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Relational Versus Collective Identification Within Workgroups: Conceptualization, Measurement Development, and Nomological Network Building

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This article distinguishes between two types of employee identification developed in organizational workgroups: (1) relational identification, which arises from connections and role relationships with other members in a workgroup, and (2) collective identification, which arises from the shared characteristics of a workgroup as a whole. Using three independent field samples, the authors generated new, context-specific measurements for relational and collective identification using an inductive, multistage approach; established their construct validity; and

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provided evidence for their differential antecedents and consequences in organizational workgroups. Results indicate that relational and collective identification are distinct constructs and that they are embedded in separate nomological networks.

Keywords: *identification; relational identification; groups; teams; nomological networks*

As local, more proximate units, workgroups are perceived by individuals to be cognitively closer than organizations are (Mueller & Lawler, 1999). As a result, employees tend to develop stronger identification with their workgroups than with their organizations (Riketta & Van Dick, 2005; Van Knippenberg & Van Schie, 2000). To understand the sources of identification that attach individuals to groups, two types of identification have been suggested in both the social and organizational psychology literatures: (1) relational identification, which arises from the relationship bonds with fellow group members, and (2) collective identification, which arises from the shared characteristics of a group as a whole (Becker, 1992; Brickson, 2000; Hogg, 1992; Smith, 1999).

Although the distinction between relational and collective identification is widely implied in the literature, evidence for this distinction is mostly suggestive and limited to nonorganizational contexts (Brewer & Gardner, 1996; Karasawa, 1991; Postmes, Spears, Lee, & Novak, 2005; Prentice, Miller, & Lightdale, 1994), and organizational research has traditionally focused on the collective aspects of identification, such as organizational and occupational identification (Ashforth & Mael, 1989; Pratt, Rockmann, & Kaufmann, 2006; Van Der Vegt & Bunderson, 2005). Not until recently has the field witnessed an increasing interest in the role of relational identification in facilitating employee cooperation, creativity, and productivity (Milton & Westphal, 2005; Polzer, Milton, & Swann, 2002; Sluss & Ashforth, 2007). Yet evidence remains inconclusive about how relational identification differs from collective identification in workgroups and how their differences are manifested through diverse group processes.

Moreover, due to the lack of measures in capturing relational and collective identification as separate constructs (Prentice, 2001), empirical validation of their distinction is still in its early stages. One problem with existing measurements is that the two types of identification are often combined into one scale, leading to large heterogeneity in the construct and scale content (Brewer & Chen, 2007; Earley & Gibson, 1998), and as such, any predictions made using the combined scale would be neither systematic nor reliable (Oyserman, Coon, & Kimmelmeier, 2002).

To close these gaps, the present research develops new, context-specific scales to measure relational and collective identification and directly tests the differences between relational and collective identification in organizational workgroups. Although the two types of identification may converge under certain circumstances (Sluss & Ashforth, 2008), we aim to show that they represent distinct constructs reflecting different foci and motivations and that they are associated with unique antecedents and consequences. We believe that this research makes a unique contribution to our understanding of social identification processes, both by refining the conceptualization of identification and by improving the level of prediction for important workgroup outcomes.

Theoretical Framework and Hypotheses

Relational Versus Collective Identification: Are They Different?

Identification is defined as the extent to which one includes a social referent in one's identity, such as relationships, an in-group, or an organization (Aron, Aron, Tudor, & Nelson, 1991; Ashforth & Mael, 1989; Dutton, Dukerich, & Harquail, 1994; Pratt, 1998). As members of a group, individuals tend to construct their identities around relational or collective identification, depending on which is more self-referential or self-defining. For example, relational identification emerges when one's identity is largely based on connections and role relationships with fellow group members (Andersen & Chen, 2002; Sluss & Ashforth, 2007), whereas collective identification develops when one's identity is primarily shaped by the positive qualities of the group and commitment to group activities (Shamir, 1990; Tajfel, 1982).

Although relational and collective identification both contribute to psychological attachment to a group, they implicate different foci and motivational bases (Becker, 1992; O'Reilly & Chatman, 1986). For example, Brewer and Gardner (1996) proposed different origins and bases for social identification, which may derive from connections and role relationships with a significant other (relational) or from the characteristics shared with other members of an in-group (collective). Relational identification is a relatively new concept, and its scope has substantially expanded from significant others to any individuals with whom one "feels some degree of closeness" and "shares a relationship that can be normatively or idiosyncratically labeled" (Chen, Boucher, & Tapias, 2006: 153). In this line of reasoning, relational identification is likely to develop from relationships with new acquaintances and work colleagues. Unlike collective identification, which applies the shared characteristics of a group to all members through a depersonalization process (Hogg & Terry, 2000; Pratt, 1998), relational identification involves interpersonal processes that allow for the expression of individuality and uniqueness through establishing close relationships with those who share similar values, beliefs, attitudes, or personalities (Polzer et al., 2002; Postmes et al., 2005; Swann, Polzer, Seyle, & Ko, 2004).

Deeply rooted in social identity theory, collective identification has long been established as a valid orientation of the self in the group context (Hogg, 2000; Hogg & Terry, 2000; Tajfel & Turner, 1986). Reflecting "categorizations of the self into more inclusive social units that depersonalize the self concept" (Brewer, 1991: 476), collective identification views group membership as the most important element of individual identity. Members with strong collective identification place greater value on group-level features and properties (e.g., group goals, missions, tasks) than on social contact or interdependence with other members (Brewer & Gardner, 1996; Hogg & Terry, 2000). Furthermore, identification in its collective form has been applied to many organizational settings, referring to employees' attraction to a variety of collective features of a social group, such as its associated image and reputation (Dukerich, Golden, & Shortell, 2002; Dutton et al., 1994), vocational or professional demands (Ibarra, 1999; Kreiner, Hollensbe, & Sheep, 2006), and a sense of calling (Dobrow, 2004; Wrzesniewski, McCauley, Rozin, & Schwartz, 1997).

Individuals may develop identification with relationships or collective characteristics in the workplace. Because organizational workgroups can provide both foci of identification, they represent an ideal research setting for studying and comparing relational and collective identification. Following existing conceptualizations, we define *relational identification* with a workgroup as the extent to which one includes *the connections and role relationships with group members* in the self-concept, and *collective identification* as the degree to which one includes *group membership and shared characteristics of the group* in the self-concept.

Emphasizing different foci, relational identification and collective identification often exist separately. For instance, group members may work together as cohesive units without liking each other interpersonally (Hogg & Hardie, 1991), indicating the existence of collective but not relational identification. Conversely, people's movements in and out of groups often depend heavily on their social contacts with group members rather than the pursuit of ideological beliefs claimed by the group (Stark & Bainbridge, 1985), implying the predominance of relational over collective identification. Because relational and collective identification reflect different motivational concerns (Brewer & Gardner, 1996; Sedikides & Brewer, 2001), understanding the distinction between the two types of identification requires a motivational analysis. In the discussions that follow, we review the literature for the distinction between relational and collective identification from a motivational perspective.

Relational Versus Collective Identification: Motivational Underpinnings

Scholars have argued that different levels of self are associated with different meanings of self-serving motivations (Brewer, 1991; Prentice, 2001). When interpersonal relationships play an important role in one's self-concept, there is a shift from the motivation for self-interest to the motivation for the benefit of the other (Baumeister & Leary, 1995; Markus & Kitayama, 1991); when collective properties of a group are self-defining, the group's welfare becomes an end in its own right (Batson, 1994; Chen, Brockner, & Katz, 1998). To reveal the different motivational mechanisms underlying relational and collective identification, we propose that the motivational processes underlying relational and collective identification address, *in different ways*, two fundamental social motives (Banaji & Prentice, 1994; Baumeister, 1998): (1) self-enhancement, which refers to the wish for favorable information about the self, such as being competent, likable, and morally good, and (2) belongingness, which refers to the drive to form and maintain positive and significant relationships with individuals or a social group.

Self-enhancement. When group members derive their self-identities from relational identification, their self-enhancement needs are largely reflected in *cooperative work relationships* (Sluss & Ashforth, 2007). Here we adopt the social behavioral approach to cooperation, defining it as "an interactive and relational behavior that occurs between members of a workgroup and that is directed at task achievement" (Milton & Westphal, 2005: 192). By this definition, cooperation among group members may take forms such as exchanging information and ideas about group tasks, constructively discussing problems and conflicts, and giving assistance and support to each other (Argyle, 1991; Chen, Chen, & Meindl, 1998; Tjosvold, 1998). Allowing members to fulfill their work roles more effectively

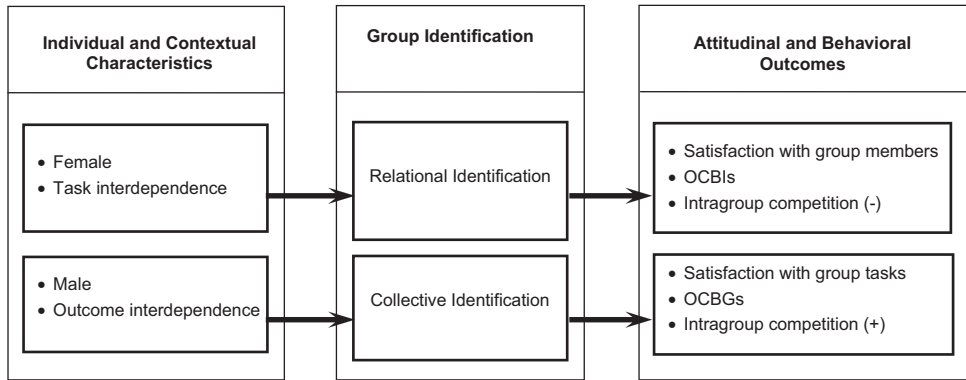
through these work-related activities (Tyler & Blader, 2000), cooperation features the role relationships that represent a pillar of the relational self (Brewer & Gardner, 1996; Sluss & Ashforth, 2008). Further, because a workgroup serves as the opportunity structure for interpersonal cooperation (Milton & Westphal, 2005), one's identity as a qualified and capable group member will depend largely on the extent to which he or she acts out the task-related roles in cooperating with other members. In this sense, developing cooperative work relationships with other members is an essential approach to achieving self-enhancement in a workgroup. Moreover, group members are likely to achieve "interpersonal congruence" through cooperative work relationships, whereby they will see each other as they see themselves, especially in terms of favorable attributes such as being intelligent, cooperative, and socially skilled (Polzer et al., 2002). This further relates to self-enhancement, as confirmation of these favorable attributes by other members will provide support for constructing a positive self-view.

In contrast, for group members with strong collective identification, their self-enhancement motives are mostly reflected in their associations with the *positive features of the group*. Simply achieving membership of a group is a rich source of facilitating positive self-views, especially when the desirable characteristics of the group are incorporated in one's self-views (Pinel & Swann, 2000; Swann et al., 2004). Moreover, individuals are often driven by self-enhancement to elevate their social identity, and they can do so by moving to a reputed group (Ellemers, 1993; Rao, Davis, & Ward, 2000) or by joining a group that optimizes their career success (Brown, 1969). No matter which strategy is taken, identification with the collective characteristics of a group, particularly those that facilitate one's career, will feed into self-enhancement.

Belongingness. Similar to the self-enhancement motive, the need for belongingness is also manifested differently in relational and collective identification. For individuals with a strong relational identification, belongingness is primarily expressed in *informal nonwork relationships* with others in the group. Compared with cooperation that focuses on work role relationships, informal nonwork relationships build and foster affective bonds among group members, who consequently develop preference and concern for one another (Prentice et al., 1994). Informal interactions among group members often start with interpersonal attraction generated from idiosyncrasies and complementarities of close and enduring relationships (Hogg & Terry, 2000). Positive individual qualities, such as warmth and social skills, also invite informal interactions. Over time, these nonwork contacts function as the emotional glue that draws members to the group, fulfilling their need for belongingness.

On the other hand, when group members develop strong collective identification with their group, their need for belongingness will be manifested in a different fashion. By incorporating the whole group in their own sense of self, these members are likely to experience "oneness" with their group and treat it as an indispensable part of the self. This experience further leads to *perceived prominence of the group*, such that personal and group interests are closely aligned and the group's welfare becomes an end in itself (Brewer & Gardner, 1996). Consistent with this argument, research on social dilemmas has demonstrated a powerful influence of group identification on individuals' willingness to contribute to a public good at the expense of self-interest (Brewer & Kramer, 1986; Caporael, Dawes, Orbell, & Van de Kragt, 1989). These findings suggest that driven by a strong sense of

Figure 1
Nomological Model of Relational Identification and Collective Identification



Note: OCBIs = organizational citizenship behaviors directed to individuals; OCBGs = organizational citizenship behaviors directed to the group.

belongingness to their group, individuals no longer view themselves as separate entities and will consequently attach greatest importance to the group's success.

Given the above discussion on the different foci and motivation underlying relational and collective identification, we propose the following hypothesis:

Hypothesis 1: Relational and collective identification with a workgroup are two distinct constructs.

Relational Versus Collective Identification: Separate Nomological Networks

Reflecting distinct aspects of group identification, relational and collective identification tend to associate with differential antecedents and consequences in workgroups. This research develops separate nomological networks for relational and collective identification (Figure 1). Specifically, we identify two antecedents that have different effects on relational versus collective identification: (1) sex, an individual factor that predisposes group members to develop relational or collective identification, and (2) forms of interdependence, a contextual factor that can mold and shape the type of identification by specifying a certain work structure. Our model also highlights several unique consequences for relational versus collective identification, such as satisfaction with different aspects of work (group members vs. group tasks), organizational citizenship behaviors (OCBs; directed at individual members vs. the group as a whole), and intragroup competition. Although identification in its collective form has been associated with a range of attitudinal and behavioral outcomes, including some of the variables proposed here (Ashforth & Mael, 1989; Dukerich et al., 2002; O'Reilly & Chatman, 1986), it is unclear from the literature whether these outcomes or their distinct facets (if any) will be differentially related to relational identification. Thus, our attempts to

identify and evaluate the unique relationships involving relational versus collective identification not only contribute to a fine-grained understanding of the identification processes but also serve as additional evidence that the two types of identification are distinct constructs embedded in different nomological networks.

Sex. Research has found consistent sex differences in the aspects of self-concept (e.g., Cross & Madson, 1997; Gardner, Gabriel, & Hochschild, 2002). Accumulated evidence shows sex differences in many life domains such as childhood upbringing, social roles, experiences, and occupations. For example, compared with their male counterparts, female groups are characterized by intimate friendships and efforts to maintain social relationships (Maccoby, 1990). The strong relational orientation in female group members is reflected in their self-descriptions, attention to information, and behavioral intentions (Gabriel & Gardner, 1999). In contrast, men showed strong preferences for being socially connected with large-group associations rather than being in intimate dyadic relationships (Baumeister & Sommer, 1997), and they emphasize more the collective aspects of the self and spend more time in group activities (Benenson, Apostoleris, & Parnass, 1997; Gardner et al., 2002). Moreover, when feeling deviant from the group norm, men are more inclined than their female counterparts to react with conformity, an act motivated by collective identification (Prentice & Miller, 1993). Taken together, these findings suggest the following:

Hypothesis 2a: Female group members tend to have stronger relational identification than do male group members.

Hypothesis 2b: Male group members tend to have stronger collective identification than do female group members.

Forms of interdependence. Previous research identifies two primary forms of interdependence in workgroups (Wageman, 1995): task interdependence, a structure of work relationships where group members must work together to accomplish the task, and outcome interdependence, another form of work structure where the significant outcomes one receives depend heavily on the performance of other members. Because actual interaction is essential to the development and maintenance of cooperative and affective relationships among group members (Heide & Miner, 1992; Seers, 1989; Sluss & Ashforth, 2008), task interdependence is more likely to give rise to relational identification. In contrast, outcome interdependence does not demand actual interaction among group members; indeed, they may simply share responsibility for an outcome, with no interaction at all. Outcome interdependence is more effective in aligning individual and group interests because the significant consequences for individual members, such as goal attainment and tangible rewards, will be largely dependent on the performance of the entire group rather than on one's own performance (Wageman, 1995). The increased contingency on collective performance will highlight the collective characteristics of the group, such as shared goals and tasks, which are essential for attraction to a group and categorization of oneself as a member (Hogg & Abrams, 1988; Sherif, 1967; Sherif & Sherif, 1969). Moreover, outcome interdependence leads to the assumption that group members "swim or sink together and that they benefit from each other's performance" (De Dreu, 2007: 628), which produces the "common fate" feelings that evoke collective identification with a group (e.g., Brewer &

Kramer, 1986; Campbell, 1958; Chen, 1996; Kramer & Brewer, 1984; Lewin, 1948). For these reasons, under strong outcome interdependence, the group goals and welfare become more salient and self-referential to individual members, therefore contributing to strong collective identification (Deaux, 1993). We thus hypothesize the following:

Hypothesis 3a: Task interdependence is more strongly related to relational identification than is outcome interdependence.

Hypothesis 3b: Outcome interdependence is more strongly related to collective identification than is task interdependence.

Satisfaction. As a multidimensional construct, satisfaction includes distinct facets such as satisfaction with coworkers and with work itself (Roznowski, 1989; Scarpello & Campbell, 1983). Although a positive relationship between satisfaction and collective identification has been found (Mael & Ashforth, 1992), there is little research on the relations between satisfaction with different facets and different types of group identification. According to the “target similarity effect” (Lavelle, Rupp, & Brockner, 2007), whereby constructs are more strongly related when they refer to the same target than to different targets, we propose that group identification is more strongly related to satisfaction when both are directed to the same referent than to different referents. Specifically, we expect satisfaction with group members to be a more likely outcome of relational identification. Because relational identification entails both cooperative and affective relationships with group members, it serves as an important source of satisfaction with group members (Cross, Bacon, & Morris, 2000). Indeed, research shows that individuals having instrumentally or emotionally rewarding interactions with their peers reported greater coworker satisfaction (Ducharme & Martin, 2000). In contrast, satisfaction with group tasks is a more likely outcome of collective identification. Consistent with this argument, it has been found that employees’ desire to maintain their group membership, as well as their belief in and acceptance of group goals and values, is positively associated with their satisfaction with the work itself (see Brooke, Russell, & Price, 1988, for a review). Therefore, we propose:

Hypothesis 4a: Relational identification is more strongly related to satisfaction with group members than is collective identification.

Hypothesis 4b: Collective identification is more strongly related to satisfaction with group tasks than is relational identification.

Organizational citizenship behaviors. Based on the targets to which OCBs are directed, two types of OCBs are distinguished in the literature (McNeely & Meglino, 1994; Organ, 1997; Williams & Anderson, 1991): (1) OCBs directed to individuals (OCBIs), and (2) OCBs directed to the organization (OCBOs). Because the present research is concerned with workgroups, a new type is proposed here—OCBs directed to the group (OCBGs), such as voluntarily attending activities to help the group image and expressing loyalty toward the group. We hypothesize that relational and collective identification have differential effects on OCBIs and OCBGs. With a focus on individual members, OCBIs often result from high-quality relationships that involve reciprocal social exchange with and/or positive affect for

peers (Anderson & Williams, 1996; Settoon & Mossholder, 2002). These relationships are prominently featured in work cooperation and informal interactions among group members, both of which are likely to result from relational identification. Therefore, strong relational identification will promote OCBIs. On the other hand, characterized by behaviors that benefit the group in general, OCBGs represent a deliberate attempt to balance the social exchange between individuals and their group (Lee & Allen, 2002; Williams & Anderson, 1991). Because collective identification prioritizes the group's welfare over individuals' interests, it promotes a personal commitment to the group even at the sacrifice of one's own benefits (Chen et al., 1998; Weiner, 1982). Supporting this argument, collective identification was found to be a significant predictor of OCBs directed at a collective (O'Reilly & Chatman, 1986). Therefore, we expected strong collective identification to substantially enhance OCBGs. Taken together, we hypothesize the following:

Hypothesis 5a: Relational identification is more strongly related to OCBIs than is collective identification.

Hypothesis 5b: Collective identification is more strongly related to OCBGs than is relational identification.

Intragroup competition. Prior research suggests a negative relation between identification and competition (Mael & Ashforth, 1992). Here we propose a more nuanced view by differentiating the types of identification. Members of a group often share similar attributes such as age, status, skills, and experience. Although similarity fosters interpersonal liking and cooperation (Byrne, 1971; McPherson, Smith-Lovin, & Cook, 2001; Newcomb, 1963), it can also breed competition within a workgroup that motivates individual members to improve their own performance (Festinger, 1954; Kilduff, Elfenbein, & Staw, 2010; Martens, 1976). For this reason, cooperation and competition are likely to coexist in a workgroup, which is consistent with the recent view of cooperation and competition as orthogonal but not opposite constructs (Brandenburger & Nalebuff, 1996; Madhavan, Gnyawali, & He, 2004; Tsai, 2002). Because relational identification motivates group members to maintain harmonious relationships with each other, it is incompatible with the rivalry nature of intragroup competition (Ely, 1994; Reagans, 2005), even when competition may boost both individual and group performance and have constructive influences on the long-term success of a workgroup (Berger & Pope, 2011; Lado, Boyd, & Hanlon, 1997; Tjosvold, Johnson, Johnson, & Sun, 2003). Therefore, we argue that relational identification will suppress intragroup competition. In contrast, collective identification is featured by a depersonalization process, which minimizes one's concerns about personal relationships or friendships during intragroup competition (Hogg & Terry, 2000). Prioritizing the group's welfare over personal interests or relationships, collective identification may encourage members to improve task performance through constructive competition with others in the workgroup while suppressing any negative consequences, as the superordinate goals accentuated by collective identification will reduce the conflict and hostility associated with competition (Sherif, 1958). Supporting this argument, research shows that collectively oriented group members view task-related competition as a positive means to increasing

their efforts in group tasks and in achieving group goals (Chen, Xie, & Chang, in press; Johnson & Johnson, 1989; Karau & Williams, 1997) and that group members may even show greater liking and respect for peers perceived as competitors than for those perceived as noncompetitors (Rees & Segal, 1984). Therefore, we hypothesize a positive relationship between collective identification and intragroup competition.

Hypothesis 6a: Relational identification is negatively related to intragroup competition.

Hypothesis 6b: Collective identification is positively related to intragroup competition.

Research Overview

Given the paucity of measures that have been developed to distinguish between the relational and collective aspects of identification (Brewer & Chen, 2007; Oyserman et al., 2002; Prentice, 2001), and the nonorganizational contexts in which most of the relevant measures were generated (e.g., Aron et al., 1991; Cross et al., 2000; Karasawa, 1991; Prentice et al., 1994), we first developed and tested new scales for relational and collective identification to be used in an organizational group setting (Study 1). Then, using two independent samples, we unpacked the differential antecedents and consequences of relational and collective identification in organizational workgroups (Study 2). We further highlighted the unique contribution of our newly developed constructs by demonstrating their discriminant validity from relevant existing concepts in the literature, as well as their incremental value in predicting important organizational outcomes beyond these relevant concepts.

Study 1: Scale Development and Validation

Item Generation

Following Hinkin's (1995, 1998) scale development procedure, we used three independent samples for item generation, initial reduction, and assessment of construct validity. First, we administered an open-ended survey to 68 MBA students enrolled in a large research university in China. The survey was written in English, and we employed the back-translation procedure (Brislin, 1980) to develop the Chinese version of the survey. Respondents were approached in one of their class sessions, and all of them volunteered to participate and provided valid responses. Their mean age was 29.1 years ($SD = 3.48$), with 73% being men. All respondents had at least a four-year college degree. Their average length of group membership was 2.61 years ($SD = 1.80$). They were provided with the definitions of relational and collective identification with a workgroup, where *relational identification* refers to "the extent to which one includes *the connections and role relationships with group members* in one's self-concept," and *collective identification* refers to "the degree to which one includes *group membership and shared characteristics of the group* in one's self-concept." The respondents then drew from their work experiences up to five examples describing each type of

identification. Specifically, they completed the following sentence in up to five different ways while keeping a certain type of group identification in mind: "I feel strongly identified with this workgroup because ____." Respondents provided 253 statements for relational identification and 213 items for collective identification.

Next, two coders independently sorted all of the statements into categories, and statements confounding the two types of identification were eliminated. There was a high rate of agreement between the two coders ($r > .90$). The few remaining discrepancies were thoroughly discussed and a final consensus was reached, resulting in five categories for each type of identification. For each category, three representative statements were selected to construct the scales, using the most frequently mentioned items in that category. This led to our initial 15-item scales for each type of identification.

Data Reduction

We explored the factor structure of the new scales by surveying a different sample of 228 MBA students from the same university and 333 employees from seven organizations across industries such as information technology, finance, construction, and education in China. All MBA students were recruited in a class session and volunteered to participate in our study. After discarding responses with missing values, the final sample consisted of 210 MBA respondents, resulting in the valid response rate of 92%. Their mean age was 30.23 years ($SD = 3.55$), with 69% being men. All had at least a four-year college degree, and their average length of group membership was 3.33 years ($SD = 2.73$). The employee respondents were randomly selected from work units representing all functions and divisions of their organization, and they were mailed the survey with a cover letter explaining our study purpose and instructions. Confidentiality was guaranteed to all respondents, and they were provided with stamped envelopes to return their responses. Our receipt of 283 valid employee responses yielded a response rate of 85%. Their mean age was 32.35 years ($SD = 8.06$), and 55% were men. Seventy-five of them had at least a four-year college degree, and their mean length of group membership was 4.88 years ($SD = 6.20$).

In the survey, respondents evaluated the extent to which each item describes their identification with a workgroup on a 7-point Likert-type scale. Specifically, before responding to the survey items, they read the definition of group identification as part of the instructions:

When people's experience within a workgroup plays an important role in shaping their self-concept, they develop identification with the workgroup. In other words, identification with a workgroup means that people's experience within the workgroup is important to who they are. Below you will see items describing various aspects of one's experience within a workgroup. Please indicate the extent to which each item contributes to who you are in your workgroup.

In particular, the MBA respondents were instructed to respond to the questions about an organizational group they had previously worked for, and the employee respondents responded to the questions about their current workgroups.

Table 1
Two-Factor Structure of Group Identification (Study 1)

Items	Factor 1: Relational Identification	Factor 2: Collective Identification
I feel strongly identified with this workgroup because _____.		
1. I frequently participate in the social events organized by this group.	.73	.15
2. I share mutual respect with other members.	.71	.23
3. I attend social occasions with other members on a regular basis.	.68	.16
4. I coordinate my own work well with other members.	.68	.29
5. I maintain a straightforward work relationship with other members.	.68	.05
6. I communicate a lot with other members outside work.	.67	.13
7. Other members are considerate of my non-work-related needs.	.64	.33
8. This group offers me many career opportunities.	.25	.74
9. This group provides experiences essential to my career success.	.26	.72
10. This group provides me with a good chance of promotion.	.26	.70
11. This group is considered as a high-status professional group.	.14	.64
12. This group receives little attention from the top managers of the organization. (R)	-.01	.62
13. This group is a key unit of the organization.	.15	.56
14. This group does not achieve success. (R)	.19	.55
Eigenvalue	5.14	1.67
Variance explained	25.26%	23.37%

Note: R = reverse-coded item. Factor loadings are shown in bold font.

We conducted an exploratory factor analysis on their responses and eliminated the items with low loadings or high cross-loadings. Among the remaining 14 items, a two-factor solution explained 48.63% of the total variance (Table 1). As expected, the 7 items loading on Factor 1 reflect relational identification, featured by identification with *cooperative work relationships* (share mutual respect, coordinate one's own work with group members, maintain a straightforward work relationship) and *informal nonwork relationships with group members* (attend social occasions, participate in social events, communicate outside work, be considerate of one's non-work-related needs). The other 7 items, loading on Factor 2, represent collective identification, featured by identification with the *desirable characteristics of the group* (provide a good chance of promotion, offer career opportunities, provide experiences essential to career success, be considered as a high-status professional group) and the *perceived prominence of the group* (receive attention from top managers, achieve success, be a key unit of the organization). The reliabilities of relational and collective identification scales are .83 and .80, respectively.

Scale Validation

To further validate the distinction between relational and collective identification, we performed a confirmatory factor analysis (CFA; LISREL 8.8) using the data from a different sample of 543 organizational employees in China (details about this sample are explained in Study 2). The data fit the two-factor model well, $\chi^2(71, N = 543) = 216.10$, normed fit index (NFI) = .96, comparative fit index (CFI) = .97, incremental fit index (IFI) = .97, relative fit index (RFI) = .95, root mean square error of approximation (RMSEA) = .06, with all items strongly loading on the expected factors, $p < .01$. Moreover, the two-factor model fit the data significantly better than a one-factor model with all items loading on a single factor, $\chi^2(72, N = 543) = 592.42$, NFI = .88, CFI = .90, IFI = .90, RFI = .85, RMSEA = .13; $\Delta\chi^2(1, N = 543) = 376.32$, $p < .01$. Taken together, these results suggest that relational and collective identification are distinct constructs, therefore supporting Hypothesis 1.

Study 2: Discriminant Validity and Nomological Networks

Study 1 provides initial evidence for the construct validity of our newly developed scales, such that the two item sets have appropriate content validity and represent distinct constructs. Still, issues remain concerning whether they truly measure something new and different compared with existing variables in the literature, such as cohesion, collectivism, and group efficacy, and whether they have incremental value in predicting key organizational outcomes beyond these existing variables (Brewer & Chen, 2007; Henry, Arrow, & Carini, 1999; Van Zomeren, Leach, & Spears, 2010). To address these issues, we conducted Study 2 in an attempt to achieve three specific goals: (1) establish the discriminant validity of relational and collective identification from relevant existing constructs in the literature, (2) examine the nomological validity by testing their differential antecedents and consequences in workgroups, and (3) assess the incremental predictive value of our new constructs over existing constructs.

Samples

To accomplish these goals, we recruited a mixed sample of 217 organizational employees and MBA students. In addition, we used a second sample of 543 organizational employees to cross-validate the nomological validity of relational and collective identification. The employee respondents in the first sample were randomly selected from a public engineering/construction organization in China, and they held job functions in areas such as purchasing, design, operations, human resources, and accounting. Their mean age was 33.29 years ($SD = 9.17$), with 59% being men. Among them, 96% had at least a four-year college degree, and the average length of group membership was 6.34 years ($SD = 7.58$). As in Study 1, the MBA respondents volunteered to participate and filled out the surveys in a class session. Their mean age was 29.38 years ($SD = 2.68$), with 62% being men. All had at least a four-year college degree, and the average length of group membership was 3.03 years ($SD = 2.98$).

The second sample consisted of 543 full-time organizational employees in China. The majority of the data ($n = 390$) were from four organizations in the industries of media (132), telecommunications (108), financial services (96), and real estate (54). The rest of the data ($n = 153$) were from organizations across various industries such as information technology, construction, insurance, pharmaceutical, automobile, and energy. Respondents were randomly selected from their organizations, and all of them worked in groups holding job functions in areas such as sales, operations, human resources, R&D, and management. Their mean age was 31.59 years ($SD = 7.29$), with 60% being men. Among them, 88% had at least a college education. Their average length of group membership was 4.37 years ($SD = 5.23$).

Data Collection Procedures

The survey sent to all participants included demographic questions and the scales for relational and collective identification and for the hypothesized antecedents (forms of interdependence) and consequences (satisfaction, intragroup competition). In addition, participants from the first sample responded to the measures of seven existing variables that may appear relevant to the two types of identification: social cohesion, task cohesion, person–group fit, collectivism, group esteem, group efficacy, and group identification (see the appendix for the scale items). All variables were measured using self-report. The valid response rates were 87% and 92% for employee and MBA respondents, respectively.

We administered the same survey to participants from the second sample to cross-validate the nomological relationships. Rather than measuring all variables with self-report (and thus increasing the risk of common method bias), we used different sources to measure OCBs. OCBI were rated by at least two peers, who should best observe these behaviors as their direct recipients. OCBG were evaluated by the participants' group leaders, who should pay more attention to these behaviors and provide objective assessments. Confidentiality was guaranteed to all respondents. Group leaders and peers used separate envelopes to return their surveys. The overall valid response rates of self-, peer, and leader ratings were 88%, 89%, and 85%, respectively.

Measures

Group identification. Relational and collective identification were assessed using the newly developed scales. The reliabilities from the first and second samples are .84 and .82 for relational identification, and .80 and .75 for collective identification, respectively.

Forms of interdependence. Task and outcome interdependence were measured with Wageman's (1995) five-item scales. A sample task interdependence item was "My work is not done until everyone in the group has done his or her part." A sample outcome interdependence item was "The performance of my group members affects my rewards." The reliabilities from the first and second samples are .84 and .82 for task interdependence and .91 and .89 for outcome interdependence, respectively.

Satisfaction. Satisfaction with group members and satisfaction with group tasks were measured using the scales from the Job Diagnostic Survey (Hackman & Oldman, 1980). Satisfaction with group members included three items (“I am satisfied with the members I talk to and work with on my job”). Satisfaction with group tasks included five items (“I am generally satisfied with the kind of work I do in this group”). The reliabilities from the first and second samples are .87 and .88 for satisfaction with group members and .85 and .83 for satisfaction with group tasks, respectively.

OCBs. OCBI were measured with Lee and Allen’s (2002) eight-item scale. A sample OCBI item was “This employee helps others in the group who have been absent.” In contrast to the first sample, where OCBI were rated by self-report, in the second sample OCBI were assessed by peers, whose ratings were aggregated into a composite score, average $r_{wg} = .74$, intraclass correlation coefficient (ICC)(1) = .69, ICC(2) = .88. Similarly, OCBG were assessed by self-report for the first sample and by group leaders for the second sample, and the items were adapted from Lee and Allen’s (2002) eight-item OCBO scale, with “organization” replaced by “group.” A sample OCBG item was “This employee attends functions that are not required but that help the group image.” The reliabilities from the first and second samples are .87 and .94 for OCBI, and .90 and .87 for OCBG, respectively.

Intragroup competition. We adapted six items from Mael and Ashforth’s (1992) intraorganizational competition scale, with “name of school” replaced by “my group.” A sample item was “The competition in my group is intense.” The last two items of the original scale were not included (“School instructors did not foster competition between the students” and “Students tried to outdo each other at impressing their instructors”) because the adapted items would assess the impact of group leaders, not the identification of individual members. The reliabilities from the first and second samples are .73 and .67, respectively.

Control variables. Sex, age, education, and time spent in a workgroup were controlled in the analysis, except for Hypotheses 2a and 2b, where sex was entered as an independent variable.

Results

Tables 2 and 3 show the descriptive statistics, reliabilities, and correlations among the variables from the first and second samples, respectively.

Discriminant validity. To empirically demonstrate the unique contribution of our research to the literature, we examined the discriminant validity of relational and collective identification from relevant existing concepts. Using data from the first sample, we performed a CFA using a nine-factor measurement model that treats the two types of identification as distinct constructs from each of seven relevant concepts: social cohesion, task cohesion, person–group fit, collectivism, group esteem, group efficacy, and group identification. The model yielded good fit to the data, $\chi^2(662, N = 217) =$

Table 2
Means, Standard Deviations, Reliabilities, and Correlations (Study 2: First Sample)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Sex	1.41	0.52													
2. Age	32.21	8.11	.06												
3. Education	4.08	0.73	.01	-.10											
4. Time spent in the workgroup	5.43	6.79	.07	.68**	-.21**										
5. Relational identification	5.15	0.96	-.14*	.02	-.09	.01									
6. Collective identification	4.88	0.98	-.19**	-.13	.06	-.15*	.45**								
7. Task interdependence	4.19	0.59	-.16*	.06	-.07	.02	.32**	.20**							
8. Outcome interdependence	3.66	0.84	-.21**	-.05	.05	-.01	.26**	.47**	.42**						
9. Satisfaction with group members	4.11	0.59	-.16*	-.06	.03	-.08	.46**	.43**	.55**	.45**					
10. Satisfaction with group tasks	4.01	0.66	-.20**	-.08	.03	-.09	.43**	.51**	.45**	.52**	.74**				
11. OCBIs	3.90	0.55	-.11	-.03	-.01	-.11	.37**	.27**	.46**	.40**	.57**	.52**			
12. OCBGs	4.03	0.63	-.13	.01	-.04	-.04	.45**	.49**	.44**	.47**	.58**	.64**	.70**		
13. Intragroup competition	3.00	0.64	-.01	.01	-.10	-.01	-.10	.05	.07	.16*	.08	.08	.09	.00	.73

Note: Values in parentheses are alpha reliabilities. For sex, 1 = male, 2 = female.

* $p < .05$. ** $p < .01$.

Table 3
Means, Standard Deviations, Reliabilities, and Correlations (Study 2: Second Sample)

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Sex	1.40	0.49													
2. Age	31.59	7.29	-.06												
3. Education	3.54	0.84	.07	-.06											
4. Time spent in the workgroup	4.37	5.23	-.09	.50**	-.15*										
5. Relational identification	5.47	0.95	.01	-.01	.02	.00 (.82)									
6. Collective identification	5.06	1.02	-.04	.00	.13	-.06 .48** (.75)									
7. Task interdependence	4.30	0.65	-.01	-.01	.01	.04 .48** .46** (.82)									
8. Outcome interdependence	3.80	0.90	-.03	.05	.01	.01 .39** .49** .51** (.89)									
9. Satisfaction with group members	4.25	0.63	.01	-.07	.00	.00 .57** .45** .49** .34** (.88)									
10. Satisfaction with group tasks	4.08	0.71	-.01	.00	.06	.03 .51** .55** .48** .40** .68** (.83)									
11. OCBIs	3.39	0.69	-.07	.01	.02	.01 .24** .17* .20** .10 .25** .18** (.94)									
12. OCBGs	4.00	0.67	.01	.16*	-.07	.11 .12 .12 .12 .05 .04 .06 .05 .24** (.87)									
13. Intragroup competition	2.83	0.70	-.05	.00	.03	.03-.04 .08 .00 .07 -.05 .02 -.13 -.01 (.67)									

Note: Values in parentheses are alpha reliabilities. For sex, 1 = male, 2 = female.

* $p < .05$. ** $p < .01$.

Table 4
Regression Analyses of the Antecedents of Relational
and Collective Identification (Study 2)

Variable	Relational Identification				Collective Identification			
	Model 1		Model 2		Model 3		Model 4	
	First Sample	Second Sample	First Sample	Second Sample	First Sample	Second Sample	First Sample	Second Sample
Intercept	3.46**	3.37**	2.05**	1.69**	2.75**	1.90**	2.08*	0.95*
Control								
Relational identification					0.46**	0.53**	0.39**	0.33**
Collective identification	0.45**	0.46**	0.42**	0.30**				
Sex			-0.06	0.00			-0.13	-0.09
Age	0.01	-0.00	0.00	-0.00	-0.01	-0.00	-0.01	-0.01
Education	-0.14†	-0.06†	-0.12	-0.04	0.10	0.16**	0.10	0.11*
Time spent in the group	0.00	-0.00	0.00	-0.01	-0.01	-0.00	-0.00	-0.00
Key predictors								
Sex	-0.11	0.03			-0.23*	-0.16†		
Task interdependence			0.39**	0.50**			-0.15	0.21**
Outcome interdependence			-0.05	0.09†			0.45**	0.37**
R ²	.23	.25	.27	.37	.25	.27	.37	.39

† $p < .10$. * $p < .05$. ** $p < .01$.

920.61, NFI = .94, CFI = .98, IFI = .98, RFI = .93, RMSEA = .04, supporting the notion that relational and collective identification represent distinct constructs from these preexisting concepts.

We also estimated a full measurement model including the two types of identification, their antecedents (task interdependence, outcome interdependence), and their consequences (intragroup competition, satisfaction with group members, satisfaction with group tasks, OCBI, OCBG). The model fit the data well for both the first sample, $\chi^2(1,334, N = 217) = 2,296.53$, NFI = .92, CFI = .96, IFI = .96, RFI = .91, RMSEA = .06, and the second sample, $\chi^2(1,334, N = 543) = 2,509.34$, NFI = .93, CFI = .97, IFI = .97, RFI = .93, RMSEA = .05. Thus, these results lent further support to the notion that the two types of identification are not only different from each other but also are distinct from the proposed antecedents and consequences.

Nomological model. We first tested the hypotheses that relational and collective identification are associated with differential antecedents. Because the two constructs are correlated (first sample: $r = .45, p < .01$; second sample: $r = .48, p < .01$), we controlled for one type of group identification when the other was the dependent variable. Using hierarchical linear regression, control variables were entered in Step 1, followed by the hypothesized antecedents in Step 2. All variance inflation factors (VIFs) were less than 2, suggesting that multicollinearity was not a problem (Chatterjee & Price, 1991). Table 4 presents the regression results.

Hypothesis 2a posits that female group members have stronger relational identification than do male group members. This hypothesis was not supported in either sample, as sex was not related to relational identification. However, Hypothesis 2b is supported because male group members tended to display stronger collective identification than do female group members (first sample: $\beta = -0.23, p < .05$; second sample: $\beta = -0.16, p < .06$). The asymmetric effect of sex on the two types of identification is in line with prior findings on sex differences in relational and collective orientations, where both men and women appear to value relational attachments, but only men show a strong tendency for groups (see Seeley, Gardner, Pennington, & Gabriel, 2003, for a review).

Consistent with Hypothesis 3a, there was a positive relation between task interdependence and relational identification (first sample: $\beta = 0.39, p < .01$; second sample: $\beta = 0.50, p < .01$), whereas the relation between outcome interdependence and relational identification was weak (first sample: $\beta = -0.05, ns$; second sample: $\beta = 0.09, p = .07$). Indeed, a test of differences in regression coefficients (Cohen, Cohen, West, & Aiken, 2003) confirmed that task interdependence was a stronger predictor of relational identification than outcome interdependence was (first sample: $t = 2.45, p < .05$; second sample: $t = 3.23, p < .01$). Hypothesis 3b was also supported, in that outcome interdependence was positively related to collective identification (first sample: $\beta = 0.45, p < .01$; second sample: $\beta = 0.37, p < .01$), whereas the relation between task interdependence and collective identification was not stable (first sample: $\beta = -0.15, ns$; second sample: $\beta = 0.21, p < .01$). Moreover, additional analyses showed that outcome interdependence was more strongly related to collective identification than was task interdependence (first sample: $t = -4.52, p < .01$; second sample: $t = -2.44, p < .05$).

Next, we tested the hypotheses involving the differential consequences of relational and collective identification. Each consequence was entered in regression as the dependent variable, followed by control variables in Step 1 and the two types of identification in Step 2. There was no evidence of multicollinearity between relational and collective identification (all VIFs < 2). Table 5 presents the regression results.

Because satisfaction with group members and satisfaction with group tasks were correlated (first sample: $r = .74, p < .01$; second sample: $r = .68, p < .01$), one type of satisfaction was controlled when the other type was entered in regression as the dependent variable. Supportive of Hypothesis 4a, relational identification was positively related to satisfaction with group members (first sample: $\beta = 0.10, p < .01$; second sample: $\beta = 0.17, p < .01$), whereas collective identification was not, and the two relations were different (first sample: $t = 1.77, p = .08$; second sample: $t = 3.43, p < .01$). Hypothesis 4b was also supported. Collective identification was positively related to satisfaction with group tasks (first sample: $\beta = 0.14, p < .01$; second sample: $\beta = 0.19, p < .01$), whereas the relationship between relational identification and satisfaction with group tasks was not stable (first sample: $\beta = 0.03, ns$; second sample: $\beta = 0.08, p = .01$). Moreover, collective identification was more strongly related to this satisfaction than was relational identification (first sample: $t = -1.97, p = .05$; second sample: $t = -2.40, p < .05$).

Because OCBI and OCBG were significantly correlated (first sample: $r = .70, p < .01$; second sample: $r = .24, p < .01$), we controlled one type of OCB when the other type was entered in the regression as the dependent variable. Hypothesis 5a proposes that relational identification is more strongly related to OCBI than collective identification is. Although we

Table 5
Regression Analyses of the Consequences of Relational
and Collective Identification (Study 2)

Variables	Satisfaction With Group Members		Satisfaction With Group Tasks		OCBIs		OCBGs		Intragroup Competition	
	First Sample	Second Sample	First Sample	Second Sample	First Sample	Second Sample	First Sample	Second Sample	First Sample	Second Sample
Intercept	1.06**	1.70**	0.43	0.22	1.43**	1.55**	0.15	2.51**	3.51**	3.15**
Control										
Satisfaction with group members			0.70**	0.55**						
Satisfaction with group tasks	0.59**	0.44**								
Organizational citizenship behaviors directed to individuals							0.68**	0.22**		
Organizational citizenship behaviors directed to the group					0.62**	0.25**				
Sex	0.00	-0.00	-0.07	-0.04	-0.03	-0.11	-0.00	0.06	-0.00	-0.16*
Age	0.00	-0.01*	-0.00	0.00	0.00	0.00	0.00	0.01**	0.01	-0.00
Education	0.02	-0.02	-0.00	0.02	0.01	0.01	-0.02	-0.06	-0.11†	0.03
Time spent in workgroup	-0.00	0.00	0.00	0.00	-0.01†	-0.01	0.00	0.01†	-0.01	0.00
Key predictors										
Relational identification	0.10**	0.17**	0.03	0.08*	0.07*	0.15**	0.06†	0.01	-0.12*	-0.13**
Collective identification	0.01	0.02	0.14**	0.19**	-0.08*	0.03	0.19**	0.06†	0.09†	0.10**
R ²	.58	.49	.60	.52	.52	.13	.60	.13	.04	.04

† $p < .10$. * $p < .05$. ** $p < .01$.

did not find a stable difference in the strength of relations between the two types of identification and OCBIs (first sample: $t = 2.81, p < .01$; second sample: $t = 1.59, ns$), we did find that relational identification was positively related to OCBIs (first sample: $\beta = 0.07, p < .05$; second sample: $\beta = 0.15, p < .01$) and that collective identification was unrelated or even negatively related to OCBIs (first sample: $\beta = -0.08, p < .05$; second sample: $\beta = 0.03, ns$), thus indicating a consistent pattern as proposed in Hypothesis 5a. Similarly, there did not seem to be a stable difference in the strength of relations between the two types of identification and OCBGs (first sample: $t = -2.44, p < .05$; second sample: $t = -0.86, ns$). However, in line with Hypothesis 5b, collective identification was positively related to OCBGs (first sample: $\beta = 0.19, p < .01$; second sample: $\beta = 0.06, p < .09$), whereas relational identification did not seem to have a consistent relationship with OCBGs (first sample: $\beta = 0.06, p = .09$; second sample: $\beta = 0.01, ns$).

Table 6
Hypotheses Testing After Controlling Each of the Relevant
Constructs (Study 2: First Sample)

	Satisfaction With Group Members	Satisfaction With Group Tasks	OCBIs	OCBGs	Intragroup Competition
Control					
Person–group fit	0.07	0.05	–0.01	0.13*	–0.07
Collectivism	0.17**	0.05	0.10†	0.15**	0.13
Social cohesion	0.13**	–0.01	0.02	0.06	–0.04
Task cohesion	0.01	0.11*	0.02	0.02	0.11†
Group esteem	0.07	0.14*	–0.07	0.19**	–0.02
Group efficacy	0.09*	0.07	0.04	0.09†	–0.10
Group identification	0.08	0.18**	–0.02	0.25**	0.02
Independent variables					
Relational identification	$\beta_s > 0.07^*$	<i>ns</i>	$\beta_s > 0.06^{\dagger a}$	<i>ns</i> ^c	$\beta_s < -0.11^{*d}$
Collective identification	<i>ns</i>	$\beta_s > 0.08^*$	$\beta_s < -0.08^{*b}$	$\beta_s > 0.10^{**}$	<i>ns</i> ^e

a. Relational identification became nonsignificant in predicting self-reported organizational citizenship behaviors directed to individuals (OCBIs; $\beta = 0.06$, $p = .12$) when group efficacy was controlled.

b. Collective identification became nonsignificant in predicting self-reported OCBIs ($\beta = -0.06$, $p = .15$) when group esteem was controlled.

c. Relational identification became marginally significant in predicting self-reported organizational citizenship behaviors directed to the group (OCBGs; $\beta = 0.06$, $p = .07$) when collectivism was controlled.

d. Relational identification became marginally significant in predicting intragroup competition ($\beta = -0.10$, $p = .09$) when person–group fit was controlled.

e. Collective identification became marginally significant in predicting intragroup competition ($\beta = 0.10$, $p = .06$) when person–group fit was controlled.

† $p < .10$. * $p < .05$. ** $p < .01$.

Hypotheses 6a and 6b posit that relational and collective identification predict intragroup competition in opposite directions. Indeed, relational identification (first sample: $\beta = -0.12$, $p < .05$; second sample: $\beta = -0.13$, $p < .01$) and collective identification (first sample: $\beta = 0.09$, $p < .09$; second sample: $\beta = 0.10$, $p < .01$) were related to intragroup competition in opposite directions, and the two relations were significantly different (first sample: $t = -2.36$, $p < .05$; second sample: $t = -3.38$, $p < .01$), supporting Hypotheses 6a and 6b.

Predictive value. Finally, to examine whether relational and collective identification add incremental predictive value beyond existing constructs, we repeated the hypothesis-testing regressions and entered each of the seven relevant constructs as a control variable. As Table 6 shows, relational and collective identification remain significant predictors of their associated consequences even after controlling the relevant constructs. The only exception was that collective identification became nonsignificant in predicting intragroup competition after most of the relevant constructs were controlled. Even so, there was no evidence that any of these control variables would consistently render either relational or collective identification nonsignificant in predicting all consequences. Taken together with the earlier results on discriminant validity, these findings suggest that as newly developed constructs, relational and collective identification not only represent distinct constructs from existing concepts but also add incremental validity in predicting important outcomes for organizational groups.

Discussion

Although identification plays an essential role in organizational workgroups, the relational and collective aspects of group identification have rarely been directly addressed and compared in organizational research. Part of the reason is that identification with relationships with group members and identification with the collective characteristics of the group “appear to be highly interdependent, and it may not be possible to distinguish easily or reliably between these two constructs” (Ashmore, Deaux, & McLaughlin-Volpe, 2004: 90). Despite their high interdependence in many situations, we believe that relational and collective identification represent distinct self-conceptualizations manifested in different foci and motivational bases and that they are associated with unique antecedents and consequences. As an attempt to bridge the gap between theoretical and empirical progress on the two aspects of social identification, the present research developed and tested new, context-specific scales for relational and collective identification in an organizational workgroup setting and provided empirical evidence for their separate nomological networks.

Theoretical Implications

Our study makes at least four theoretical contributions to the literature. First, our efforts to distinguish between the relational and collective aspects of identification are among the first to answer the call for a more refined treatment of social identification (Brewer & Chen, 2007; Prentice, 2001). In this regard, existing scales of collectivism (a common label of social identity or identification) often include both collective (e.g., sacrifice for the common good) and relational (e.g., group harmony) items. A potential problem arises when both types of items are combined into one scale to predict individual differences in collectivism (Oyserman et al., 2002). Because organizational workgroups provide an ideal context where both relationships and collective characteristics can contribute to the sense of identity, relational and collective identification reflect the different mechanisms through which one’s identity is developed, maintained, and bounded in a workgroup. Our research demonstrates that the distinction between the two types of group identification is both conceptually and empirically meaningful and that future research on social identification may benefit from taking this distinction into account.

Second, our findings highlight the different ways in which relational and collective identification address social motives in shaping self-identities in workgroups. It seems that the common assumption that relational identification reflects the motive for belongingness tells only part of the story. In particular, relational identification can serve as the motive for self-enhancement as well, especially when it comes to the ability to perform work roles through cooperation with group members. Further, in line with social identity theory, our findings indicate that collective identification is largely guided by the pursuit of positive social identity and thus reflects the motive for self-enhancement (Hogg & Terry, 2000). However, the motive for belongingness can also be evident in collective identification through the perceived prominence of the group.

Third, our nomological network model provides a more nuanced view of the antecedents and consequences of group identification, which sheds light on the deeper mechanisms underlying the identification process. For instance, the present research suggests several means to develop and foster relational or collective identification, such as recruiting new members with certain characteristics or specifying the form of interdependence within workgroups. Moreover, depending on whether their group identification is primarily based on relationships or collective characteristics, employees may direct their attitudes, thoughts, and behaviors toward different targets in the group. For example, we found that group identification is more predictive of satisfaction and citizenship behaviors when they address the same social referent (relationships or the group). More interestingly, we identified a “dilemma” that represents an explicit trade-off between relational and collective identification—intragroup competition, which is inherently discordant with relational identification but can be encouraged by collective identification.

Finally, we empirically studied the role of interpersonal relationships in shaping group identification, which has long been shadowed by the traditional emphasis on collective identification. Not until recently did researchers begin to value a relational conceptualization of identification (Brewer & Chen, 2007; Postmes et al., 2005; Sluss & Ashforth, 2007, 2008). In stark contrast to the depersonalization processes associated with collective identification and the resultant tension between personal and social identities (Kreiner et al., 2006), relational identification presents a new approach to enhancing group attachment by allowing the coexistence of individuality and social connectedness within the same person. Following this stream of research, our work is the first to develop a valid, context-specific measurement for relational identification and directly compares it with collective identification.

Limitations and Future Research

Given that relational and collective identification are still correlated in the workgroup setting of our research, an interesting extension would be to investigate the contexts in which relational or collective identification is more prominent. For example, relational identification may be more prevalent in family business, where relationships tend to play a predominant role in shaping one’s identification, whereas collective identification may be more influential in virtual teams, where shared goals and tasks are critical for the development of identification. Moreover, because the Chinese culture values both interpersonal relationships (Chen, Chen, & Xin, 2004; King, 1989) and collective memberships (Oyserman et al., 2002; Wagner, 1995), the Chinese samples we used across studies may have inflated the correlation between relational and collective identification, which would actually provide a conservative test of our model by making it more difficult to obtain support for the distinction between relational and collective identification. For this reason, our findings may be even stronger in other, more individualistic cultures. Future research should test this possibility by examining the generalizability of the findings in other cultural contexts.

Second, another limitation associated with our samples is that our studies focus on strongly identified members whose self-concept in their workgroups was jointly shaped by relational and collective components of their workgroup experience. Future research should investigate

whether this model could be extended to other forms of identification (Sluss & Ashforth, 2008), such as ambivalent identification (relational identification and collective disidentification, or vice versa) or disidentification (relational and collective disidentification).

Third, as is the case with all cross-sectional designs, our studies raise the question of causality. Indeed, research suggests that identification is reciprocally related to attitudes and behaviors, such as satisfaction, OCBs, and competition (Mael & Ashforth, 1992; O'Reilly & Chatman, 1986). Nevertheless, our research purpose is not particularly dependent on the causal direction of these relationships. For instance, whether satisfaction with group members predicts relational identification or vice versa, or whether OCBGs contribute to collective identification or the reverse, the results we presented will remain useful in distinguishing between the two types of group identification. To fully understand these reciprocal effects, longitudinal studies would be particularly helpful in exploring identification dynamics over time.

Fourth, given that our data were mostly self-reported, we cannot completely rule out common method bias. However, multiple sources were used to assess variables that tend to be biased by self-report (OCBIs, OCBGs). For the rest of the variables, common method bias may not be a significant problem. On the one hand, most of these variables measure perceptions and attitudes, and self-report is typically used for these internal states (Markoczy, 1997). On the other hand, in testing the nomological model, we found different, sometimes opposite, relationships for the two types of group identification. Common method bias is unlikely to explain these findings because respondents would have to simultaneously draw on a considerable number of implicit beliefs regarding the unique antecedents and consequences of relational and collective identification. In fact, it would be very challenging for respondents to base their responses on the implicit belief about one type of identification without violating the implicit belief about another.

Finally, future research should expand our nomological network model by including a broader set of antecedents of relational and collective identification. Larger contexts, such as intergroup relations (competitive vs. cooperative), organizational culture (meritocratic vs. nepotistic), and industry (capital vs. labor intensive), can potentially affect the type of identification. Future research also should explore consequences of relational and collective identification at the group and organizational levels. To achieve this goal, longitudinal and multilevel studies are needed to assess the far-reaching impacts of each type of identification on higher level outcomes, such as group creativity and organizational effectiveness.

Practical Implications

Research shows that identification in the workplace is a valuable resource with positive effects on employee attitudes and behaviors (Dutton et al., 1994; Mael & Ashforth, 1992; O'Reilly & Chatman, 1986). Therefore, knowledge that can guide managers to understand intragroup dynamics associated with each type of identification and to develop the needed type of identification will likely yield substantial practical benefits. For example, knowledge about the differential consequences of each type of identification—especially those that are observable such as employee attitudes or behaviors—can be of great value in helping managers identify and diagnose identity-related problems: Few helping behaviors or intense

competition within a group may indicate a low level of relational identification, whereas expressed dissatisfaction with group tasks or lack of citizenship behaviors directed to the group should warn a manager about low collective identification. Next, depending on the type of identification needed, managers may employ strategies such as recruiting new members with certain characteristics (male vs. female) or designing group tasks in a way that either facilitates intermember interactions and/or accentuates the common goals of the group.

Conclusion

The empirical exploration of relational and collective identification in organizational settings is still in its infancy. We believe that the present research makes an important contribution to the literature by developing valid measures for relational and collective identification, revealing their motivational underpinnings, and unpacking their differential antecedents and consequences in organizational workgroups. Clarifying the distinct bases of social identification in the organizational context, we hope, will encourage further pursuit of knowledge of the identification processes in the workplace.

Appendix

Social cohesion (Zaccaro, 1991):

I generally do not get along with my fellow group members (reverse coded).

I enjoy belonging to my group because I am friends with many of my group members.

Task cohesion (Zaccaro, 1991):

I like belonging to my group because of the activities I participate in.

I do not like what I do as a member of my group (reverse coded).

Person–group fit (Vogel & Feldman, 2009):

Working with the other people in my group is one of the best parts of this job.

I get along well with the people I work with on a day-to-day basis.

There is not much conflict among the members of my group.

If I had more free time, I would enjoy spending more time with my co-workers socially.

There are some people I work with I try to avoid when possible (reverse scored).

Collectivism (Earley, 1989):

Working with a group is better than working alone.

Individuals are responsible for the successes or failures of work groups.

One should live one's life independent of others as much as possible (reverse coded).

Each worker is responsible for the outcomes of his or her company.

Group esteem (Ellemers, Kortekaas, & Ouwerkerk, 1999):

I think my group has little to be proud of (reverse coded).

I feel good about my group.

I have little respect for my group.

I would rather not tell that I belong to this group.

Group efficacy (Salanova, Llorens, Cifre, Martínez, & Schaufeli, 2003):

I feel confident about the capability of my group to perform the tasks very well.

My group is able to solve difficult tasks if we invest the necessary effort.

I feel confident that my group will be able to manage effectively unexpected troubles.

My group is totally competent to solve the task.

Group identification (Wu, Tsui, & Kinicki, 2010):

I identify myself as a member of my group.

I am glad to be a member of my group.

I identify with other members of my group.

I feel strong ties with other members of my group.

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