A social exchange perspective to understanding team creativity

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Social exchange theory is a major theoretical framework to understand the employee-organization relationship and its associated outcomes. Existing constructs that draw upon social exchange theory include Perceived Organizational Support (POS), Leader-member exchange (LMX) and Team member exchange (TMX); POS captures employees' perceptions of organizational support (Eisenberger, Huntington, Hutchison & Sowa, 1986), LMX captures the reciprocal exchanges between an employee and supervisor (Graen & Uhl-Bien, 1995) and TMX captures reciprocal exchanges between an employee and team members (Seers, 1989).

Recently, researchers have begun to explore team creativity as an outcome of social exchange relationships and in particular, Liao, Liu and Loi (2010) found that both LMX and TMX had unique positive effects on team member's creativity via self efficacy. We extend this stand of research in two ways. First, we expand the foci of social exchange relationships to include POS and in doing so, capture social exchange relationships at the organizational, supervisor and team levels. Second, consistent with the tenets of social exchange theory, trust is an important mechanism that allows for the benefits of social exchange to materialize and trusting relationships among team members may provide the basis for team creativity.

In an organizational context, employees may concurrently develop social exchange relationships with their organization, supervisor and team members. We argue that POS and LMX facilitate the development of high quality TMX and this relationship will be stronger when employees have a higher propensity to engage in

indirect reciprocation. Blau (1964) differentiates between direct and indirect exchanges recognizing the interdependency amongst social exchanges. Therefore, one way employees can reciprocate POS is by developing high quality team member exchanges (TMX) and this is likely to be stronger when an individual adheres to the indirect norm of reciprocity. We also predict a similar relationship between LMX and TMX.

Trust is the lynchpin between high quality TMX and creativity in our research. Specifically, we first propose that high quality TMX in turn leads to trust between colleagues. Trust is one's willingness to accept vulnerability based on positive expectations about the intentions, behaviour and/or attributes of another (Mayer, Davis, & Schoorman, 1995). Since individuals high in TMX are more willing to help each other, and to share ideas and feedback within work teams (Jordon, Field, & Armenakis, 2002; Liden, Wayne & Sparrowe, 2000), we argue that this precipitates trust in each other. Second, trust in colleagues should promote team based creativity. A trusting team environment has been characterised as open, supportive, tolerant and less hostile (West & Anderson, 1996), where ideas may flourish; these are all elements which are conducive to creativity. Thus, we explore the following hypotheses:

> H1: Employee's indirect reciprocity moderates the relationship between POS and TMX (H1a) and between LMX and TMX (H1b) such that the relationship is stronger when employees' indirect reciprocation is high versus low
>
> H2: There is a positive relationship between team members' TMX and their trust in colleagues
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> H3: Team members' trust in their colleagues is positively related to team level creativity.

METHODS

The research sample was drawn from employees at a large financial institution based in the United Arab Emirates (UAE). The organisation operates in more than twenty countries, providing financial services and products. Currently, 7,200 people, representing more than 60 nationalities are employed by the organisation.

We focused on the headquarters and ten offices based in the city of Abu Dhabi, approaching only employees working in teams, directly reporting to a team leader. These teams are highly involved in designing financial products. More precisely, we approached four teams: client coverage, product engineering, traders and management. We visited private wealth management offices, where client coverage teams (private bankers) and management sits. Given that product design involves two other teams (traders and product engineers), our surveys were distributed amongst those two as well. For the final phase, we considered data from teams that consisted of a team leader and a minimum of three team members who had participated in all three timelines of data collection.

We conducted a longitudinal quantitative study, administering surveys in three data collection rounds (September 2013, December 2013, and March 2014, respectively). We administered 2 types of surveys, one for the employees and one for the team leaders, in each data collection round. We administered the surveys in English as it is the business language in the UAE financial sector. We collected 453 employee and 73 team leader surveys at Time 1, 224 employees and 52 team leaders at Time 2 and 213 employees and 43 team leaders at Time 3.

Measures

All scale items were rated on a 7-point Likert scale ranging from 1 = "strongly disagree" to 7 = "strongly agree". We used a modified version of the 13-items

creativity scale of Zhou & George (2001) to measure team leader reported team-level creativity (α .98). Perceived organisational support was measured with the 8-item POS scale from Rhoades & Eisenberger (2002) (α .98). We developed a 3-item scale to measure individual-level indirect reciprocity (α.93). We measured trust in colleagues with the 6-item interpersonal trust at work scale of Cook & Wall (1980) (α .96). We utilised the 7-item LMX scale of Janssen and Van Yperen (2004) (α .98). We used the 18-item team-member exchange scale of Seers (1989) (α .95)

Control variables. We included several questions on the demographic characteristics of the respondents such as sex, grade, department, tenure in the organization, and tenure at their current team. These variables were used as control variables in our analyses. Note that given missing values on these control variables, which potentially reduce the sample size significantly, we decided to control for them at the group level (i.e., taking the average of the team members' characteristics). Finally, given that POS, LMX, indirect reciprocity, and TMX are assessed at the same time, we included self-efficacy as a control variable to account for common-method variance (see Podsakoff, MacKenzie, & Podsakoff, 2012).

Analyses

We conducted a series of multilevel analysis using the R free software and hierarchical regression analysis. In doing so, we tested whether TMX and trust in teams have within- and between-team variabilities in these constructs. The mean and median r_{wgs} were .85 and .97 for TMX and .76 and .92 for trust in teams. The ICC(1) and ICC(2) were .55 and .85 for TMX and .42 and .78 for trust in teams. Given ICC(1) for both TMX and trust in teams are significant, a multilevel approach to testing the hypotheses is appropriate.

Results

We found interactive effects of POS and indirect reciprocity (b=-.045, s.e.=.02, p<.05) and LMX and indirect reciprocity (b=-.051, s.e.=.018, p<.01) contrary to our hypotheses. As shown in Figure 1[1], the interaction effects show that the effects of POS (LMX) on TMX were stronger when indirect reciprocity was low (vs. high). More importantly, the figure shows that, at low level of POS (LMX), high indirect reciprocity results in a higher level of TMX; but at high level of POS (LMX), indirect reciprocity plays a limited role. In support of H2, we found a significant effect of TMX on trust in teams (b=.34, s.e.=.148, p<.05) after accounting for POS, LMX, indirect reciprocity and their interactions. As reported above, we tested H3 using a hierarchical regression using SPSS given the dependent variable is at the team level. In support of H3, the effect of trust in teams on creativity as rated by the supervisor was significant (b=.673, s.e.=.389, p<.10).

DISCUSSION

Our findings spotlight the role of social exchange relationships in the development of team members' trust that in turn have a positive impact on team creativity. We discuss the theoretical and practical implications of our findings for understanding creativity in non-Western contexts.

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[1] The interaction figure for LMX and indirect reciprocity was similar to that shown in Figure 1.

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FIGURE 1

Interaction between POS and Indirect Reciprocity on TMX