriate for the target participants. To increase the interview quality, the participants were given a copy of the interview guide and the survey prior to the interview being conducted. This was to allow the participants to reflect on the questions they would be asked during the interview (Flick, 2002). All interviews were undertaken by the first author and each interview lasted approximately 45 minutes. The interviews were recorded and the audio tapes were transcribed verbatim (Flick, 2002). Each transcript was approximately 15 pages type-written, single-spaced. Interview transcripts were examined by the participants after the interviews to ensure their accuracy.

Qualitative Data Analytic Procedures

To analyze the transcripts we used content analysis. The analysis started by reading each transcript to gain a basic understanding and then re-read the transcripts more carefully in an attempt to identify frequently occurring keywords and phrases (Rubin, 2005). The keywords and phrases of the transcripts were compared with each other, and then grouped based on their similarities and differences (Dasborough, 2006).
At the next stage, the computer software package *Leximancer* (Smith, 2004) was employed to quantify the keywords and phrases, and to explore their interrelations in line with the research questions. *Leximancer* is a lexical computer program that is designed to objectively analyze the content of textual documents. It is initiated with a list of ‘seed words’ (our list of keywords), and then ‘learns’ additional coding and adds terms found in the text to create the full thesaurus (Smith, 2004). The reliability of the coding is calculated based on the built-in mathematical algorithm of the software (Smith, 2004). We analyzed the transcripts in three-sentence text blocks (or the number of sentences to the end of the paragraph if less than three). This procedure is recommended by Smith, on the basis that analyzing groups of sentences allows the strength (weightings) of concept relationships to be determined. This enabled us to extract meaningful data strands which contained the frequency of each keyword or phrase, and the description of all other information provided by the participants.

Finally, we used this analysis to identify themes reflecting the underlying meaning, which we believe accurately captured the responses that the participants had provided. After several iterations, we reached a final set of themes (i.e., 3 themes for the perception of and reaction to TMX relationships, and 2 themes for the emotional responses to the relationships). Two independent judges (not involved in this study) coded all identified keywords and phrases extracted from interview responses according to the general meaning of each specified theme. A Kappa coefficient was computed as an index of inter-judge reliability (Miles & Huberman, 1994). The content analysis for the participants’ perceptions of TMX relationships and emotional responses to the relationships yielded Kappa values of .70 and .77 respectively. Disagreements were discussed with the independent judges.
until all coding differences were resolved (Flick, 2002; see also Dasborough, 2006).

**Quantitative Data Analytic Procedures**

Due to the small sample size, only basic statistical analyses were conducted. In order to verify that the correlation results could be justifiable for interpretation given our sample size, we followed the recommendations of Cohen and Cohen (1983) and Jobson (1991) to perform the test of normal distribution and zero-correlation. Results of the tests suggest that correlations among the variables below .40 should be interpreted with caution. However, correlations higher than .40 at 1% significance level are valid for general interpretation (Cohen & Cohen, 1983; Jobson, 1991).

**Results**

In this section, we present the findings from our qualitative and quantitative data analysis. To recap the aims of this research, Research Question 1 asked: (1) How do individual team members perceive their team member relationships in the workplace? This question was answered using content analysis based on the qualitative interview data. Research Questions 2 and 3 focused on the emotional aspects of TMX, asking: (2) What kinds of emotional responses do individual team members experience in relation to TMX exchanges? and, (3) What is the relative importance of positive and negative emotional responses when examining TMX exchanges? Research Question 2 is answered using content analysis, while Research Question 3 is addressed using both content analysis and statistical analysis based on the survey data. In the following sections, the specific findings in relation to each research question are outlined.
1) Team Member Perceptions of Team Member Exchanges

The qualitative findings reveal the range of keywords used by team members to describe their team member exchanges (see Table 1). Based on all of the key words identified, three themes emerged from the data, representing how team members themselves perceive team member exchanges. Based on the number of text units, the most frequent themes were (1) relationship-oriented exchanges (N= 417), (2) task-oriented exchanges (N = 315), and (3) TMX outcomes (N = 209).

Insert Table 1 about here

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Relationship-oriented aspects of TMX

The first theme to emerge from the data concerns the relationship-oriented aspects of team member exchanges. In general, participants’ responses refer to employees’ perceptions of the extent to which they consider their relationships with other team members as friendships going beyond their workplace relationships. A total of 417 keywords were mentioned by participants to describe the relationship-oriented aspects of TMX. Specifically, the keywords with the highest frequency (helping, caring, concerning and supporting each other) are not focused on the task, but rather focus on the personal relationships between team members. Key concepts such as being close to each other, personal sharing, similar values and friendship, reflect that team members treasure and value the relationship-oriented aspects of working in teams.

Below are some quotes from the interview transcripts, highlighting the importance of friendship between team members. 1) “They’re definitely friends, yes. Well if you lose a
loved one, like a parent or something, of course, they’re very concerned and very caring”.  
2) “You sympathize with them and you know, if they want to talk to you about their problems, and you’re there for each other, definitely”, 3) “If you sort of feel that they’ve done well, and if they’re not feeling well, and they’ve still done their work, you say, well good on you, that’s great”, 4) “We look out for each other. If any of us have got a problem, like even if it’s an outside work personal problem, we can talk to each other and support each other in those situations” and 5) “I mean we can have a joke with each other, but that still doesn’t mean that our workload will change”. These quotes are consistent with past findings regarding the notion of workplace friendship, advocating that employees like to develop communal relationships and show concern for one another’s welfare in a team environment (see Winstead, Derlega, Montgomery, & Pilkington, 1995; Wright, 1984).

Task-oriented aspects of TMX

The second theme is task-oriented aspects of TMX. A total of 315 keywords regarding task-oriented aspects were recorded, with most of the participants providing more than one keyword in response to the question. The most frequently discussed concepts in this theme, are sharing ideas and feedback, and work communication. This suggests that task-oriented aspects of teams serve as a foundation on which individuals exchange tangible resources with other team members in order to accomplish their assigned tasks. The following are quotes from team members about the exchanges that take place in the team which enables them to achieve task goals. 1) “We are just having a coffee, we’ll stand around to share ideas”, 2) I don’t know, you can just sit in a room and you are happy just with their ideas to solve your problems at work, 3) “We do have meetings where we actually share information and ideas, but often they are only informally on an hourly basis.
For example, someone in our team has read an article, which might be something that we might all need to read, or maybe just one of us” and 4) “I think a lot of us have developed a very good method of asking each other, so before we even start to think on our own too much about a particular issue, or developing something new, or creating new ideas, we actually open it up to a group discussion”.

Associated TMX outcomes

The third theme from the qualitative data is TMX outcomes. When describing high quality TMX relationships, participants mostly referred to recognition, appreciation and encouragement, and mutual respect and trust to indicate how reciprocal contributions for mutual benefits between team members are developed in the relationships over time. This theme was presented when team members spoke of low quality TMX relationships also; low quality relationships were largely defined by their lack of trust, respect, and low levels of teamwork/cooperation. These outcomes have been explored quantitatively in the TMX literature, and were expected (Seers, 1989; Seers et al., 1995).

Quotes referring to low quality TMX relationships and outcomes are: 1) “I probably wouldn’t, I haven’t fully developed trust in them. I don’t think it’s come to that yet. I’m not sure about respect yet either”, 2) “There’s no recognition or appreciation for what I do; for example, he’s made comments about my position and what I don’t do.” 3) “I was just trying to get across what I wanted him to do for me for a particular function... and he just blew it up in my face and said I don’t do anything around here and so, I just said I can’t... I’m not going to take this, and walked away”, and 4) “We don’t have anything...I don't share knowledge or anything with [member E]. I think that if anything was new, coming into our job, I would not discuss it with him”. These quotes suggest that in low quality
TMX relationships, team members may be less likely to exert effort in task-oriented exchanges and there is also a lack of relationship-oriented exchanges.

2) Emotional Aspects of Team Member Exchanges

Table 2 shows the range of emotional responses employees reported in relation to their own experience of team member exchanges. The most frequent emotions discussed were positive emotions, such as interest, like, and love; pleasure and happiness; and feeling comfortable, relaxed and satisfied.

Specific examples of positive emotional team member experiences are: 1) “Most team members don’t have mood swings. They come in and have in the same mood every day. There’s no, I’ve had a bad weekend. They leave that at home and I find that good...because they do that, working with them is very easy”, 2) “I like working with them because, especially the clerical duties, they’re always very happy, they’re always fairly enthusiastic. They’re very like, industrious” and 3) “Well, [team member A] walks in during the morning and says, “hello”, nice and brightly. I say hello nice and brightly back, and it sets the day off to a good day, you know. I never walk in grumpy or anything”, 4) “I suppose, they created an environment in which you can work and enjoy work”, and 5) “It’s nice to come back into the office and for it to be relaxed enough to, I suppose, interact with members in this team... also for it to be quite enjoyable too”.

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Insert Table 2 about here
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Negative emotions were less frequently reported than positive emotions. The most frequent negative emotions discussed in relation to TMX relationships were feeling uncomfortable; anger and annoyance; frustration, hate, and fury.

Specific examples of negative emotional team experiences include: 1) “Well, I didn’t know...I spoke too aggressively, I spoke too loud, I spoke too soft. I didn’t know how I was supposed to talk, and this was what some members were picking on... so I was very confused”, 2) “I became disappointed and felt betrayed when someone was saying something bad about me behind my back to the team” and 3) “When conflicts occur in the team I get really angry”, 4) “Some people in my team actually just haven’t got the good relationship to communicate that very well, and therefore it creates confusion and that eventually builds up to be frustration and anger”, 5) “I just felt disappointed there was no support there to help me”, 6) “Working with people here becomes stressful, or a source of difficulty and frustration, because they are not cooperative”.

3) Importance of Positive and Negative Emotions in Teams

Table 2 indicates that team members reported more positive emotions, (interested, pleasant, relax, excitement, comfortable and positive) 65 counts (59%), than negative emotions, (angry, frustration, uncomfortable, nervous, afraid, stress and upset) 45 counts (41%). This frequency count shows that positive emotions appear to be more important than negative emotions in facilitating team member exchanges. However, these frequencies alone are not convincing enough in terms of addressing our research question. Thus, we turned to the survey data to explore the emotions associated with TMX relationships further.
Table 3 reports the means, standard deviations and correlations from the survey data. TMX quality was significantly related to positive emotions ($r = .77$ $p < .01$), but not to negative emotions. Further, there was a significant relationship between positive emotions and relationship with team members ($r = .46$ $p < .01$). These correlations suggest that higher quality team member exchanges (including task and relationship-oriented exchanges) are associated with positive emotions. This finding is consistent with Harter, Schmidt and Keyes (2003), who found that positive emotions that occur through friendships at work are likely to develop social resources that enhance communication exchanges with others.

With regards to negative emotions, as expected, there was a negative correlation with positive emotions ($r = -.40$, $p < .01$). Further, older team members were associated with less negative emotional responses to TMX exchanges ($r = -.65$, $p < .01$) than younger team members. This is consistent with prior work on emotions and aging (see Gross, Gastensen, Tsai, Skorpen & Hsu, 1997). Further, Barrick and colleagues found age was related to decreases in emotional intensity, but only for negative emotions (Barrick, Hutchinson, & Deckers, 1989).

While this correlational data does not prove causality, it does suggest trends in the data. Based on these correlations, we suggest that positive emotions promote high quality team member relationships, and that over time as teams become more experienced, negative emotions in the team are reduced due to familiarity and understanding.
In summary, the findings suggest that team members consider both task and relationship-oriented exchanges as important elements of TMX relationships, and that friendship within the team context may facilitate these exchanges. In relation to emotions, participants reported that they experienced a range of positive and negative emotions within their TMX relationships and the quantitative results suggested that positive emotions, rather than negative emotions, were associated with increased TMX relationship quality.

Discussion, Implications and Conclusion

Prior to discussing the research implications, it is important to again highlight its qualitative nature. Our intention was to uncover aspects of TMX relationships that team members themselves recognize as important; the qualitative results of our research enabled this to occur. Quantitative research does not allow for such descriptive findings, and, although we do report results from the brief survey, given the small sample, we emphasize that the survey results are not the main contribution of this study. They merely suggest some associations between variables, which need to be validated with further data collection using larger samples in the future. Thus, our major contribution derives from the qualitative data, and we argue that these findings have a number of implications.

Implications for Theory and Research

This study advances current research on TMX by contributing to the literature on social exchange and emotions in teams in four ways. First, the study extends the TMX literature by identifying how individual team members perceive and experience exchanges with their team members, rather than quantitatively examining the effects of TMX on individual and team outcomes. Existing research has mainly recognized that TMX plays a
role in parallel with LMX as a predictor of individual and team effectiveness (e.g., see Murphy et al., 2002; Liden, et al., 2001). Factors contributing to how individual team members facilitate reciprocal contribution for mutual benefits, however, are largely unknown. Our findings shed new light on the psychological and emotional processes for improving team member relationships in organizations.

Second, prior studies on TMX have largely depended on quantitative designs for hypothesis testing. Qualitative designs help to extend our understanding by obtaining in-depth information about how team members perceive their exchanges with others. Our qualitative results suggest that task-oriented exchanges, such as the exchange of information or work-related favors, are perceived as significant factors contributing to team member relationships. However, the dynamism of team member social exchange is complex. In particular, our findings suggest that relationship-oriented exchanges (e.g., exchanging care, support and encouragement, and recognizing, appreciating and helping each other), are also regarded by team members as important in motivating their relationship development. We suggest that future TMX research should account for the role of both task-oriented and relationship-oriented exchanges.

Third, the qualitative findings also provide support for affective events theory (Weiss & Cropanzano, 1996), where team member exchanges are seen as affective events for team members that evoke positive or negative emotions. Although we did not explicitly measure team member attitudes and behaviors following specific affective events, our findings suggest that team member exchanges are associated with emotional responses of team members. Further, and in line with affective events theory, we argue that positive emotions in teams will promote team member satisfaction, commitment to the team, and
increased effort. Prior research has found that TMX is related to employee attitudes and behaviors, including job satisfaction, organizational commitment and job performance (e.g., Liden et al, 2000; Sherony & Green; 2002; Wech, 2003). We argue that it is the emotional responses to TMX, which influences these important individual work outcomes. Further, these emotions may spread amongst team members through emotional contagion (Barsade, 2002), and thus also have an impact on team level outcomes.

Finally, this study also provides initial support for the notion that workplace friendship may play vital a role in determining the quality of TMX. This is consistent with Winstead and his colleagues (1995), who found that the quality of an individual’s relationship with one’s best friend at work was associated with satisfaction with coworkers and supervision on the job. Since our findings highlight the role of friendships in team contexts, we suggest that friendship ties should be incorporated into team studies to find more evidence for their benefits, and to explore how new friendships can be developed to enhance TMX (Berman, West, & Richter, 2002; Wright, 1984).

The findings in relation to workplace friendship and TMX are new in the team literature, yet they are congruent with social network theory (Klein et al., 2004). This theory suggests that individuals are interconnected and embedded within the social structure of an organization (Manson, 1993). Klein and her colleagues (2004) explored the antecedents of friendship networks in order to understand team network centrality. Hence, we suggest that future research should attempt to explore the implications of workplace friendship for TMX because workplace friendship impacts the team and the larger organizational social system.
Implications for Practice

The findings show that the development of strong TMX relationships not only emphasizes the role of task-oriented exchange for work-related benefits, but also relies on relationship-oriented exchanges for friendship development between team members. From a large-scale survey of senior managers, Berman, West and Richter (2002) found that 76.4% of managers approved or strongly approved of various types of workplace friendships. Further, in their study, the most frequently reported perceived rewards of workplace friendship were “help employees obtain mutual support”, “improve the workplace atmosphere” and “improve communication”. We suggest that managers can improve task-oriented exchanges and maximize the potential of relationship-oriented exchanges within teams by facilitating and supporting friendship development. For example, managers can organize team social gatherings, such as picnics, Friday afternoon happy hours, BBQ’s, parties, and sport activities. These gatherings help to promote friendship formation and increase positive affect within teams (Harter et al., 2003).

Limitations and Future Research Directions

Since the design of the study was primarily qualitative, it is reasonable to believe that personal biases, recall of information or experiences, and subjective preferences could intrude into the research process (Flick, 2002). In order to mitigate these concerns, we attempted to maximize the reliability, validity and objectivity through pilot testing to evaluate the interview questions, requesting the participants to check the accuracy of their responses after the interviews were transcribed, employing a professional transcriber for interview transcribing, and using the software of Leximancer for objective data coding.
These steps could help to minimize the possible personal subjective biases underlying the qualitative research process.

Seers and colleagues (1995) have called for more research explicating the psychological process underlying how individuals develop high quality TMX relationships. The objective in this study was to apply the social exchange literature to team relationships to understand team member cognitions and emotions. The findings of this study however, could also be affected by contextual variables that were outside the scope of the current study, such as task structure and team size. Both of these variables have been regarded as independent or control variables in previous team research (e.g., Randel & Jaussi, 2003; Choi, Price, & Vinokur, 2003; Van Der Vegt, Van De Vilert, & Oosterhof, 2003), and therefore may affect TMX. Thus, future research may benefit by including more potential contextual variables for theory testing.

Proposed Model for Future Research

Incorporating our findings in relation to friendship, TMX, and positive emotions, we propose a theoretical model (Figure 2) for future research efforts to explore. In this cross-sectional study we were unable to test the causal sequence in this model; however, future experimental work could provide insight into the direction of these proposed relationships. In the model, the path from positive emotions to positive team member attitudes and behaviors (Path C) is driven by affective events theory (Weiss & Cropanzano, 1996); the path from TMX to positive team member attitudes and behaviors (Path D) is driven by TMX theory (Seers et al., 1995); and the path from friendship to positive emotions (Path E) is supported by research on friendship within the field of psychology.
(see Harter et al., 2003). Path A (from friendship to TMX quality) and Path B (from TMX quality to positive emotions) are proposed based on the findings of this study.

In conclusion, the purpose of this research was to further our understanding of how team members perceive and experience their relationships with other team members, and to explore their emotional experiences within the TMX process. Given that previous TMX research has primarily focused on task-related exchanges between team members, our findings in relation to relationship-oriented exchanges are unique. Perhaps the most important finding of this research was the perceived benefit of friendships between team members, and the positive emotions that result from the relationship-oriented exchanges between friends. Future research should turn attention to the specific relationship-oriented exchanges that exist in teams, and test the proposed benefits of friendship for team settings in order to promote more positive organizations.
References


Table 1

Team Member Exchanges as Defined by Team Members

<table>
<thead>
<tr>
<th>High-Quality TMX keywords</th>
<th>Frequency</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping/caring/concern, supporting each other</td>
<td>113</td>
<td>Relationship-oriented</td>
</tr>
<tr>
<td>Similar values, standards</td>
<td>95</td>
<td>Relationship-oriented</td>
</tr>
<tr>
<td>Close to each other</td>
<td>78</td>
<td>Relationship-oriented</td>
</tr>
<tr>
<td>Personal sharing</td>
<td>69</td>
<td>Relationship-oriented</td>
</tr>
<tr>
<td>Friendship</td>
<td>62</td>
<td>Relationship-oriented</td>
</tr>
<tr>
<td>Ideas and feedback sharing</td>
<td>88</td>
<td>Task-oriented</td>
</tr>
<tr>
<td>Information and knowledge exchange</td>
<td>79</td>
<td>Task-oriented</td>
</tr>
<tr>
<td>Work-related problem solving</td>
<td>66</td>
<td>Task-oriented</td>
</tr>
<tr>
<td>Good/frequent work communication</td>
<td>45</td>
<td>Task-oriented</td>
</tr>
<tr>
<td>Task requirement/work demands/job responsibility</td>
<td>37</td>
<td>Task-oriented</td>
</tr>
<tr>
<td>Recognition, appreciation, encouragement</td>
<td>71</td>
<td>TMX Outcome</td>
</tr>
<tr>
<td>Mutual respect and trust</td>
<td>71</td>
<td>TMX Outcome</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low-quality TMX keywords</th>
<th>Frequency</th>
<th>Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little appreciation, care and support</td>
<td>10</td>
<td>Relationship-oriented</td>
</tr>
<tr>
<td>Poor work communication, criticism, verbal abuse</td>
<td>39</td>
<td>Task-oriented</td>
</tr>
<tr>
<td>Task-focused/job related discussion</td>
<td>14</td>
<td>Task-oriented</td>
</tr>
<tr>
<td>Lack of trust and respect</td>
<td>50</td>
<td>TMX Outcome</td>
</tr>
<tr>
<td>No teamwork/cooperation</td>
<td>17</td>
<td>TMX Outcome</td>
</tr>
</tbody>
</table>
Table 2

*Emotions Associated with Team Member Exchanges*

<table>
<thead>
<tr>
<th>Positive Emotions</th>
<th>Frequency</th>
<th>Negative Emotions</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Interested/like/love</td>
<td>14</td>
<td>1) Uncomfortable</td>
<td>8</td>
</tr>
<tr>
<td>2) Pleasant/happy/fun</td>
<td>13</td>
<td>2) Angry/annoyed</td>
<td>8</td>
</tr>
<tr>
<td>3) Comfortable</td>
<td>11</td>
<td>3) Frustrated/hate/furious</td>
<td>8</td>
</tr>
<tr>
<td>4) Relaxed/satisfied</td>
<td>9</td>
<td>4) Nervous/anxious</td>
<td>7</td>
</tr>
<tr>
<td>5) Enjoyment</td>
<td>7</td>
<td>5) Stressed</td>
<td>6</td>
</tr>
<tr>
<td>6) Excitement/enthusiasm</td>
<td>6</td>
<td>6) Afraid/scared</td>
<td>5</td>
</tr>
<tr>
<td>7) Positive/active</td>
<td>5</td>
<td>7) Upset/unhappy</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Total</th>
<th>Percentage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(59%)</td>
<td>65</td>
<td>(41%)</td>
<td>45</td>
</tr>
</tbody>
</table>
Table 3

*Means, Standard Deviations and Inter-correlations*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S. D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender (0 = Females, 1 = Males)</td>
<td>.32</td>
<td>.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Age (years)</td>
<td>37.2</td>
<td>10.3</td>
<td>-.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Team work experience (Months)</td>
<td>39.6</td>
<td>38.4</td>
<td>-.23</td>
<td>.54***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Team member exchange (TMX)</td>
<td>3.65</td>
<td>.52</td>
<td>-.19</td>
<td>.02</td>
<td>.17</td>
<td>(.84)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Positive emotions</td>
<td>3.39</td>
<td>.82</td>
<td>-.37*</td>
<td>.12</td>
<td>.21</td>
<td>.77**</td>
<td>(.91)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Negative emotions</td>
<td>1.24</td>
<td>.31</td>
<td>-.01</td>
<td>-.65***</td>
<td>-.24</td>
<td>-.23</td>
<td>-.40**</td>
<td>(.78)</td>
<td></td>
</tr>
<tr>
<td>7. Relationship with team members</td>
<td>5.97</td>
<td>1.01</td>
<td>-.11</td>
<td>.13</td>
<td>.13</td>
<td>.38*</td>
<td>.46**</td>
<td>-.33</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: N = 25. Alpha reliabilities are in parentheses and the diagonal

*** Correlations are significant at the .01 level
** Correlations are significant at the .05 level
* Correlations are significant at the .10 level
Figure 1

Relationship with Team Members

Please evaluate your own relationship with each individual team member by filling in the appropriate number in the box provided below, ranging from 1 (very poor) to 7 (very good).

1 Very Poor
2 Moderately Poor
3 Poor
4 Neutral
5 Good
6 Moderately Good
7 Very Good

You

Team Member A
Team Member B
Team Member C
Team Member D

Provide ratings on your own relationship with each of the members A to D in the box.
Figure 2

Model of Antecedents and Consequences of TMX for Future Research

Sources of Proposed Pathways:

a. Qualitative findings
b. Qualitative and quantitative findings
c. Affective events theory and research
d. TMX theory and research
e. Friendship theory and research