The Contextualized Self: How Team–Member Exchange Leads to Coworker Identification and Helping OCB

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This article develops the argument that team–member exchange (TMX) relationships operate at both between- and within-group levels of analysis to influence an employee’s sense of identification with coworkers in the group and their helping organizational citizenship behavior (OCB) directed at coworkers. Specifically, we propose that relatively higher quality TMX relationships of an employee as compared with other members of the group influence an employee’s sense of positive uniqueness, whereas higher average level of TMX quality in the group creates a greater sense of belonging. Multilevel modeling analysis of field data from 236 bank managers and their subordinates supports the hypotheses and demonstrates 3 key findings. First, team members identify more with their coworkers when they have high relative TMX quality compared with other group members and are also embedded in groups with higher average TMX. Second, identification with coworkers is positively related to helping OCB directed toward team members. Finally, identification with coworkers mediates the interactive effect of relative TMX quality and group average TMX quality on helping. When TMX group relations allow individuals to feel a valued part of the group, but still unique, they engage in higher levels of helping. Overall moderated mediation analysis demonstrates that the mediated relationship linking relative TMX quality with helping OCB via identification with coworkers is stronger when group average TMX is high, but not present when group average TMX is low. We discuss theoretical and practical implications and recommend future research on multilevel conceptualizations of TMX.

Keywords: TMX, coworker identification, helping OCB, optimal distinctiveness

This study examines how the quality of team–member exchange relations (TMX; Seers, 1989) predicts helping directed toward group members by fostering high levels of identification with coworkers in the group. We extend prior research on relationships and contextualized views of the self (e.g., Farmer & Van Dyne, 2010) to highlight how TMX relationship quality at the within-group and between-group levels of analysis interact to predict identification with coworkers and subsequent helping. Overall, we aim to shed light on when and how the quality of social exchanges in work groups influences the contextualized self, with subsequent implications for helping others in the group.

Cole, Schaninger, and Harris (2002) called for more research on group-specific exchange relationships because the emphasis on work groups and horizontal relationships in organizations and resulting work interdependence makes helping within groups particularly important to task accomplishment (Bachrach, Powell, Collins, & Richey, 2006). Given the small amount of prior empirical work on coworker relationships and helping organizational citizenship behavior (OCB), we have limited understanding of why the quality of group relations affects helping in groups (Leary, 2007). Accordingly, it is vital to expand models of helping OCB to consider processes that explain when and how the quality of social exchanges between employees and other team members influences helping directed at these team members.

Emphasizing a nuanced and multilevel conceptualization of TMX, we propose that TMX relationship quality at the within-group and between-group levels of analysis interact to predict employee’s contextualized view of the self. Chen, English, and Peng (2006) defined the contextualized self as a person’s sense of self in a particular situation or in the context of specific relationships. In our case, we focus on the employee’s sense of identification with coworkers in the group and posit that this contextualized sense of identification provides one explanation for why TMX
processes predict helping OCB that is directed at coworkers (see Figure 1).

We consider TMX (the quality of team–member relationships; Seers, 1989) as a predictor of identification with coworkers in the group and describe how this occurs through two unique, level-specific subprocesses. We ground our ideas in recent work highlighting the differentiated nature of social exchanges (Henderson, Wayne, Shore, Bommer, & Tetrick, 2008; Vidyanthi, Liden, Anand, Erdogan, & Ghosh, 2010; Tse, Ashkanasy, & Dasborough, 2012) and the individual’s need to see him- or herself as positively unique within the group while simultaneously feeling a sense of belonging to the group (Brewer, 1991; Vignoles, 2009). Overall, we highlight differences in TMX within the group and differences in TMX across groups as two key aspects of employee social exchange relationships with their coworkers.

We use optimal distinctiveness theory (ODT; Brewer, 1991; Brewer, Manzi, & Shaw, 1993) as a conceptual lens to understand how these different-level aspects of TMX might jointly affect identification and helping OCB. First, we argue that the within-group-level construct of an employee’s relative quality of TMX relations within the group—specifically, the extent to which the individual group member’s TMX quality is higher than that of the rest of the group—affects perceptions of his or her own positive uniqueness within the group through social comparison processes. Second, at the group level, we argue that TMX—the overall level of exchange quality in the group (Seers, Petty, & Cashman, 1995)—influences perceptions of belonging to the group because this meets member’s need for “validation and similarity” (Brewer, 1991, p. 477). Drawing from theory on optimal distinctiveness processes (Brewer, 1991; Brewer et al., 1993; Hornsey & Jetten, 2004), we propose that relative TMX quality and group average TMX quality will interact to predict identification with coworkers in the group. TMX research has relied almost exclusively on social exchange explanations for the effects of TMX on outcomes (e.g., Seers, 1989; Seers & Chopin, 2012), but this research has usually operationalized TMX as between person or between group, confounding possible differences in mechanisms that are within group and between group. Social exchange is particularly important in between-person and between-group TMX effects, because these reference the absolute level of TMX for the individual, or the group, respectively, but it cannot easily account for effects of relative (within-group) TMX social comparison regardless of absolute exchange level for the individual or the group. Thus, our approach of using an optimal distinctiveness lens complements existing social exchange theory explanations for TMX effects for within-group comparisons.

Finally, we posit that identification with coworkers mediates the interactive effect of relative TMX and group average TMX on helping OCB. This is because people’s behavior is motivated by group needs, norms, and goals when the work group is an essential part of their sense of self (high level of identification) (Haslam, Reicher, & Platow, 2011). Thus, we expect that team members with a strong sense of identification with coworkers in the group will exhibit helping OCB directed at coworkers.

**ODT**

The notions of the contextualized self and identification with the group can be considered through the lens of ODT (Brewer, 1991). ODT is based on the idea that social identity reconciles the need for assimilation and the need for differentiation from others (Brewer, 1991). According to Chen, Boucher, and Parker Tapia (2006), optimal social identities meet people’s needs for assimilation and differentiation. Assimilation refers to feelings of inclusion within the group; it supports an individual’s need to have a sense of collective identity (Brewer & Gardner, 1996). Differentiation refers to feeling personally distinctive within the group; it supports the need to have a personal identity (Brewer & Gardner, 1996).

To date, most of the research on ODT has used experimental designs where student subjects are randomly assigned to conditions representing structural factors (e.g., group size, status, and role differentiation) as predictors of group identification. Although results of these limited-duration, stranger interactions generally support predictions of ODT and show the importance of feeling distinctive and also experiencing a sense of belonging, results may or may not have relevance to ongoing embedded relationships among peers in work organizations (for an exception, see Janssen & Huang, 2008). Given the prevalence of group work and the im-

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![Figure 1](image-url)

*Figure 1.* Study model. H1 = Hypothesis 1; H3 = Hypothesis 3; H2 = Hypothesis 2; OCB = organizational citizenship behavior.
portance of relationship quality among coworkers, we conducted this study in a field context.

**Optimal Distinctiveness and Identification**

*Identities* refer to self-definitions—the typical ways we see ourselves. Although people often focus on the internalized aspects of identities, both theory and empirical research suggest these self-definitions are situated in the environment outside the self. The driving questions behind identity construction are not only “Who am I?” (an identity-laden question with different answers for different identities) but also “What is my relation to the world?” (Higgins, 1996). To answer this question, people must connect themselves with the environment.

The process of identification, or “viewing a collective’s or role’s defining essence as self-defining” (Ashforth, Harrison, & Corley, 2008, p. 329), presents a situated identity where the self becomes contextualized, interdependent, and linked to others (Markus & Kitayama, 1991). This identification process creates self-representations that overlap substantively with those of others and reflect social identities (Davis, Conklin, Smith, & Luce, 1996). ODT emphasizes both personal and social identities, such that the strongest sense of social identification with a group should occur when the needs of both identities are met and there is not too much assimilation or too much differentiation (Brewer, 1991). In other words, optimal distinctiveness occurs when individuals have a sense of belonging (meeting social identity needs) and a sense of positive uniqueness (meeting personal identity needs).

In contrast to most prior research that has drawn on ODT, we focus on personal and social needs in the context of work organizations. Accordingly, our use of ODT as a lens for theorizing about predictors of helping OCB differs from most prior research. Going beyond prior experimental ODT research (Badea, Jetten, Czukor, & Askevis-Leherpeux, 2010; Brewer et al., 1993; Hornsey & Jetten, 2004), we argue that the quality of relationships between employees and coworkers is an important influence on the extent to which personal needs for uniqueness and social needs for assimilation are met (Bilimoria, Joy, & Liang, 2008; Shore et al., 2011). Thus, we highlight aspects of the contextualized self that are especially important in work settings.

ODT has typically focused on assimilation needs that are met within the group and differentiation needs that are met by distinguishing the group from other groups. Sheldon and Bettencourt (2002), however, demonstrated that feeling distinctive within the group (a different type of differentiation) predicted outcomes of positive affect, intrinsic motivation, and commitment to the group as expected, but was not negatively correlated with group inclusion. This shows that differentiation and assimilation needs need not be opponent processes and instead can complement each other. Hornsey and Jetten (2004) similarly emphasized the point that role differentiation reinforces individual distinctiveness within the group and can be independent from processes that influence feelings of inclusion (see also Vignoles’, 2009, summary of empirical support for the independence of personal and social needs). Also relevant is the more recent theorizing of Shore and colleagues (2011), which posits that assimilation and differentiation can co-exist at high levels, reflecting a state of inclusion whereby the individual is treated as an insider (social identity) and also allowed to retain uniqueness within the work group (personal identity). Differentiation needs can be, in Vignoles’ (2009, p. 497) words, “entirely compatible with belonging needs,” and it is important to complement existing research on differentiation processes across groups with the equally plausible consideration of differentiation processes within groups (based on relative TMX compared with that of other group members).

Going beyond existing research, we consider TMX (Seers, 1989) as an important aspect of group processes that should affect a team member’s experiences of assimilation and differentiation, influence optimal distinctiveness, and have implications for the extent to which a team member identifies with coworkers. In the next section, we develop the argument that assimilation and differentiation in TMX is typified by an augmenting process whereby positive differentiation of TMX quality from others in the group (individual member relative TMX) interacts with assimilation (average group-level TMX) to produce an enhancer effect in which high relative TMX and high average TMX represent optimal distinctiveness—such that both personal identity needs and social identity needs are met.

**TMX and Identification With Coworkers**

We draw on research and theory on TMX processes (Seers, 1989) to highlight the importance of relationship quality within work groups. At the individual level, TMX reflects the level of reciprocity in exchanges between a member and her or his group in sharing ideas, feedback, efforts, resources, expertise, and recognition (Liden, Wayne, & Sparrowe, 2000; Seers, 1989; Seers et al., 1995). TMX thus represents the overall quality of a member’s relationships in the group. High-quality TMX relations are characterized by mutual trust and respect (Scott & Bruce, 1994) and involve exchanges of resources and support beyond what is necessary for task completion (Liden et al., 2000).

There are, however, different ways to conceptualize TMX processes in the context of organizations, especially concerning level of analysis. First is group-level TMX, which is the average level of TMX in the group. As a group-level construct, average TMX is the same for all members in the group. In other words, variance in group-level TMX occurs between groups such that some groups have higher average group-level TMX than others. Second is relative TMX, which is the quality of an individual’s TMX relations compared with the average level of TMX in the group. Relative TMX focuses on differences within the group.

Given our interest in the contextualized self, we focus on individual identification with coworkers in the group as a theoretically important outcome of TMX. Although scholars have theorized about this linkage over the last two decades (e.g., Ford & Seers, 2006; Seers & Chopin, 2012; Seers et al., 1995; Tse, Dasborough, & Ashkanasy, 2005), a thorough search of the literature uncovered no published primary research testing this assertion.

In setting up our ideas about linkages between TMX and identification with coworkers, we draw on our earlier discussion about optimal distinctiveness and identification. Optimal distinctiveness research describes identification as a result of meeting needs for both differentiation and assimilation. We propose that TMX relates to identification in two ways. First, at the within-group level, high relative standing of an individual’s TMX relations compared with others within the group should satisfy needs for differentiation.
Second, at the group level of analysis, high average group TMX compared with other groups should satisfy needs for assimilation.

This is consistent with Seers’ (1989, p. 121) conceptualization of TMX: “we may expect components of meaningful [TMX] variation both between groups and within groups.” Nevertheless, subsequent TMX research has rarely made this distinction (see Alge, Wiethoff, & Klein, 2003, for an exception). Building on Seers’ point and integrating it with ODT, we highlight differences in TMX within and across groups.

**TMX Within the Group**

Although TMX is conceptually embedded within group processes, it is often treated as an individual-level concept. In contrast, a within-group view of TMX focuses on differences in the quality of social exchange relations within the group (Ford & Seers, 2006; Liu, Keller, & Shih, 2011), rather than across all individuals. A growing body of research on TMX’s conceptual cousin, leader-member exchange (LMX), proposes and demonstrates that relative LMX, defined as the degree of difference between one’s own LMX and that of coworkers (e.g., Henderson et al., 2008; Vidyarthi et al., 2010), can function as a referent for making social comparisons and judging one’s own LMX relationship.

Given that TMX is similarly grounded in social exchange, we propose that similar processes apply to TMX. Consistent with this, Liao, Liu, and Loi (2010) argued that an employee with high-quality work relationships is “likely to view him-/herself as more respected and better off than the comparison others” (p. 1094). Feeling positively distinctive within a group is a form of contextualized self-identity (Vignoles, Chryssochoou, & Breakwell, 2000) and thus should predict identification with coworkers in the group.

Although most ODT research focuses on distinctiveness of a group versus other groups as a source of identity, Sheldon and Bettencourt (2002) adopted a within-group perspective and demonstrated that those who felt they were unique, distinct, separate, and stood out within the group had higher group participation, intrinsic interest in group activities, and commitment to the group. More directly relevant to identification with coworkers, prior research demonstrates that high relative LMX has positive implications for self-concept and orients employees toward group values and interests. Consistent with this, Tse et al. (2012) demonstrated that individuals with high relative LMX had higher levels of group identification than those with low relative LMX. Extending these ideas to team member social exchanges, we argue that within-group positive comparison of personal TMX with average TMX in the group will help satisfy the need for differentiation (Brewer, 1991).

**TMX Across Groups**

When the overall level of TMX in a group is high, individuals freely express ideas to all group members, give each other feedback readily and constructively, share resources, benefit from each other’s expertise, and recognize the efforts of all group members. Therefore, it is not surprising that high average group TMX positively predicts team performance (Jordan, Feild, & Armenakis, 2002; Seers et al., 1995). These effects on performance are primarily a function of task-oriented elements of TMX, such as idea sharing, feedback, and communication about the work. TMX, however, is a relational construct (Seers & Chopin, 2012) and highlights the contextualized placement of individuals in a web of social exchanges. As Seers (1989) described, “Member roles become defined in relation to the group and its other members through the reinforcement of reciprocal actions” (p. 119). The reciprocal web of reinforcement that occurs in high-quality TMX groups illustrates the value of generalized, group-oriented, indirect exchanges (Ekeh, 1974; Sahlins, 1972), such that when Member A benefits Member B, Member B may not reciprocate directly to Member A, but indirectly to still yet another team member (Molm, 2003). Generalized social exchanges are low in equivalence and immediacy of returns and are oriented toward concern for others rather than reciprocal self-interest (Sahlins, 1972).

Thus, high average group-level TMX should have important implications for assimilation processes and members’ sense of oneness and belonging to the group. For example, Seers and Chopin (2012) proposed that high group TMX triggers generalized exchange that leads to group identity because a sense of shared ownership develops when everyone is pulling their weight (Ford & Seers, 2006). Assimilation should be high in groups with high levels of average TMX based on a merging of self and others in terms of resources, perspectives, and characteristics (Aron, Aron, Tudor, & Nelson, 1991). Accordingly, high between-group TMX will help satisfy the need for assimilation.

**Interactive Effects of Assimilation and Differentiation in TMX**

Optimal distinctiveness occurs when assimilation and differentiation needs are both satisfied. ODT theory, however, posits that too much assimilation or too much differentiation has negative consequences. As a result, optimal, not maximal, levels should foster identification with the group. To date, laboratory research is generally supportive of this prediction (e.g., Badea et al., 2010; Brewer, 1991; Brewer et al., 1993; Horsey & Hogg, 1999).

Emphasizing the point that differentiation and assimilation needs need not be opponent processes and instead can complement each other, Shore and colleagues (2011) developed a model of inclusiveness that predicts high-perceived inclusion when belongingness (assimilation) and uniqueness (differentiation) needs are both met, such that the “individual is treated as an insider and also allowed/encouraged to retain uniqueness within the work group” (p. 1266). This is consistent with Horsey and Jetten’s (2004) description of structural and perceptual strategies that simultaneously enhance belonging and uniqueness for team members. It is also consistent with research that suggests perceived insider status can positively affect group identification (Stumper & Masterson, 2002).

Integrating these ideas, we consider assimilation and differentiation at different levels of analysis. Thus, high average group TMX (vs. other groups) facilitates assimilation, whereas high relative TMX (of an individual vs. other group members) facilitates differentiation and a sense of uniqueness. Consistent with the core arguments of ODT, we predict that the highest level of identification with coworkers in the group will occur when both relative TMX and group average TMX are high. Restated,

_Hypothesis 1_: Group average TMX quality and relative TMX quality will interact, such that relative TMX will be more
strongly related to identification with coworkers in the group when average TMX quality is high (identification will be highest when both types of TMX are high).

The Contextualized Self and Helping Within the Group

Social identification occurs when the self is defined in terms of social group membership (Tajfel, 1978), such that the individual “cognitively assimilates the self to the in-group prototype and, thus, depersonalizes self-conception” (Hogg & Terry, 2000, p. 123). Ashforth et al. (2008) argued that “social identification implies an acceptance of [the social group’s] attributes as one’s own. The more an individual actually embodies those attributes, the more prototypical he or she is said to be” (p. 330). Under these circumstances, group members focus on satisfying the needs and goals of the group because their individual identity is one with the group (Haslam, 2001). This sense of oneness with the group causes individuals to view the aims and goals of the group as their own (Mael & Ashforth, 1992).

Cialdini, Brown, Lewis, Luce, and Neueberg (1997) proposed and demonstrated that a sense of oneness with others—inclusion of the other in the self (Aron, Aron, & Smollan, 1992)—predicted helping, and felt oneness with others was a more proximal cause of helping than empathic concern. Similarly, Swann, Gomez, Huici, Morales, and Hixon’s (2010) experiments demonstrated that identity fusion—a form of identification where individuals identify with an entity and still retain a sense of personal self and agency—predicted helping in group contexts. Related research demonstrates that perceived insider status predicts helping OCB (Masterson & Stamper, 2003). Applied to work teams, Janssen and Huang (2008) and Van Der Vegt, Van De Vliert, and Oosterhof (2003) showed positive relationships between team identification and helping other team members. In sum, based on this theory and empirical research, we propose that identification with coworkers in the group will predict helping OCB.

Hypothesis 2: Identification with coworkers will predict helping OCB directed at coworkers in the group.

Mediation of TMX Effects on Helping OCB

Theory suggests that TMX should be related to helping OCB. Helping is a form of citizenship behavior that is rooted in social exchanges (Organ, Podsakoff, & MacKenzie, 2006; Zellars & Tepper, 2003) where reciprocation is a basis for helping (Spitzmuller & Van Dyne, 2013). TMX describes the quality of group member reciprocal obligations. Anderson and Williams (1996) observed: “high-quality working relationships would be characterized by a mutual sense of concern for each other and a sense of responsibility” (p. 284). Thus, high-quality TMX relationships, like other social exchange relationships, should predict helping OCB.

Prior research has demonstrated that TMX is related to OCB in general (Love & Forret, 2008) and to helping OCB in particular (Kamdar & Van Dyne, 2007), but research to date is limited because it has generally focused on main effect predictions and has rarely considered mediators that explain why TMX is related to helping (for an exception, see Kim, Van Dyne, Kamdar, & Johnson, 2013). Extending existing research, we propose that identification with coworkers will mediate the interactive effects of relative TMX and group-level TMX on helping OCB directed at coworkers. This is consistent with our contextualized self perspective of employees as situated within the context of the group, where within-group processes shed light on how TMX influences helping OCB. Thus, we predict an integrated model of first-stage moderated mediation, in which the interactive effect of high relative TMX (referencing social comparison and differentiation) and high average group TMX (referencing assimilation)—will predict helping OCB, with its indirect effect mediated by identification.

Hypothesis 3: Identification with coworkers will mediate the interactive effects of relative TMX quality and group average TMX quality on helping OCB, such that the mediated effect is stronger when both types of TMX are high.

Method

Participants and Procedure

We tested our hypotheses with field data from 236 employees and their managers working full time for a large multinational bank in Singapore (62% response rate). The employee sample was 59% male, with average age 35 (range = 22–49), and 4.83 years tenure. Seventy-seven percent had at least a bachelor’s degree. There were 52 work groups, with group n ranging from three to six members (M = 4.51; dn = 5.0; participation was limited to those with at least 3 months of tenure within the group). Employees completed surveys in group meetings at company facilities. Participants could withdraw at any time and were assured of response confidentiality. Supervisors provided data on employee helping OCB. Employee questionnaires included TMX, identification with coworkers, role perceptions for helping, and demographics.

Measures

Helping OCB. Supervisors (n = 52) rated employee helping (average ratings per supervisor = 4.5, min = 3, max = 6) using the five highest loading items from Van Dyne and LePine’s (1998) seven-item scale (1 = strongly disagree; 7 = strongly agree; see Van Dyne et al., 2008, for acceptable reliability [α = .95] of the shorter scale). Items focused on coworkers as the target of the behavior. A sample item is: “This particular employee volunteers to do things that help coworkers with their work” (α = .95).

TMX. Employees rated TMX quality with an adapted version of Seers’ (1989) 10-item scale found in Seers et al. (1995). On the basis of preferences of the bank’s managers, we changed the original frequency wording of the questions (e.g., How often do you make suggestions about better work methods to other team members?) to more traditional Likert-scaled statements that focus on extent of agreement (I often suggest better work methods to my coworkers in my work group). Management also had us simplify the wording of some items (e.g., “Do other members of your team usually let you know when you do something that makes their jobs easier or harder?”) to enhance the readability for the Singapore respondents (e.g., “Others in my work group let me know when I affect their work”).
of working adults (in Singapore) read the TMX items from our survey and identify the meaning of the overall set of items by selecting one of three options: quality of work relationships with others in the group, how much they like others in the group, or quality of work relationships with the organization. All respondents correctly identified the set of items as measuring quality of relationships with coworkers. In contrast, only 70% of respondents in another nonoverlapping sample (n = 20) of working adults (in Singapore) correctly identified the original TMX items.

Group average TMX was calculated as each group’s mean TMX score. Relative TMX was calculated following the relative LMX operationalization used by Henderson et al. (2008) and Tse et al. (2012), where we centered scores by subtracting the group’s mean TMX score from each group member’s individual TMX score.

Identification. We used Shamir and Kark’s (2004) Graphic Identification scale to assess employee’s level of identification with coworkers in the work group. This scale is based on self-expansion theory’s notion of closeness as overlapping selves (Wright, Aron, & Tropp, 2002). Identification is the “cognitive distance of space between an individual and a collective” (Shamir & Kark, 2004, p. 116). This is consistent with Ashforth and Mael’s (1989) definition of identification as “the perception of oneness or belongingness to some human aggregate” (p. 21). The measure uses a combination of visual and verbal report based on Venn diagrams that assess the overlap that individuals use to define themselves relative to an entity—in our case, relative to coworkers in the group. This format provides a cognitive “speed bump” in surveys that can help combat respondent fatigue and boredom.

Similar Venn diagram-based Graphic Identification scales have been used by Aron et al. (1992) and Thau, Aquino, and Poortvliet (2007). Recently, Bartel (2001) and Dukerich, Golden, and Shore-fell (2002) showed convergent validity between graphic scales and other identification measures, as well as predictive validity for nomologically related outcomes such as desire to remain, cohesion, and collective efficacy. More important, Shamir and Kark (2004) demonstrated convergent validity between their graphic scale and an identification scale based on Mael and Ashforth (1992), with correlations of .69, .65, and .51 across three samples. To further assess the graphic scale compared with the Mael and Ashforth (1992) scale, we collected additional data from students in two university samples (described in detail in the Supplemental Analyses section) and assessed convergent validity between the two scales in the context of student groups. Convergent validity was .58, p < .01, for Sample 1, and .51, p < .01 for Sample 2.

Control variables. We controlled for age (in years) and gender (0 = female, 1 = male) because research demonstrates these characteristics can influence helping (Van Dyne & LePine, 1998). Role perceptions (i.e., the extent to which helping is perceived to be part of the employee’s work role) predict helping and other citizenship behaviors (Kim et al., 2013; Van Dyne, Kamdar, & Joireman, 2008). Individuals who perceive helping to be in-role (part of their jobs) engage in helping because it is a job requirement (and not because of a discretionary wish to benefit the group or organization; Morrison, 1994). Accordingly, we accounted for this alternative explanation by including helping role perceptions as a control variable (Van Dyne et al., 2008; five items, α = .90). We also controlled for group size (Badea et al., 2010; Brewer et al., 1993) to rule out potential confounds.

Results

Prior to hypothesis testing, we assessed discriminant and convergent validity of the multi-item self-rated scales (TMX and role perceptions for helping) and the supervisor-rated scale (helping OCB) with confirmatory factor analysis. The proposed three-factor model had good fit to the observed covariance matrix, χ²(138) = 296.87, p < .001; comparative fit index = .97, root-mean-square error of approximation = .07, with all standardized loadings significant. Comparison of this model with a two-factor model that collapsed TMX and coworker helping into a single factor showed worse fit than the hypothesized three-factor structure (Δχ² = 1209.37, Δdf = 2, p < .001), as did comparison with a two-factor model that collapsed TMX and role perceptions for helping (Δχ² = 531.01, Δdf = 2, p < .001), and comparison with a single-factor model (Δχ² = 1715.57, Δdf = 3, p < .001). These results support the factor structure, discriminability, and convergence of the scales.

Because our model proposes that TMX has both within- and between-group effects on identification, we calculated eta-square values based on one-way random-effects models (i.e., null models). Eta-square was .21 for TMX and .25 for identification, suggesting adequate between-group variance in the variables. Prior to aggregating TMX to produce mean scores for each group, we examined group member agreement in TMX scores (see Ford & Seers, 2006) using rwg(j) (James, Demaree, & Wolf, 1984). Median rwg(j) was .87, suggesting acceptable levels of agreement for aggregation. Following standard practice, we dropped five groups with rwg(j) values below .7, leaving 47 groups in the analyses.

Tests of Hypotheses

We used regression analysis within HLM 6.08 to account for the nested data. Level 1 (age, gender, and role perceptions for helping) and Level 2 (group size) controls were entered in the first hierarchical step. All controls were grand mean centered except gender. TMX was partitioned within group and between group in the second step by adding within-group-centered TMX (thus creating relative TMX) as a Level 1 predictor and group average TMX as a Level 2 predictor (Hofmann & Gavin, 1998). To be able to compare models across hierarchical steps using changes in the deviance statistic, we used full information maximum likelihood estimation (Snijders & Bosker, 2012). As our theoretical interest was in the fixed effects of the study variables, random effects were only modeled for Level 2 intercept terms.

Initial analysis showed that the random variance component for TMX was not significant, suggesting no slope variance for TMX across groups, a condition that could preclude testing Hypothesis 1 (Snijders & Bosker, 2012). However, Aguinis, Gottfredson, and Culpepper (2013) as well as Snijders and Bosker (2012) recommended proceeding with the cross-level interaction test when there is a strong theory-based rationale, because of the low power of the random variance significance test (i.e., high Type II error rate; LaHuis & Ferguson, 2009). Considering that this cross-level interaction is a key theoretical component of our research, we followed Aguinis et al.’s recommendation and proceeded with analysis as planned.

Means, standard deviations, and intercorrelations are reported for Level 1 variables in Table 1. Table 2 reports results of the multilevel analyses. For identification, control variables explained
Table 1

Means, Standard Deviations, and Inter correlations for Individual-Level Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
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<th>3</th>
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<tbody>
<tr>
<td>1. Age</td>
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<td>7.40</td>
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<td>2. Gender (0 = female, 1 = male)</td>
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<td>0.49</td>
<td>0.00</td>
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<td>3. Role perceptions for helping</td>
<td>0.00</td>
<td>0.14</td>
<td>0.03</td>
<td>0.02</td>
<td>0.35**</td>
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<td>4. Relative TMX (group centered)</td>
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<td>1.87</td>
<td>0.03</td>
<td>0.42**</td>
<td>0.33**</td>
<td>0.35**</td>
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<td>5. Identification with coworkers</td>
<td>4.55</td>
<td>1.69</td>
<td>0.06</td>
<td>0.39**</td>
<td>0.36**</td>
<td>0.35**</td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 236.  
* Denotes self-rating.  
** Denotes supervisor rating.

19% of variance, with a significant effect for role perceptions (γ = .74, p < .01). In the second step, relative TMX (γ = .23, p < .05) and group average TMX (γ = .46, p < .01) were both significant, together explaining an additional 6% of variance in identification. In the final step for identification, the relative TMX × Group Average TMX product term was significant (γ = .39, p < .01), incrementally accounting for 1% of the variance.

Because the interaction was significant, we plotted the conditional effect of relative TMX to determine whether its form supported our interaction hypothesis (Hypothesis 1). Although our hypothesis focuses on a coequal interaction effect, following convention we labeled group average TMX as the moderator for convenience (see Aguinis et al., 2013, p. 1514). Figure 2 shows a significant positive relationship between relative TMX and identification for employees in groups with high average TMX, n(208) = 3.96, p < .001, and a weaker but still significant relationship between relative TMX and identification for employees in groups with low average TMX, n(208) = 2.68, p < .001. Thus, the form of the interaction is consistent with our predictions, supporting Hypothesis 1.

For the regression predicting helping OCB, controls explained 20% of the variance. In Step 1, role perceptions for helping (γ = .66, p < .01) was significant. In Step 2, the addition of relative TMX, group average TMX, and their interaction explained 6% of incremental variance, with relative TMX (γ = .30, p < .05) and the relative TMX × Group Average TMX product term (γ = −.46, p < .05) as significant predictors. In the third and final step, identification with coworkers had a positive and significant relationship with helping OCB (γ = .15, p < .05), explaining an additional 3% of the variance. This result supports Hypothesis 2.

We tested Hypothesis 3 by calculating indirect conditional effects of the within- and between-group TMX interaction on helping OCB based on the procedure outlined by Bauer, Preacher, and Gil (2006). This approach accounts for the multilevel nature of the data by restructured the data to “stack” the dependent variable and the mediator for each lower level unit (in this case, individuals). This stacking creates a single outcome variable that allows simultaneous estimation for the mediator-as-outcome and dependent variable-as-outcome models while accounting for the nesting of individuals within groups. The results indicated that at low (−1 SD) levels of group average TMX, the slope of the relative TMX–helping OCB relationship was not significantly different from zero (indirect effect = .13, SE = .11, t = 1.18, p > .05, CI95% [−.09, .35]). When group average TMX was high (+1 SD), this relationship was positive and significant (indirect effect = .26, SE = .12, t = 2.20, p < .05, CI95% [.14, .38]). These results show that the indirect effect of relative TMX on helping OCB through identification was augmented by group average TMX. Thus, Hypothesis 3 was supported showing that the mediated relation between relative TMX and helping was significant when group average TMX was high, but not significant when it was low. The proportion of the total effect (direct + indirect) of relative TMX on helping accounted for by this conditional indirect effect was 41.25% when group average TMX was high, and 0% when group average TMX was low.

Table 2

Multilevel Modeling for Identification With Coworkers and Helping OCB

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Identification with coworkers</th>
<th>Helping OCB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Age</td>
<td>.01</td>
<td>.01</td>
</tr>
<tr>
<td>Gender</td>
<td>.14</td>
<td>.06</td>
</tr>
<tr>
<td>Role perceptions</td>
<td>.74**</td>
<td>.60**</td>
</tr>
<tr>
<td>Group size</td>
<td>−.14</td>
<td>−.02</td>
</tr>
<tr>
<td>Relative TMX</td>
<td>.23*</td>
<td>.23*</td>
</tr>
<tr>
<td>Group average TMX</td>
<td>.46*</td>
<td>.46*</td>
</tr>
<tr>
<td>Relative TMX × Group Average TMX</td>
<td>.39*</td>
<td>−.46*</td>
</tr>
<tr>
<td>Identification with coworkers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.19</td>
<td>.25</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.19</td>
<td>.06</td>
</tr>
<tr>
<td>Deviance</td>
<td>810.21</td>
<td>801.44</td>
</tr>
<tr>
<td>ΔDeviance (as χ²)</td>
<td>51.76 (4 df)</td>
<td>8.77 (2 df)</td>
</tr>
</tbody>
</table>

Note. Number of observations was 212 at Level 1 and 47 at Level 2. Deviance tests and R² for Step 1 are based on a comparison with a null model (intercept only). ΔR² = increase in variance explained by each step; all proportions of variance explained were computed as the overall proportional reduction in Level 1 and Level 2 variance components of dependent variable scores (Snijders & Bosker, 2012). Unstandardized coefficients are at each step. OCB = organizational citizenship behavior; TMX = team–member exchange.

* p < .05. ** p < .01.
average TMX was low (e.g., not significant). This effect accounts for substantial variance, but also shows that almost 59% of the total effect is direct or mediated by another mechanism, such as social exchange.

**Supplemental Analyses**

To address alternative explanations for our effects, we conducted additional analyses and collected supplemental data from students at two universities. We start with post hoc analysis.

Given that respondents selected one of a series of differentially overlapping circles to represent their level of identification with coworkers (Shamir & Kark, 2004), the scale could be viewed as ordinal. Accordingly, we complemented our primary analysis with ordinal, multilevel logistic regression. All predictors showed the same pattern of significance and nonsignificance as reported in the Results section. Thus, scaling did not influence results.

Second, we tested the role of dispersion in the group because greater dispersion represents more dissimilarity of high relative TMX members compared with other group members, and this could make social comparisons more salient for them. This allowed us to infer whether positive social comparisons occurred for high relative TMX members. We controlled for group average TMX to account for the level of absolute exchange resources in the group. Results demonstrated a significant interaction between dispersion in the group and relative TMX in predicting identification with coworkers. The positive relationship between relative TMX and identification became stronger as dispersion increased. This analysis suggests that positive social comparison occurred in the group and employees were aware of their distinctiveness.

Finally, we collected data from students at two universities to rule out alternative explanations for our results (first university n = 358, second university n = 164) using Qualtrics. Students provided information about real project groups, including instructors or group advisors, group size, length of membership, and group purpose. They then described their relationship with the instructor/advisor (two to three sentences), a specific experience with that person, and answered LMX questions using eight items from Liden and Maslyn (1998). We used a similar approach to obtain data on perceived organizational support (eight items from Rhoades & Eisenberger, 2002), TMX (adapted for student groups), identification with group members (Shamir & Kark, 2004), Mael and Ashforth’s (1992) identification measure, adapted for student groups and used in the earlier reported convergent validity analysis, and willingness to help others in the group (same scale as primary sample).

A recent meta-analysis of TMX (Banks et al., 2014) raised questions about the incremental validity of TMX versus its leadership counterpart, LMX (DiNiesco & Liden, 1986; Graen & Cashman, 1975), so we used the supplemental student data to assess the extent to which TMX predicted identification with group members above and beyond LMX. We also included another well-established social exchange variable: perceived organizational support (POS; Eisenberger, Huntington, Hutchison, & Sowa, 1986).

Controlling for LMX and POS, partial correlations were TMX and identification (Sample 1 = .43, p < .01; Sample 2 = .25, p < .01; TMX and helping; Sample 1 = .38, p < .01; Sample 2 = .24, p < .01) in the two university samples. Hierarchical regression analyses, with LMX and POS in Step 1 and TMX in Step 2, showed the addition of TMX in Step 3 explained significant variance in identification (15%; 5%) and helping (incremental variance = 14%; 6%). These analyses demonstrate incremental predictive validity of TMX above and beyond LMX and POS.

We also used the student data to ascertain whether those with higher relative TMX make positive social comparisons versus other group members. As a second part to the supplemental data collection, participants were randomly assigned by computer to low- or high-relative TMX scenario conditions. Low relative TMX:

Read the following scenario and imagine that this describes your own experiences in a student project group. Personally, you get less than others from the group and you give less to the group than others. Overall, you have much poorer quality relationships with team members compared to others in the group. Now, think of a time when you were in a student project group that was similar to this scenario. Write 2 - 3 sentences that describe a specific experience you had in a similar situation - where you had much worse relationships with team members than others.

The high-relative TMX scenario was similar but indicated that the student gets more and gives more than others in the group, and has
much better quality relationships with team members compared with others in the group. They then completed manipulation checks and TMX social comparison items based on Vidyarthi et al. (2010).

Manipulation checks were significant: high relative TMX (Sample 1 $M = 5.56$, $SD = 1.05$; Sample 2 $M = 5.46$, $SD = 1.15$) versus low relative TMX (Sample 1 $M = 3.44$, $SD = 1.57$; Sample 2 $M = 3.50$, $SD = 1.77$), Sample 1 $t = 15.11$, $p < .01$; Sample 2 $t = 5.61$, $p < .01$. High-relative LMX respondents had higher positive social comparisons (Sample 1 $M = 5.45$, $SD = 1.05$; Sample 2 $M = 5.42$, $SD = 1.13$) than low relative TMX (Sample 1 $M = 3.38$, $SD = 1.59$; Sample 2 $M = 3.75$, $SD = 1.76$), Sample 1 $t = 19.00$, $p < .01$; Sample 2 $t = 9.76$, $p < .01$. Those who perceived they were positively different from other group members had higher relative TMX, but negative distinctiveness (low relative TMX) was not related to positive social comparison.

**Discussion**

In this study, we theorized and demonstrated that TMX operates at both between- and within-group levels of analysis to predict identification with coworkers. Importantly, these contextualized self-views predicted context-specific behavior—helping OCB directed at coworkers. When employees had high exchange quality compared with other group members, and the team itself was also characterized by high-quality exchanges, helping was higher. Identification with coworkers mediated this interactive effect on helping OCB. There was no mediation when group-level TMX was low, showing that uniqueness of high relative TMX alone did not have indirect effects on helping via identification with coworkers. This suggests a novel approach to research that could be applied to other contexts, self-views, and behaviors.

**Contributions**

Our conceptual model of TMX at multiple levels of analysis and our findings build on social exchange theory perspectives on helping and extend the literature in three key ways. First, although we did not measure assimilation and differentiation directly and thus cannot directly attribute our findings to optimal distinctiveness processes, our results are consistent with extant theory in this area. Unlike most research drawing on an optimal distinctiveness framework, we used field data rather than laboratory research where ongoing interaction is not expected. This is important because ongoing coworker interaction is a regular, recurring feature of social structure within organizations. Second, this is the first study to follow up on Seers’ (1989) suggestion that TMX simultaneously operates at multiple levels. This is important because it should change future research by expanding conceptualizations of TMX and trigger additional studies that consider within-group as well as between-group effects of TMX. Third, to the best of our knowledge, this is the first study to test the theoretical notion that TMX should predict identification within the work group (e.g., Ford & Seers, 2006; Seers & Chopin, 2012). Demonstrating support for this assertion is important because untested assumptions can be misleading and limit our understanding of the benefits of high-quality coworker relationships.

**Theoretical Implications**

Our results build on prior research that shows self-views can be made salient by contextual or situational factors (Farmer & Van Dyne, 2010). Going beyond previous findings, the study focuses specifically on the group as an important context within which the self is embedded. Thus, we examined team social exchange processes as a vehicle for affecting self-views and helping. Given the trend toward interdependent work, results provide insights as to how and why the work group influences formation and priming of self-views, resulting in the contextualized self. Departing from prior laboratory research on ODT, we examined social exchanges in work teams. We acknowledge that we did not directly measure assimilation to the group and differentiation from it, but note that our interaction results are consistent with optimal distinctiveness predictions. More important, our approach goes beyond past ODT research by positing and demonstrating that group processes operate differently across levels to foster group identification.

We also drew on recent work by Shore and colleagues (2011), who proposed links between optimal distinctiveness and inclusion in organizations, defined as “the degree to which an employee perceives that he or she is an esteemed member of the work group through experiencing treatment that satisfies his or her needs for belongingness and uniqueness” (p. 1265). Application of the Shore and colleagues theorizing suggests that high assimilation and high differentiation activate collective identity schema, which cause employees to experience a sense of oneness with the group. Consistent with this approach, Flynn (2005) proposed that individuals with a collective identity orientation would prefer more generalized social exchanges. Complementing these perspectives, our results suggest this may be a reciprocal process such that generalized social exchanges (rather than dyadic social exchange) activate collective identity. Thus, our approach of considering the interactive effects of within-group and between-group conceptualizations of relationship quality has theoretical implications and suggests new directions for research on different types of identity.

Another important conceptual implication of our study is the extension to TMX theory. Prior research has proposed that TMX should be linked to group identification (e.g., Seers et al., 1995), but little if any empirical research has examined this relationship. Noting the ubiquitous use of groups in contemporary organizations, we used ODT as a lens to shed light on how group-level TMX can predict identification with coworkers. Although prior theory has described TMX as a construct that exists at both within- and between-group levels of analysis (Seers, 1989), no prior study has examined both types of TMX simultaneously. Thus, our approach highlights how optimal distinctiveness processes can account for TMX effects on identification and helping by recognizing that different but complementary processes can occur at different levels of analysis. Assimilation processes at the group level are compatible with social exchange accounts for TMX effects, in line with the original theorizing about TMX (Seers, 1989; Seers et al., 1995), whereas social comparison may be better suited to explain within-group effects. Linking TMX conceptually and empirically at two levels of analysis, which has not been done previously, is a meaningful theoretical advance. Finally, though other research has linked TMX to OCB through mediators such as organizational commitment, work satisfaction, and group cohesiveness (Organ et al., 2006), this is the first study to show that
identification processes link TMX to helping OCB that is directed at coworkers, reaffirming the value of using constructs with a context-specific focus (Ajzen, 1988).

Practical Implications

In addition to the above theoretical implications, our research also has important practical implications. First, results of our moderated mediation model suggest that it is critically important for managers to pay attention to the average level of TMX in the group and the relative level of TMX of individual group members because this will provide them with insights about which group members are more versus less likely to identify with and help their coworkers. In any organization, there are employees who have high relative standing—get more and give more within the group—but who are not in high-TMX groups. These employees would be high in uniqueness but low in assimilation and, per theory, wouldn’t develop the highest levels of identification and so would help less. Organizations also include employees who are in high-average TMX groups but who are personally low in relative TMX. These employees would be high in assimilation but low on positive uniqueness, and thus would not develop the highest levels of identification with the group, and would help less.

Going beyond these conceptual insights, results also suggest the utility of managerial actions that reinforce the value of high-quality relationships that balance uniqueness and belonging within work groups. This could include setting clear expectations that each group member has differentiated strengths that make him or her a unique and valuable contributor to the group and that each group member is an insider who belongs to and is included in group interaction. Managers also should provide immediate, positive feedback to those who exemplify the subtle balance between assimilation and differentiation—that is, those who are unique but included members of the group and identify strongly with coworkers. Finally, our results suggest two key recommendations that should help managers enhance high-quality team social exchanges and helping behaviors. First, they should create a group climate that values the uniqueness of each team member, and second, they should encourage group interactions that nurture high-quality exchanges across all team members.

Limitations and Future Research

As with all studies, limitations of our study have implications for future research. First, although we drew on ODT for our predictions, we did not measure perceptions of assimilation or differentiation. Additional research, preferably longitudinal, is needed to address this limitation. Second, we tested our model cross-sectionally, precluding definitive inferences about causality and causal direction. For instance, it is possible that identification with coworkers is an outcome of TMX processes as we proposed, but it may also have reciprocal effects on TMX by creating preferences for generalized social exchanges such as those typified by TMX. Thus, we recommend longitudinal research on reciprocal causality. Third, employees rated TMX and identification. Hence same-source issues may raise questions about the strength of this relationship. Our research question, however, did not focus on main effects of TMX on identification, and instead emphasized interactive effects. Evans (1985) established and Siemsen, Roth, and Oliveira (2010, p. 456) confirmed that “interaction effects cannot be artifacts of CMV” [common method variance]. Method bias, therefore, should not be a major concern for the interactive relationship between relative TMX and group average TMX predicting identification. Fourth, because coworkers may often be more aware of helping, we recommend that future research complement this study by using coworker ratings of helping.

Our model includes only one mediator, identification with coworkers. To extend our theorizing, we recommend research on other theoretically plausible mediators that represent the contextualized self. This could include group-based self-esteem (Luhtanen & Crocker, 1992), group-based psychological ownership (Van Dyne & Pierce, 2004), and affective commitment to the group (e.g., Vandenbroucke, Bentein, & Stinglhamber, 2004).

Finally, we note that we tested our model with data from employees and their supervisors in Singapore. Although English is the language of business in Singapore, it is possible that results may have been influenced by cultural values. On average, Singaporeans are higher in collectivism and power distance than employees in Western cultural contexts (Hofstede, 2001). Future research is needed to determine whether assimilation and distinctiveness similarly interact in individualistic, low power distance cultures to predict identification with coworkers and helping directed at coworkers. Given that ODT is not grounded in any one cultural context, we have no a priori reason to expect differences across culture. Nevertheless, a large percentage of people throughout the world are high in collectivism and power distance. Thus, results should have implications for employees and employers in many cultural contexts.

Conclusion

It is unfortunate that TMX, an important instantiation of group social exchanges, has received less research attention than other social exchange processes such as LMX and POS. Our results support a multiple-level perspective on TMX that sheds light on how optimal distinctiveness satisfies the needs for feeling unique and distinctive while also having a sense of belonging and being an insider, and thus facilitates contextualized self-identification processes and helping directed at coworkers. These results are important because they show the relevance of ODT in a field setting with ongoing, embedded relationships. They also confirm the critical importance of relationships among coworkers and how the quality of these relationships influences the contextualized self and subsequent work behavior. Finally, we hope our research stimulates future research on group-level, dyadic, and individual-within-group perspectives on TMX.

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