

Helping While Competing? The Complex Effects of Competitive Climates on the Prosocial Identity and Performance Relationship

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ABSTRACT Integrating notions of co-competition with social information processing theory, we build and test a theoretical model that explains the paradox that arises when prosocial identifying employees work in competitive climates. Sampling 406 subordinates nested within 91 supervisors over two time-points, we show that the relationship between prosocial identity and interpersonal helping is stronger when competitive climate is low rather than high. We also find that competitive team climate positively relates to instrumental helping motives (i.e., helping others to gain something in return). In addition, instrumental helping motives significantly moderate the linkage between interpersonal helping and job performance as well as the indirect effect of prosocial identity on job performance via interpersonal helping such that the main and indirect effects became weaker as instrumental helping motives increased. Overall, our findings reveal new insights into how prosocial identifiers incorporate information from social cues to strike a balance between cooperation and competition.

Keywords: competitive team climate, helping behaviour, helping motives, instrumental helping motives, job performance, prosocial identity

INTRODUCTION

‘We need to understand that cooperation and competition often occur simultaneously and that how we navigate the tension between these seemingly opposite

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behaviors gives us profound insight into human nature.’ – Adam D. Galinsky

Management research has long been enamoured with how individuals face the paradox and mixed motives associated with competition and cooperation (Brandenburger and Nalebuff, 1996; Strese et al., 2016). While competition is often considered a centrepiece of business, some management scholars focus, instead, on cooperation by examining when and why people help others as well as the consequences of helping behaviours for both helpers and the organization (LePine et al., 2002; Podsakoff et al., 2009). One of the cornerstones of this research is prosocial identity (Meglino and Korsgaard, 2004), defined as ‘the aspect of the self-concept that is concerned with helping and empathizing with others’ (Grant et al., 2009a, p. 322). Prior research has uncovered a host of positive outcomes associated with prosocial identities, including commitment to beneficiaries and experienced work meaningfulness (Farmer and Van Dyne, 2017; Grant et al., 2009a). Importantly, scholars have noted that prosocial orientations can lead specifically to helping behaviours directed at other individuals (Cha et al., 2014). Interpersonal helping, in turn, is usually rewarded with desirable outcomes in the workplace such as promotions, pay increases, and recognition (Podsakoff et al., 2009). Recently, however, several scholars (e.g., Rapp et al., 2013; Rubin et al., 2013) have found that helping behaviours have a non-linear relationship with job performance. This inverted U-relationship acknowledges that the benefits of helping can be offset by the time and energy costs associated with providing help (Busse et al., 2015).

Despite the benefits of a cooperative orientation in organizations, competitive contexts are unavoidable in business. Prosocial identifiers will inevitably encounter the contradictory forces of cooperation and competition. Yet, the literature on prosocial identity and helping offers few theoretical or empirical insights into how prosocial identifiers manage this paradox. Prior scholars have noted that cooperation (helping) and competition can coexist simultaneously in the hybrid state of *coopetition* (i.e., ‘simultaneous cooperative and competitive interactions between actors on any level of analysis, leading to the formation of a paradoxical relationship’; Bengtsson et al., 2016, p. 4). Although a rich body of research has documented the effects of *coopetition* at the firm level and between teams, there has been a dearth of studies examining how this paradox is managed by individuals (see Naidoo and Sutherland, 2016). Moreover, those that have focused on individual *coopetition* have portrayed individuals as passive recipients of paradoxical angst when their firm cooperates with rival firms (Bengtsson et al., 2016), rather than as actively grappling with contrasting internal and external motivational forces. Consequently, we seek to expand the present understanding of *coopetition* while providing a richer theoretical understanding of how the prosocial identity functions in competitive contexts.

To accomplish this goal, we apply social information processing theory (Priesemuth et al., 2014; Salancik and Pfeffer, 1978; Spurk et al., 2019). According to this theory, people’s perceptions and behaviours are not only determined by their own needs, but are also strongly influenced by their social environments and work groups. That is, employees use social cues to make sense of their ambiguous and/or contradictory environments (Naumann and Bennet, 2000; Priesemuth et al., 2014). Thus, we expect that competitive team climates can serve as conduits for social cues and information that trigger sensemaking related to *coopetitive* paradoxes in prosocial employees (Stadler and Van

Wassenhove, 2016). Such zero-sum climates can make helping – the behaviour through which prosocial employees express their identity – ill-advised as it is tantamount to facilitating the advancement of others at one's own expense (Johnson and Johnson, 1983). As a result, a highly competitive team climate may make prosocial identifiers suppress their prosocial inclination to help others. Supporting this idea, extant research notes that team climates can temper the extent to which one's identity aligns with their subsequent behaviours (Sluss and Ashforth, 2007). As a result, we expect that the social information present in a highly competitive team (e.g., intense rivalry, unequal allocation of rewards, and frequent status comparisons with peers; Fletcher et al., 2008) may lead prosocial employees to be reluctant to help others.

In addition to reducing the quantity of prosocial identifiers' helping behaviours, the social cues signalled by competitive team climates may also impact employees' motives for providing help. Prior research has noted that competitive climates foster self-interested behaviours including engaging in favourable self-presentation, advertising one's achievements, and seeking valuable information (Spurk et al., 2019). Extrapolating from this, employees in a highly competitive team climate may engage in sensemaking and decide that they need to hedge their bets by ensuring that their help will accrue personal benefits going forward. Stated alternatively, we propose that the social cues and information from competitive team climates can increase individuals' instrumental helping motives (i.e., helping others in order to gain something in return). These motives, in turn, may affect prosocial identifiers' performance gains from their helping behaviour. According to attribution theory (Weiner, 1985), beneficiaries may view helpers with low instrumental helping motives as more genuine and kind-hearted, leading them to be more likely to befriend the benevolent helper, share key information, and assist the helpers to be successful in their core work tasks. Such helpers may also accrue reputational and relationship benefits as they are able to demonstrate their task-related skills to others in a non-threatening way through their helping (Grant, 2013). In contrast, helpers with high instrumental helping motives, who may view helping as a form of social debt (Grant, 2013), garner less reciprocation, thereby excelling less in their core tasks. We, therefore, propose that the instrumental helping motives stimulated by competitive team climates moderate the relationship between interpersonal helping and job performance, rendering helping less beneficial in terms of performance gains.

In summary, we examined the complex moderating effects of competitive team climates on the two stages of the non-linear indirect relationship between prosocial identity and job performance via interpersonal helping. Our dual-stage, multilevel moderated mediation model provides several unique theoretical insights. First, evidence for the prosocial identity–competitive climate interactive effect extends the nomological net of the prosocial identity–helping relationship (Farmer and Van Dyne, 2017). Integrating social information processing theory with the tenets of cooperation also helps us better understand how employees resolve the contradictory forces of internal drivers (i.e., helping others) and external drivers (i.e., outperforming others). To date, scant attention has focused on how being in a paradoxical situation oneself (e.g., having a prosocial identity but working in a competitive climate) may affect individual job performance (Bengtsson et al., 2016). Our study contributes to a better understanding of (a) how employees can use social cues to make sense of and address the cooperation-competition paradox,

and (b) the various pathways through which this paradoxical situation influences job performance.

In addition, our work responds to calls to better understand when helping is beneficial for helpers (Bolino et al., 2013) by examining how instrumental helping motives (as well as competitive team climates) impact the relationship between interpersonal helping and job performance. Although previous scholars (e.g., Kim et al., 2013) have investigated when and why prosocial proclivity results in helping behaviours, fewer have examined how motives affect the outcomes of the helping behaviour itself (see Halbesleben et al., 2010 for an exception). The present study also broadens our understanding of why people help by introducing a new helping motive, instrumental helping motives, as well as its antecedents and interactive effects on outcomes. Lastly, given the non-significant relationship between prosocial identity/values and job performance documented in prior studies (e.g., Grant et al., 2009b; Shao et al., 2019), it is important to know whether prosocial identifiers are, in fact, productive and, if so, through which mechanisms and under what conditions they are able to achieve high job performance. Our conceptual model, illustrated in Figure 1, displays the complex moderating effects that competitive climates have on prosocial processes at work.

Prosocial Identity, Interpersonal Helping, and Job Performance

Employee self-perceptions are intricately intertwined with the actions they choose to take (Houser-Marko and Sheldon, 2006). Because individuals can actively choose when to help and when to withhold help (Penner et al., 1997), research has shown that they will often elect behaviour that serves to fulfil their self-concept (Swann, 1987). This implies, consistent with research findings, that – all else equal – employees with a strong prosocial identity are more likely to engage in helping than those with a weak prosocial identity (Cha et al., 2014; Farmer and Van Dyne, 2017). For example, Cha et al. (2014) found that prosocial identifiers were more likely to provide help toward others as well as the organization itself, but the former relationship (i.e., prosocial identity-interpersonal helping

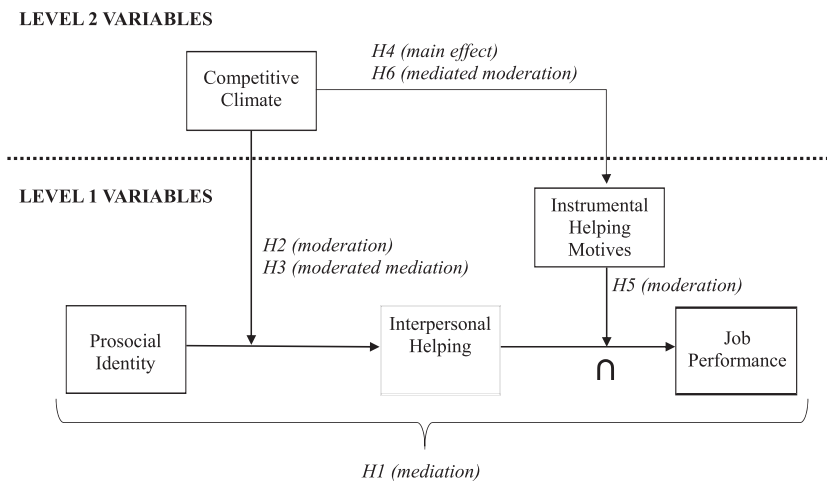


Figure 1. Hypothesized Model for the Effects of Competitive Team Climate on Helping Processes

relationship) was the stronger of the two. The strong linkage between prosocial identity and interpersonal helping was further underscored by Ramarajan et al. (2017), who showed that those who identified as both prosocial and collective (rather than individualistic) engaged in the most prosocial behaviours toward others at work.

Theoretically, this increased interpersonal helping can lead to better subjective performance evaluations for employees from their supervisors (Grant et al., 2009b). Supervisors are likely to give employees credit for their good deeds if they are seen as being motivated by a fundamental concern for others (Bolino and Grant, 2016; Halbesleben et al., 2010). Furthermore, peers often repay help through a process of social exchange that can further benefit the helper (Blau, 1964). However, increasing evidence points toward the notion that too much helping may actually be detrimental to the job performance of the focal employee (Avolio et al., 1990; Bergeron, 2007; Bolino et al., 2004) and their teams (Barnes et al., 2008). In determining when to help, individuals must weigh the pros and cons associated with doing so (Methot et al., 2017); at very high levels, the marginal benefits associated with helping may stop outweighing the costs of engaging in helping (Busse et al., 2015). Supervisors may also perceive that employees who engage in too much helping may be doing so at the expense of their core-task obligations and are shirking their duties, leading to diminishing performance returns (Bergeron, 2007; Bolino et al., 2004). Consistent with this, Rapp et al. (2013, p. 670) noted that supervisors may perceive that ‘employees who engage in moderate OCB should get help from co-workers, have coverage during peak hours, get feedback and work-related advice, and still have time to do their own work.’ Supporting this idea, several researchers have uncovered a non-linear relationship between helping behaviour and task performance (Ellington et al., 2014; Rapp et al., 2013; Rubin et al., 2013).

Combining the two bodies of work outlined above, we posit that prosocial identity will display a non-linear indirect effect on job performance through interpersonal helping. Specifically, we expect that prosocial identity will be positively related to interpersonal helping, which, in turn, will be non-linearly related to job performance. This relationship is important to study in light of previous studies noting that prosocial identity/values and job performance were not significantly correlated (Grant et al., 2009b; Shao et al., 2019). This non-significant relationship may have occurred, partially, because prosocial identity may not be linearly related to job performance. We build upon these prior studies by testing whether the interpersonal helping engaged in by prosocial employees displays job performance declines at high levels. As such, we propose:

Hypothesis 1: Prosocial identity has an indirect inverted U-shaped relationship with job performance via interpersonal helping. Specifically, prosocial identity has a positive and linear relationship with interpersonal helping which, in turn, has an inverted U-shaped relationship with job performance.

The Moderating Effect of Competitive Team Climate

While prior work has provided evidence for the baseline model, there is little understanding of how the relationship between prosocial identity and helping behaviour is affected

by competitive team climates. We posit that the decision to help at work is dictated by intrapersonal sensemaking that considers both person (e.g., prosocial identity) and situation (e.g., competitive team climate) factors. According to social information processing theory (Priesemuth et al., 2014; Salancik and Pfeffer, 1978; Spurk et al., 2019), individual behaviours, perceptions, and attitudes do not occur in a vacuum, and can be influenced by the social contexts in which they occur. For example, people working in high-competitive team climates are likely to reactively adhere to competitive group norms and withhold help as compared to those in low-competitive team climates (Fletcher et al., 2008). Scholars have noted that competitive climates foster such behavioural norms as the unequal allocation of rewards, intense interpersonal rivalry, unethical behaviour, risk-taking, and frequent status comparisons with peers (Fletcher et al., 2008; Kulik et al., 2008; Spurk et al., 2019). These social cues will be then integrated with one's own prosocial disposition through sensemaking processes to determine the acceptability and appropriateness of adopting a given behaviour such as helping. As a result, high-prosocial identity employees who work in a highly competitive team climate may not actively engage in the same amount of interpersonal helping as those working in a low competitive team climate.

Cooperation scholars have also discussed how employees experience cognitive and emotional angst when exposed to the contradictory, yet related, forces of simultaneous cooperation and competition (Bengtsson et al., 2016; Gnyawali et al., 2016; Le Roy and Fernandez, 2015). Scholars have suggested that decision makers in cooperative organizations should acquire and exercise adequate analytical abilities to cope with these opposing forces in their daily lives (Smith and Lewis, 2011). In other words, they should be able to effectively leverage the benefits of increased cooperation (e.g., knowledge sharing, goodwill) while remaining focused on the task and on gaining competitive advantage due to looming competitive necessities (Gnyawali et al., 2016). Extrapolating from this, we expect that even prosocial identifiers may be less likely to help others in a high (rather than a low) competitive team climate.

Specifically, we propose that competitive team climate entail social cues that can suppress the influence of prosocial identity on employee behaviours. Teams with a low competitive team climate emit social cues that can activate prosocial identifiers' propensity to help others. Such environments allow the expression of prosocial identity to flourish, thereby increasing helping behaviours toward co-workers. As a result, prosocial identifiers would likely be free to express their innate tendencies in these supportive environments, resulting in the highest levels of interpersonal helping. Aligned with this notion, Cha et al. (2014) found that hospital employees with a strong prosocial identity were more likely to engage in citizenship behaviours and extend special care to patients when they perceived that their organizations shared this identity. Similarly, early work has noted that climates can be used to encourage specific behaviours, with helpful behaviour being more likely to occur in cooperative rather than competitive situations (Johnson and Johnson, 1983).

In contrast, highly competitive team climates provide unsupportive or even diametrically opposed social cues that trigger sensemaking, leading prosocial identifiers to consciously choose not to express their prosocial identity in the workplace to the same high degree (i.e., withholding the expression of helping behaviours). Unlike low competitive

team climates, such environments send a message to employees that they would likely be penalized for helping others. That is, highly competitive climates signal to employees that rewards are scarce and that only the best employee will succeed in the end, thereby suppressing prosocial identifiers' drives to engage in large amounts of interpersonal helping. In a similar vein, Methot et al. (2017, p. 12) noted that 'individuals experience cues that trigger sensemaking of their good citizen identity, potentially interrupting the ongoing flow of their [helping] as they reappraise their investments'. In sum, we propose:

Hypothesis 2: Competitive team climate moderates the positive relationship between prosocial identity and interpersonal helping such that the linkage becomes stronger when competitive team climate is low rather than high.

So far, we have proposed that prosocial identity has an indirect inverted U-relationship with job performance via interpersonal helping, and that competitive team climates mitigate the relationship between prosocial identity and interpersonal helping. The preceding arguments lead to a moderated mediation effect. Specifically, under a low competitive team climate, prosocial employees are more likely to engage in interpersonal helping, which can be positively evaluated by others, and encourages help recipients and observers to provide favourable returns to the helper (thereby enhancing the helper's job performance). However, the unbridled helping behaviour of prosocial employees may be more detrimental to the helper's job performance when they engage in too much interpersonal helping under low (rather than high) competitive environments. Paradoxically, and in line with the potential benefits of cooperation, the comparatively muted amount of helping that prosocial employees decide to engage in when working in highly competitive team climates may ensure that they avoid sharp job performance declines by keeping the amount of helping behaviour moderate. Cumulatively, we propose that the indirect inverted U-relationship relationship between prosocial identity and job performance via interpersonal helping will be steeper (i.e., more positive initially, and more negative later on) when competitive team climate is low (rather than high). Accordingly, we propose:

Hypothesis 3: Competitive team climate moderates the indirect relationship between prosocial identity and job performance through interpersonal helping such that the inverted U-shape is steeper when competitive team climate is low rather than high.

Competitive Team Climate and Instrumental Helping Motives

Although we suggest that the social cues that employees observe in high and low competitive team climates will suppress or activate the enactment of their prosocial identity, we also expect that this climate factor will change the relationship between helping behaviours and job performance by affecting helping motives. One of the risks of cooperation that scholars have identified is the possibility of asymmetric gains among actors engaging in simultaneous cooperation and competition (Le Roy and Fernandez, 2015). If one competitor gains more knowledge or secures more resources than the other, then cooperation becomes more win-lose than win-win (Hamel, 1991). In light of this risk

associated with simultaneous cooperation and competition, we contend that employees (including prosocial identifiers) exposed to a competitive team climate are more likely to help others with the motivation of benefiting both actors (i.e., instrumental helping motives). High instrumental helping motives imply a myopic focus on the rewards or benefits that one expects to receive after helping. Scholars have noted that the drive to help others does not necessarily exclude personal goals (Bolino and Grant, 2016); sometimes people like to help others because they expect to get something in return.

Aligned with this logic, we expect competitive team climate to positively relate to instrumental helping motives. Over time, the rules of competition (i.e., constantly being compared to your peers) become clearer, and these can alter the way employees think about both job performance and helping. Scholars have noted that competitive team climates foster selfish- and career-oriented behavioural norms including drawing attention to one's achievements, seeking scarce information, and networking (Fletcher et al., 2008; Spurk et al., 2019). Through these behavioural observations and social information processing (Salancik and Pfeffer, 1978), employees may conclude that although helping without the expectation of a reward would lead them to be taken advantage of by others, helping on an exchange basis or when reputational rewards are guaranteed may be more condoned and commonplace. Indeed, scholars have found that competitive climates lead to negative reciprocity, distrust, lower cooperation, and more self-interested and opportunistic behaviour (Černecký et al., 2014; Huo et al., 2017). As a result, in a highly competitive team climate wherein individuals are often pitted against one another, it logically does not make sense to help others without getting some benefit in return, as this may harm one's chances of coming out ahead. As such, helping others in this situation is more likely to be motivated by gaining access to roughly equivalent (yet unpossessed) resources in an effort to survive or even surpass one's peers. Thus, we hypothesize that:

Hypothesis 4: Competitive team climate has a positive relationship with time-lagged instrumental helping motives

The Moderating Effect of Instrumental Helping Motives

We propose that instrumental helping motives will moderate the non-linear relationship between interpersonal helping and job performance. Specifically, we expect that interpersonal helping will have a stronger positive effect on job performance among helpers with low rather than high instrumental helping motives when the levels of interpersonal helping increase from low to medium and before the 'too-much-of-a-good-thing' point. Helpers with low instrumental helping motives are not focusing on what they may receive in return for helping. Instead, they may focus on alleviating the suffering of others or helping because it is the right thing to do. These helping motives then seep into behaviours, leading peers to perceive and treat helpers with self-serving versus other-serving intentions differently. According to attribution theory (Weiner, 1985), people are predisposed to seek causal information about observed behaviours. The beneficiaries of helpers with low instrumental helping motives likely view these helpers as more genuine and kind-hearted than those with high instrumental helping motives (Grant, 2013),

potentially leading them to befriend the benevolent helper, share key information, and assist these helpers with their core work tasks. When people feel that others genuinely care about helping them, they are also more likely to do favours for the helpers over and above what they receive or are expected to do (Grant, 2013; Hardy and Van Vugt, 2006).

In addition, helpers with low instrumental helping motives may be able to assemble larger and more durable social networks from which they can draw resources. They are likely to be more dedicated to others, leading them to work harder (Grant, 2008) and become more energized by their giving (Brooks, 2007), thus contributing to better reputations and performance credits. Their positive reputations may make awaking dormant social network ties easier, thus opening more avenues for social exchange that strengthen the helping-performance relationship (Grant, 2013). Also, helpers that are not focused on the rewards of helping can freely display their abilities and unique value to others (Grant, 2013). These goodwill demonstrations, in turn, may make peers feel that they can trust the person, resulting in a multitude of mutually beneficial, long-term relationships that feature idea and resource exchange (Obstfeld, 2005). Consistent with this logic, Baker (2000, p. 19) noted that high instrumental helpers who ‘create networks with the sole intention of getting something...won’t succeed. We can’t pursue the benefits of networks; the benefits ensue from investments in meaningful activities and relationships’.

Importantly, we also don’t expect that helpers with high instrumental helping motives will be punished, but rather seen more neutrally as a rational and even normative choice in the workplace. Cialdini (2001) mentions reciprocity as a useful influence tactic, and business areas like negotiation (Lewicki et al., 2019) rely on the principle of reciprocity. Accordingly, we do not expect any penalties for interpersonal helping associated with high instrumental helping motives (Grant et al., 2009b), but rather that the beneficiaries may not befriend or repay the help of those with high instrumental helping motives to the same high degree as they would to those with low instrumental helping motives. That is, helpers with low (rather than high) instrumental helping motives may excel more in their core tasks than those who are simply viewing helping as a form of social debt.

However, the detrimental effect of too much helping may also be more likely to occur among those who help others with low instrumental helping motives. This occurs because the more benevolent helpers may engage in interpersonal helping at their own expense, and thus the marginal benefits associated with helping can be outweighed by the costs of engaging in extreme helping. People may even take advantage of such helpers, particularly in highly competitive environments. In contrast, individuals with higher instrumental helping motives are more likely to ensure that the help they provide will lead to benefits for themselves, and thereby avoid the steep performance declines seen among those with lower instrumental helping motives. As such, we hypothesize that the curvilinear effect of interpersonal helping on job performance will be stronger among those with low- than high-instrumental helping motives.

Hypothesis 5: Instrumental helping motives moderate the non-linear relationship between interpersonal helping and job performance such that the inverted-U shape is steeper among those with low rather than high instrumental helping motives.

The preceding discussions for Hypothesis 4 and 5 suggest a mediated moderation model. That is, competitive team climate positively relates to instrumental helping motives, which, in turn, moderate the indirect effect of prosocial identity on job performance via interpersonal helping behaviour. Accordingly, we propose that:

Hypothesis 6: Competitive team climate indirectly moderates the mediated, curvilinear relationship between prosocial identity and job performance through interpersonal helping via instrumental helping motives such that the inverted U-shape is steeper when competitive team climate is low rather than high.

METHOD

Procedures and Participants

We collected data from 406 fulltime employees and 91 immediate supervisors working in eight companies in various industries including information technology, logistics, advertising, tourism, cable service, and pharmaceutical distribution located in China. The participants worked in a number of functional areas, such as research and development, marketing and sales, customer service, administration, and operations. We approached the top management of each company to invite their participation, and the participating companies received a copy of the research findings. The Human Resource Directors of each company assisted us to identify all the work groups and distributed the questionnaires to the employees and their immediate supervisors. We informed the participants that their participation was voluntary and that their responses would be kept strictly confidential and used for research purposes only.

We used a multi-source, two-wave design to collect data from employees and their supervisors, and to temporally separate the independent variables and mediators at an interval of 4 weeks in order to minimize common method bias (Podsakoff et al., 2011). At Time 1, we distributed questionnaires to 515 employees and asked them to rate both their own prosocial identity and their work groups' competitive team climate. We received 427 responses (response rate = 82.9 per cent). At Time 2, we distributed questionnaires to the 427 employees who had completed the Time 1 questionnaire and their immediate supervisors ($N = 95$). Employee participants rated their own interpersonal helping behaviour as well as their instrumental helping motives. We received 415 responses (response rate = 97.2 per cent). Meanwhile, we asked the supervisors to rate their employees' job performance and received responses from 91 supervisors (response rate = 96.8 per cent). Together, we obtained 406 employee-supervisor matched responses, and the overall response rate was 78.6 per cent.

Of the 406 employee participants, 47.0 per cent were female. Average age was 29.55 years old ($SD = 6.44$) and average organizational tenure was 3.93 years ($SD = 3.68$). Of the 91 supervisor participants, 35.2 per cent were female. The average age of participants was 33.63 years old ($SD = 5.46$) and their average organizational tenure was 6.27 years ($SD = 3.70$).

Measures

The surveys were initially developed in English and translated into Chinese following the back-translation procedure (Brislin, 1986). All the variables were assessed on a 7-point Likert-type scale (where 1 = 'Strongly disagree' and 7 = 'Strongly agree').

Prosocial identity. We assessed employees' prosocial identity using Grant et al.'s (2008) 3-item scale (sample items: 'I see myself as caring' and 'I see myself as generous').

Competitive team climate. To assess the competitive climate of the team, we used Brown et al.'s (1998) 4-item scale. An example item is 'Our team leader frequently compares members' performance results with each other'. Competitive team climate was measured at the individual level and then, aggregated to the team level. To justify the aggregation, we calculated the within-group inter-rater agreement (r_{wg}) and the inter-member reliability ICC(1) and ICC(2) for competitive team climate (Bliese, 2000). The values for the r_{wg} , ICC(1), and ICC(2) were 0.87, 0.15, and 0.49, respectively, which meet or exceed the range of values recommended in the literature, and thus provided justification for the aggregation (LeBreton and Senter, 2008).

Interpersonal helping. At Time 2, we solicited self-rated interpersonal helping using Moorman and Blakely's (1995) 5-item scale. A sample item includes 'I go out of my way to help co-workers with work-related problems.'

Instrumental helping motives. Employees were also asked at Time 2 to assess the extent to which they are motivated to help others and their organization because they expect to get benefits from their helping behaviours in the future. To assess instrumental helping motives, we adopted four items from Lynch et al.'s (1999) 10-item scale to assess reciprocation wariness that focused on helping motives (rather than on interpersonal suspicion or general reciprocity expectations) to capture the narrower idea that some people help others because they expect that such help will engender some sort of reward. Specifically, we asked employees to respond to the question 'Why are you motivated to help others at work?' by indicating the degree to which they agreed with the following items: 'Because I can get something out of it', 'Because they will help me in the future', 'Because it benefits me', and 'Because there is something in it for me'.

Job performance. At Time 2, supervisors were asked to assess employees' job performance using Farh and Cheng's (1997) 4-item scale. This scale was developed to assess employees' job performance in the Chinese context and has been validated in previous studies (e.g., Lin et al., 2015). An example item includes 'This employee makes significant contributions to the overall performance of our work unit'.

Control variables. We controlled for employees' age, sex, and organizational tenure consistent with previous studies showing that these can affect helping behaviours and job performance (e.g., Kim et al., 2015). In addition, because the nature of the tasks (e.g., the percentage of tasks that require teamwork) could affect how helping behaviours may be perceived and associated with job performance, we controlled for perceived task interdependence. We

assessed perceived task interdependence using Van der Vegt and Janssen's (2003) five-item scale. An example item is 'I need information and advice from my colleagues to perform my job well.' We also controlled for any possible confounding effects of organization-level factors on the relationships we tested (see Gelfand et al., 2007) using dummy variables given that the individuals and teams came from different organizations.

Analytical Approach

Given that the data were nested within teams, we tested our research hypotheses using Mplus 7.3 (Muthén and Muthén, 2012) with observed variables. Specifically, we used two-level models with competitive team climate at the team level and the other variables at the individual level. We tested our research hypotheses on the curvilinear mediation and moderated curvilinear mediation simultaneously rather than in piecemeal and causal step approaches (Preacher et al., 2010). To test the non-linear ('instantaneous') indirect effect, we followed the procedures outlined by Hayes and Preacher (2010), and examined the indirect effect at several levels of the mediator (i.e., a range of -1 *SD* to $+1$ *SD*).

In addition, when testing the cross-level moderating effects of competitive team climate, we used group-mean centring for Level 1 predictor (i.e., prosocial identity) and grand-mean centring for Level 2 moderator (i.e., competitive team climate) to ensure an accurate interpretation for the main effects (Enders and Tofghi, 2007). For the first- and/or second-stage moderated mediation effects of competitive team climate and instrumental helping motives, we calculated the confidence intervals (CIs) of the indirect effect with the Monte Carlo simulation (with 20,000 replications, Preacher et al., 2010). However, because the indirect effects are non-linear, we examined the indirect effect at several levels of the mediator (from -1 *SD* to $+1$ *SD*) under high and low levels (-1 *SD* to $+1$ *SD*) of competitive team climate or instrumental helping motives.

RESULTS

We conducted multi-level confirmatory factor analyses (MCFAs) to assess the distinctiveness of all study variables from all sources. The results show that the five-factor model (i.e., prosocial identity, competitive team climate, interpersonal helping, instrumental helping motives, and job performance) fits the data well ($\chi^2(115) = 203.93$, $\chi^2/df = 1.77$, RMSEA = 0.04, CFI = 0.98, TLI = 0.97, SRMR_{Within} = 0.04, SRMR_{Between} = 0.04). The proposed model fits the data better than a four-factor model that combines prosocial identity and interpersonal helping ($\chi^2(118) = 729.46$, $\chi^2/df = 6.18$, RMSEA = 0.11, CFI = 0.84, TLI = 0.80, SRMR_{Within} = 0.09, SRMR_{Between} = 0.04), a four-factor that combines the interpersonal helping and instrumental helping motives ($\chi^2(118) = 1217.14$, $\chi^2/df = 10.31$, RMSEA = 0.15, CFI = 0.70, TLI = 0.64, SRMR_{Within} = 0.14, SRMR_{Between} = 0.04), and a three-factor model that combines the employee-reported Level 1 variables (i.e., prosocial identity, interpersonal helping, and instrumental helping motives) ($\chi^2(120) = 1695.98$, $\chi^2/df = 14.13$, RMSEA = 0.18, CFI = 0.57, TLI = 0.50, SRMR_{Within} = 0.17, SRMR_{Between} = 0.04). Taken together, these results support the distinctness of the variables used in this study.

The descriptive statistics (i.e., means and standard deviations), reliability estimates, and correlations for all of the measures are reported in Table I. All of the reliability estimates

Table 1. Means, Standard Deviations and Correlations for Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Sex (0 = male, 1 = female)	0.47	0.50	—								
2. Age (years)	29.55	6.44	-0.17	—							
3. Organizational tenure (years)	3.92	3.68	-0.10	0.60	—						
4. Task interdependence	5.83	0.93	0.04	-0.02	0.03	(0.74)					
5. Prosocial identity	5.81	1.01	0.00	0.16	0.11	0.29	(0.88)				
6. Competitive team climate	4.44	0.87	-0.26	0.09	0.17	-0.04	0.07	(0.86)			
7. Instrumental helping motives	4.24	1.70	-0.05	-0.05	0.01	0.10	-0.05	0.14	(0.92)		
8. Interpersonal helping	5.84	0.93	-0.08	0.05	0.03	0.56	0.48	0.02	0.04	(0.92)	
9. Job performance	5.66	0.93	0.18	-0.02	0.05	0.19	0.15	-0.02	0.00	0.20	(0.89)

Note. (N = 406 individuals). Reliabilities are in parentheses. For all correlation above |0.10|, $p \leq 0.05$; and above |0.14|, $p \leq 0.01$. Here, competitive team climate reflects individual level perceptions.

exceeded 0.86 with an average reliability of 0.89. Table I shows that prosocial identity was positively and significantly correlated with interpersonal helping and job performance ($r = 0.48, p < 0.01$; $r = 0.15, p < 0.01$, respectively). Also, interpersonal helping was significantly correlated with job performance ($r = 0.20, p < 0.01$). In addition, 6 out of 10 correlations among the key variables (60 per cent) were nonsignificant. These results as well as the CFA results indicate that a potential common method variance bias is not a significant concern in our data (Spector, 2006).

Hypothesis 1 stated that prosocial identity would have an indirect and non-linear (inverted U-shaped) relationship with job performance through interpersonal helping. In the first model where the main curvilinear mediation effect is considered, prosocial identity was positively and significantly related to interpersonal helping ($\beta = 0.32, p < 0.01$), as shown in Table II (Model 1). Also, shown in Model 1 in Table II, interpersonal helping-squared had an inverted U-shaped relationship with job performance ($\beta = -0.24, p < 0.01$). In addition, to test the non-linear indirect effect of prosocial identity on job performance via interpersonal helping, we examined the indirect effect at different levels of the interpersonal helping. Specifically, the indirect effect was positive and significant when interpersonal helping was low ($-1 SD$, indirect effect = 0.12, 95% CI [.05, 0.22]), turned to non-significant at the mean value of interpersonal helping (indirect effect = -0.02 , 95% CI [$-0.06, 0.02$]), then became significant and negative when interpersonal helping was high ($+1 SD$, indirect effect = -0.16 , 95% CI [$-0.25, -0.09$]), as shown in Table III. These results provide a support for Hypothesis 1.

Hypothesis 2 proposed that competitive team climates moderate the positive relationship between prosocial identity and interpersonal helping such that the linkage becomes more strongly positive when competitive team climate is low rather than high. In the results for the moderated curvilinear mediation model, the interaction term between prosocial identity and competitive team climate was negative and significant for interpersonal helping ($\gamma = -0.15, p < 0.05$), as shown in Table II (Model 2). Specifically, the simple slope tests show that the relationship between prosocial identity and interpersonal helping was positive and significant when competitive team climate was high (simple slope = 0.20, $p < 0.01$), but became stronger when competitive team climate was low (simple slope = 0.47, $p < 0.01$), supporting Hypothesis 2. These simple slopes are portrayed in Figure 2.

Hypothesis 3 proposed a moderated indirect inverted U-relationship such that the indirect relationship between prosocial identity and job performance via interpersonal helping is steeper when competitive team climate is low rather than high. As shown in Table III, the indirect effect was more positive when competitive team climate was low (rather than high) at the low levels of interpersonal helping ($-1 SD$, indirect effect = 0.12, 95% CI [.01, 0.26] vs. 0.05, 95% CI [.01, 0.13]). However, the indirect effect became more negative when competitive team climate was low (rather than high) at the high level of interpersonal helping ($+1 SD$, indirect effect = -0.18 , 95% CI [$-0.31, -0.07$] vs. -0.07 , 95% CI [$-0.15, -0.02$]). These results support Hypothesis 3, and suggest that a highly competitive climate may prevent high prosocial identifiers from hurting their own job performance with high (extreme) levels of interpersonal helping, thereby flattening the inverted-U relationship.

Table II. Results for the Curvilinear Mediation and the Moderated Curvilinear Mediation Models

Variables	Curvilinear Mediation Model (Model 1)		Moderated Curvilinear Mediation Model (Model 2)	
	Interpersonal helping	Job performance	Interpersonal helping	Job performance
Control variables				
Sex ^a (0 = male, 1 = female)	-0.29** (0.10)	0.18 (0.09)	-0.29** (0.10)	0.15 (0.09)
Age	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Organizational tenure	0.00 (0.02)	0.04** (0.02)	0.00 (0.02)	0.05** (0.02)
Task interdependence	0.37** (0.06)	0.10* (0.04)	0.38** (0.06)	0.11** (0.04)
Prosocial identity	0.32** (0.05)	0.08 (0.04)	0.33** (0.05)	0.05 (0.04)
Competitive team climate (CC)			0.09 (0.08)	
Prosocial identity × CC			-0.15* (0.06)	
Interpersonal helping		-0.06 (0.06)		-0.07 (0.06)
Interpersonal helping ²		-0.24** (0.04)		-0.17** (0.05)
Instrumental helping motives (IHM)				-0.07** (0.02)
Interpersonal helping × IHM				0.00 (0.03)
Interpersonal helping ² × IHM				0.06** (0.02)

Note. (N = 406 individuals and 91 teams).

^aSeven dummy variables for the organizations (most of them were not significant) were not included.

*p < .05; **p < .01.

Hypothesis 4 stated that competitive team climate would be positively linked with time-lagged instrumental helping motives. The results of the moderated curvilinear indirect effect model show that the effect of competitive team climate at Time 1 on instrumental helping motives at Time 2 was positive and significant ($\gamma = 0.27, p < 0.05$), supporting Hypothesis 4.

Hypothesis 5 proposed that instrumental helping motives would moderate the non-linear relationship between interpersonal helping and job performance such that the non-linear relationship between interpersonal helping and job performance is steeper among those reporting low rather than high instrumental helping motives. The results in Table II (Model 2) show that the interaction between interpersonal helping-squared and instrumental helping motives was significant ($\gamma = 0.06, p < 0.01$). We portrayed the interaction effect by plotting the non-linear relationship between interpersonal helping and job performance at high and low levels of instrumental helping motives. As depicted in Figure 3, the positive effect of interpersonal helping on job performance increased more steeply (and reached a higher apex) among those evoking low rather than high levels of instrumental motives when the levels of interpersonal helping increased from low to moderate amounts. However, the positive effect decreased more quickly among those with lowered rather than heightened levels of instrumental motives when the levels of interpersonal helping were at high or extreme levels. These results support for Hypothesis 5.

Table III. Indirect Effects of Prosocial Identity on Job Performance via Interpersonal Helping

Moderators	IH = -1 SD	IH = Mean	IH = +1 SD
---	0.12** [0.05, 0.22]	-0.02 [-0.06, 0.02]	-0.16** [-0.25, -0.09]
High competitive team climate (1 SD)	0.05* [0.01, 0.13]	-0.01 [-0.03, 0.01]	-0.07* [-0.15, -0.02]
Low competitive team climate (-1 SD)	0.12* [0.01, 0.26]	-0.03 [-0.08, 0.02]	-0.18** [-0.31, -0.07]
Difference between High and Low	-0.07 [-0.19, 0.00]	0.02 [-0.01, 0.06]	0.10* [0.01, 0.23]
High Instrumental helping motives (1 SD)	0.04 [-0.07, 0.16]	-0.02 [-0.07, 0.03]	-0.08* [-0.15, -0.01]
Low Instrumental helping motives (-1 SD)	0.14** [0.07, 0.23]	-0.02 [-0.07, 0.03]	-0.17** [-0.28, -0.08]
Difference between High and Low	-0.10* [-0.19, -0.01]	0.00 [-0.06, 0.06]	0.09* [0.01, 0.19]
High CC (1 SD) High IHM (1 SD)	0.02 [-0.04, 0.11]	-0.01 [-0.05, 0.02]	-0.05* [-0.11, -0.01]
Low IHM (-1 SD)	0.08* [0.02, 0.16]	-0.01 [-0.04, 0.02]	-0.10* [-0.20, -0.03]
Low CC (-1 SD) High IHM (1 SD)	0.05 [-0.10, 0.22]	-0.03 [-0.10, 0.04]	-0.11* [-0.23, -0.01]
Low IHM (-1 SD)	0.19** [0.09, 0.33]	-0.03 [-0.09, 0.04]	-0.25** [-0.41, -0.11]

Note. (N = 406 individuals and 91 teams).

IH = Interpersonal helping, CC = Competitive team climate, and IHM = Instrumental helping motives.

*p < .05; **p < .01.

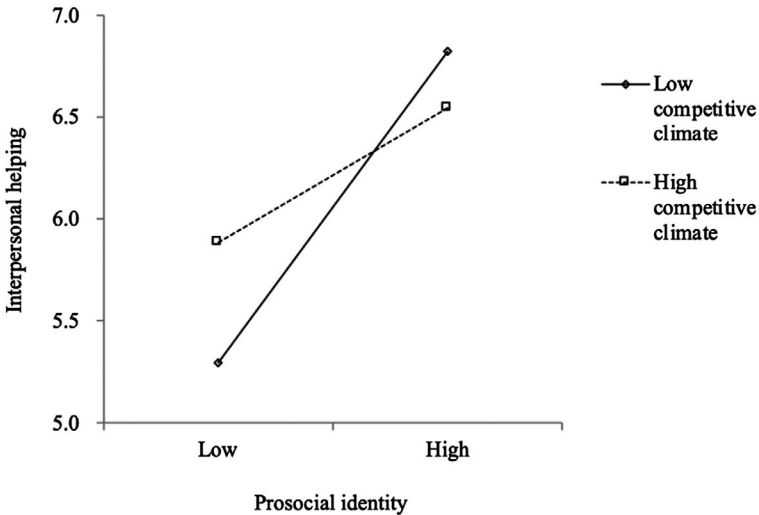


Figure 2. The effects of prosocial identity of interpersonal helping at levels of competitive team climate

In addition, we tested whether competitive team climate indirectly moderates the non-linear relationship between interpersonal helping and job performance via instrumental helping motives (Hypothesis 6). To test this indirect moderating effect, following the guidelines of Edwards and Lambert (2007), we multiplied and tested the coefficients for the effects of competitive team climate on instrumental helping motives, and the interaction term of interpersonal helping-squared and instrumental helping motives. The

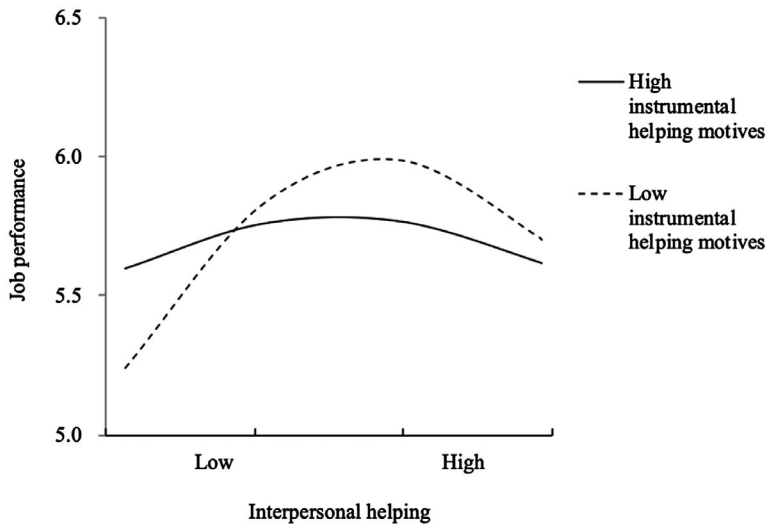


Figure 3. The curvilinear effects of interpersonal helping on job performance at levels of instrumental helping motives

results show that the indirect moderating effect was significant (the indirect moderating effect = 0.02, 95% CI [.003, 0.03]), supporting Hypothesis 6.

Supplementary Analyses

We ran additional sensitivity analyses to test the robustness of our results without the individual-level control variables (i.e., employees' age, sex, organizational tenure, and perceived task interdependence). For the dummy variables for organizations, given that helping behaviours and job performance evaluations can be affected by organizational characteristics (Gelfand et al., 2007), we kept them as control variables in the analyses. All significant results remained without the individual-level control variables. Detailed results are available upon request from the authors.

In addition, we tested whether instrumental helping motives moderate the curvilinear indirect effect that prosocial identity has on job performance via interpersonal helping. As shown in Table III, the indirect effect was significant and positive when instrumental helping motives were low, but was not significant when instrumental helping motives were high at the low level of interpersonal helping ($-1 SD$, indirect effect = 0.14, 95% CI [.07, 0.23] vs. 0.04, 95% CI [-0.07, 0.16]). Meanwhile, the indirect effect became more negative when instrumental helping motives was low (rather than high) at the high level of interpersonal helping ($+1 SD$, indirect effect = -0.17 , 95% CI [-0.28, -0.08] vs. -0.08 , 95% CI [-0.15, -0.01]). These results suggest that interpersonal helping cannot benefit prosocial identifiers for their own job performance if they have high instrumental helping motives. In contrast, when they have low instrumental helping motives, a reasonable amount of interpersonal helping can enhance high prosocial identifiers' job performance, whereas extreme levels of interpersonal helping substantially harm their performance.

Based on the aforementioned results, we tested how competitive team climate (as a first-stage moderator) and instrumental helping motives (as a second-stage moderator) would jointly moderate the indirect effects of prosocial identity on job performance via interpersonal helping. The results in Table III show that when instrumental helping motives were low, a reasonable amount of interpersonal helping can benefit high prosocial identifiers, especially when competitive team climate is low rather than high (indirect effect = 0.19, 95% CI [.09, 0.33] and 0.08, 95% CI [.02, 0.16], respectively). However, at extreme levels of interpersonal helping, prosocial identifiers' helping behaviours may not be beneficial to their own job performance, especially when low competitive team climate induce low levels of instrumental helping motives (indirect effect = -0.25 , 95% CI $[-0.41, -0.11]$).

Moreover, although we did not propose the moderating effect of instrumental helping motives on the relationship between prosocial identity and interpersonal helping due to the lack of a sound theory, we tested this possibility. The results show that instrumental helping motives significantly weakened the relationship between prosocial identity and interpersonal helping ($\gamma = -0.09$, $p < 0.01$). Specifically, the relationship between prosocial identity and interpersonal helping was stronger when instrumental helping motives were low rather than high (simple slope = 0.45, $p < 0.001$ and 0.19, $p < 0.01$, respectively). We suggest that future research should validate this finding and develop theory to explain this moderation effect.

DISCUSSION

Our overarching goal was to better understand how employees use social cues in their environment to resolve paradoxical drivers at work (i.e., how prosocial employees react to competitive contexts). Our investigation provides several interesting findings. First, we found that competitive team climates suppress the positive relationship between prosocial identity and interpersonal helping. Second, our results revealed that competitive team climates kept prosocial employees from engaging in unnecessary or extreme helping behaviours, and thereby kept their performance from declining. Third, supporting our predictions of the complex effects of competitive team climate, we found that the indirect, inverted-U effect of prosocial identity on job performance via interpersonal helping was more pronounced when instrumental helping motives (triggered by competitive team climates) were low rather than high. Lastly, our results showed that the indirect relationship between prosocial identifiers and job performance had the steepest inverted-U shape (i.e., featuring strong increases initially and strong declines at the highest levels of helping) when both competitive team climate and instrumental helping motives were low.

Theoretical Implications

Our findings provide several important theoretical implications for the prosocial identity and helping literature. First, we theorized and tested how prosocial identifying employees make sense of and address the paradoxical situations that are generated when working under a highly competitive team climate. Building on the relatively few studies who have examined cooperative tensions at the individual level of analysis (e.g., Dahl, 2014;

Gnyawali et al., 2016; Lundgren-Henriksson and Kock, 2016), our integration of the social information processing theory helps us to understand how prosocial employees resolve contrasting internal and external cues. Our results suggest that although there are certain benefits of introducing the opposing forces of cooperation and competition (i.e., avoiding performance declines associated with helping too much), there are also drawbacks (i.e., affecting helping motives in a way that detracts from performance credits).

For example, our study demonstrates the dampening effect that a strong competitive team climate can have on the expression of one's degree of prosocial identity through the quantity of interpersonal help offered. This finding is aligned with identity research that has noted that employees are active agents of their behaviour and do not mindlessly follow their identity (Chen et al., 2015), and that group climates can temper the extent to which behaviour aligns with one's identity (Sluss and Ashforth, 2007). Although on the surface this moderation effect seems like a straightforward example that individuals observe social cues in their environments, which serve to either encourage or suppress their innate tendencies (Salancik and Pfeffer, 1978), a closer inspection of the moderated indirect non-linear effect helps us to draw more nuanced conclusions. Namely, we found that highly prosocial employees demonstrated a stronger *negative* indirect relationship with job performance via interpersonal helping when working in a socially supportive, low-competition team climate. These results suggest that highly prosocial employees may be engaging in far too much interpersonal helping when given the environmental latitude to do so, harming their performance in the process.

It is also noteworthy that employees with a low prosocial identity engaged in more interpersonal helping under a high (rather than low) competitive team climate. It is plausible that employees who have a low prosocial identity tend to be indifferent towards others (and thus less likely to engage in interpersonal helping in general). Under a highly competitive team climate, however, they may engage in instrumental forms of help in a bid to get the resources they need to get ahead. We suggest that future research tests this speculation by specifying the types of interpersonal help in greater detail.

Second, our study establishes boundary conditions for the curvilinear relationship between helping and job performance (Ellington et al., 2014; Rapp et al., 2013; Rubin et al., 2013). Namely, competitive team climates had the negative side-effect of increasing time-lagged instrumental helping motives. Those with heightened instrumental helping motives, in turn, displayed a less positive indirect effect of prosocial identity on job performance via interpersonal helping (particularly at low or medium levels of interpersonal helping) than those with lowered instrumental helping motives. These results are consistent with previous studies showing that peers tend to like and reward those who are viewed as pure and benevolent helpers (e.g., Grant, 2013; Hardy and Van Vugt, 2006), and that these employees may garner superior reputational and relational benefits (Grant et al., 2009b; Willer, 2009). These findings also complement prior work reporting that job performance declines at high levels of helping are exacerbated by individual factors such as poor time management (Rapp et al., 2013), low interpersonal skill (Ellington et al., 2014), and low autonomy (Rubin et al., 2013).

Still, we need to point out that those with high (rather than low) instrumental helping motives demonstrated less severe negative trends in the interpersonal helping-job performance relationship at extremely high levels of interpersonal helping. It is plausible

that people with high instrumental helping motives, though less likely to benefit from the positive attributions granted those with low instrumental helping motives, may be more strategic about the types of help they choose. They may, for example, avoid helping opportunities that might harm their own performance. In this way, by leveraging the social information processing lens (Salancik and Pfeffer, 1978), we showed that employees integrate social cues in a way that is perhaps more deliberate and strategic than simply being passively encouraged or discouraged from expressing natural tendencies. We encourage future research to identify other contextual factors (e.g., strong peer requests for help and organizational cultures that encourage helping) or individual differences (e.g., demographic characteristics and extroversion) that may moderate the indirect, curvilinear relationship between prosocial identity and job performance through helping behaviours.

Third, by introducing a new helping motive, our findings contribute to the recent stream of work that has demonstrated how different motives play an important role in the helping process (e.g., Takeuchi et al., 2015; Kim et al., 2013). For example, Gebauer and colleagues (2008) noted that helping can be a positive or negative experience depending on whether one helps (a) to experience pleasure and happiness or (b) out of a sense of duty. The former results in positive outcomes such as better self-esteem, self-actualization, and life satisfaction, whereas the latter results in negative emotions. We expand upon this and similar work by measuring a new motive that can be impacted, at least in part, by the contextual environment: instrumental helping motives. Namely, we suggest that helping motives can be further distinguished based on whether the person is focusing on the benefits to be gained from their help or if the person helps without such expectations, the latter of which may be perceived more positively by one's peers. Although the notion that some people help with the expectation of receiving tangible benefits in return has been identified qualitatively (Taber and Deosthali, 2014), assessing this new type of motive helps to broaden our understanding of helping by demonstrating that such motives can vary even within people who identify as highly prosocial. Future research would benefit from comparing the effects of instrumental helping motives on the relationship between interpersonal helping and job performance with other helping motives such as impression management, prosocial values, and organizational concern (Kim et al., 2013) in tandem.

Lastly, we sought to determine whether the identity-expressive behaviour of interpersonal helping would lead to better job performance for prosocial employees. To date, several scholars have noted that too much helping may be detrimental to helpers' job performance (Ellington et al., 2014; Rapp et al., 2013). We provide more evidence for the costs associated with offering too much aid by showing that an inverted U-shaped indirect relationship exists between prosocial identity and performance through interpersonal helping. By demonstrating the non-linear indirect effects, our findings also provide a potential explanation for the insignificant correlation between prosociality and job performance documented in prior studies (Grant et al., 2009b; Shao et al., 2019).

Practical Implications

Our findings also offer several useful recommendations for organizations and managers who seek to create the optimum balance between competition and cooperation for their

employees. The results confirm that prosocial identifies are more likely to help others, and thus hiring these employees should help to foster cooperation that contributes to the organization's goals and the broader social milieu. To optimize their performance, however, we suggest that organizations and managers might be prudent to build competitive climates. Such climates can help to deter performance declines among prosocial employees by altering their amount of help. That is, hiring prosocial employees while fostering competition can help organizations leverage the focus and synergies associated with competition and cooperation, respectively.

In addition, while competitive climates may help individual employees in some ways, we further contend that organizations should be wary of fostering too much competition. For one, helping behaviours among employees allows organizations to meet their long-term financial goals (Kim and Gong, 2009) and enhances the positive zeitgeist for workers, thus making competitive climates detrimental. Moreover, the by-product of high competition (i.e., increased instrumental helping motives), may not be rewarded by peers and supervisors to the same high degree as low instrumental helping motives (particularly for low and moderate levels of helping). As such, we offer as an alternative that perhaps managers should consider pitting *teams* of individuals against one another (Le Roy and Fernandez, 2015). In this way, employees might reap the positive bonding effects of a common goal as well as heightened peer pressure to produce high-quality work for the good of the team. This form of co-competition may also provide a good way for prosocial employees to fulfill their self-concept (by helping teammates) while ensuring that everyone remains focused on the task at hand. Setting superordinate goals (e.g., team rather than individual goals) that require cooperation may also help to further dissuade employees from adopting selfish or instrumental motives.

Limitations and Future Research Opportunities

We would be remiss if we did not include the limitations of our research design and analyses. First, we assessed helping behaviours and job performance at a single point in time, raising questions about the causal inferences for the results. For example, although sound theory and existing empirical research suggest that helping behaviour affects the job performance of the helper, we cannot rule out the possibility that better job performers are more willing (and able) to help their peers. Despite this fact, our outcome was rated by a different source, avoiding concerns of common method bias (Podsakoff et al., 2011). Future research would benefit by validating our findings data collected at several longitudinal intervals to test the causal directionality more rigorously.

Second, we asked the participants to self-report their level of instrumental helping motives, prosocial identity, and interpersonal helping, potentially exposing our measurement to social desirability biases. However, the means of these were not extremely high and the variation across participants was large (instrumental helping motives $M = 4.24$, $SD = 1.70$; interpersonal helping $M = 5.84$, $SD = 0.93$; prosocial identity $M = 581$, $SD = 1.01$), suggesting that social desirability may not have been a severe issue in this study. We nevertheless encourage more research using other-assessed measures (especially for instrumental helping motives) as well as more fine-grained measurements of the quantity, quality, type, and duration of help in order to build confidence in the robustness of our results.

Third, we did not specifically measure the theoretical mechanisms we used to explain the interactive relationship between prosocial identity and team competitive climate on helping behaviours as well as the interactive relationship between helping behaviours and helping motives on job performance. For example, we cannot be sure whether employees low in instrumental helping motives actually received more status and resources from their peers after helping when compared to those high in instrumental helping motives. Also, we encourage future research to test the interaction effect of prosocial identity and team competitive climate on ‘felt tension’ (i.e., the tensions resulting from paradoxical situations), and how these tensions influence interpersonal helping behaviours.

Fourth, we collected the data from a single culture (i.e., China), and thus are limited in our ability to generalize these findings to employees in other cultural contexts. In Chinese culture, *guanxi*, referring to a relationship between two people that is built on giving as much as they are getting (Tsui and Farh, 1997), is quite fundamental at work, and thus *guanxi*-based reciprocity is regarded as fair in Chinese society (Morris and Leung, 2000). Nevertheless, we note that the variation in instrumental helping motives among the Chinese respondents is quite large, and that we found a significant moderating effect of instrumental helping motives on the relationship between interpersonal helping and job performance.

Despite these limitations, our study provides a first step in understanding how employees deal with the paradox associated with competition and cooperation at the individual level. We call for more future research to shed light on how employees effectively manage different types of contrasting forces to enhance their performance. For instance, future research could examine other types of paradoxical situations that employees may face at work due to the contrasts between their traits and environmental contexts (e.g., highly competitive employees working in a cooperative team climate or ethical employees working in a highly political climate). It would be also interesting to examine how these opposing forces interact at different levels of analysis. For example, scholars might investigate how prosocial employees react to competitive organizational climates or even how competitive teams might fare in a cooperative organizational culture.

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REFERENCES

- Avolio, B. J., Waldman, D. A. and McDaniel, M. A. (1990). ‘Age and work performance in nonmanagerial jobs: The effects of experience and occupational type’. *Academy of Management Journal*, **33**, 407–22.
- Baker, W. E. (2000). *Achieving Success through Social Capital: Tapping Hidden Resources in Your Personal and Business Networks*. San Francisco, CA: Jossey-Bass.
- Barnes, C. M., Hollenbeck, J. R., Wagner, D. T., DeRue, D. S., Nahrgang, J. D. and Schwind, K. M. (2008). ‘Harmful help: The costs of backing-up behavior in teams’. *Journal of Applied Psychology*, **93**, 529–39.
- Bengtsson, M., Raza-Ullah, T. and Vanyushyn, V. (2016). ‘The cooptation paradox and tension: The moderating role of cooptation capability’. *Industrial Marketing Management*, **53**, 19–30.

- Bergeron, D. M. (2007). 'The potential paradox of organizational citizenship behavior: Good citizens at what cost?'. *Academy of Management Review*, **32**, 1078–95.
- Blau, P. M. (1964). *Exchange and Power in Social Life*. New York: Wiley.
- Bliese, P. D. (2000). 'Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis'. In Klein, K. J. and Kozlowski, S. W. J. (Eds), *Multilevel Theory, Research, and Methods in Organizations*. San Francisco, CA: Jossey-Bass, 349–81.
- Bolino, M. C. and Grant, A. M. (2016). 'The bright side of being prosocial at work, and the dark side, too: A review and agenda for research on other-oriented motives, behavior, and impact in organizations'. *Academy of Management Annals*, **10**, 599–670.
- Bolino, M. C., Klotz, A. C., Turnley, W. H. and Harvey, J. (2013). 'Exploring the dark side of organizational citizenship behavior'. *Journal of Organizational Behavior*, **34**, 542–59.
- Bolino, M. C., Turnley, W. H. and Niehoff, B. P. (2004). 'The other side of the story: Reexamining prevailing assumptions about organizational citizenship behavior'. *Human Resource Management Review*, **14**, 229–46.
- Brandenburger, A. and Nalebuff, B. (1996). *Co-opetition*. New York: Doubleday.
- Brislin, R. W. (1986). 'The wording and translation of research instruments'. In Lonner, W. and Berry, J. (Eds), *Field Methods in Cross-Cultural Research*. Beverly Hills, CA: Sage, 137–64.
- Brooks, A. C. (2007). 'Does giving make us prosperous?'. *Journal of Economics and Finance*, **31**, 403–11.
- Brown, S. P., Cron, W. L. and Slocum, J. W. (1998). 'Effects of trait competitiveness and perceived intra-organizational competition on salesperson goal setting and performance'. *Journal of Marketing*, **62**, 88–98.
- Busse, C., Mahlendorf, M. D. and Bode, C. (2015). 'The ABC for studying the too-much-of-a-good-thing effect'. *Organizational Research Methods*, **19**, 131–53.
- Černe, M., Nerstad, C. G., Dysvik, A. and Škerlavaj, M. (2014). 'What goes around comes around: Knowledge hiding, perceived motivational climate, and creativity'. *Academy of Management Journal*, **57**, 172–92.
- Cha, J., Chang, Y. K. and Kim, T. Y. (2014). 'Person–organization fit on prosocial identity: Implications on employee outcomes'. *Journal of Business Ethics*, **123**, 57–69.
- Chen, Z., Zhu, J. and Zhou, M. (2015). 'How does a servant leader fuel the service fire? A multilevel model of servant leadership, individual self-identity, group competition climate, and customer service performance'. *Journal of Applied Psychology*, **100**, 511–21.
- Cialdini, R. B. (2001). 'Harnessing the science of persuasion'. *Harvard Business Review*, **79**, 72–81.
- Dahl, J. (2014). 'Conceptualizing cooptation as a process: An outline of change in cooperative and competitive interactions'. *Industrial Marketing Management*, **43**, 272–79.
- Edwards, J. R. and Lambert, L. S. (2007). 'Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis'. *Psychological Methods*, **12**, 1–22.
- Ellington, J. K., Dierdorff, E. C. and Rubin, R. S. (2014). 'Decelerating the diminishing returns of citizenship on task performance: The role of social context and interpersonal skill'. *Journal of Applied Psychology*, **99**, 748–58.
- Enders, C. K. and Tofighi, D. (2007). 'Centering predictor variables in cross-sectional multilevel models: A new look at an old issue'. *Psychological Methods*, **12**, 121–38.
- Farh, J.-L. and Cheng, B.-S. (1997). 'Modesty bias in self-rating in Taiwan: Impact of item wording, modesty value, and self-esteem'. *Chinese Journal of Psychology*, **39**, 103–18.
- Farmer, S. M. and Van Dyne, L. (2017). 'Organization-specific prosocial helping identity: Doing and belonging as the basis of "being fully there"'. *Journal of Organizational Behavior*, **38**, 769–91.
- Fletcher, T. D., Major, D. A. and Davis, D. D. (2008). 'The interactive relationship of competitive climate and trait competitiveness with workplace attitudes, stress, and performance'. *Journal of Organizational Behavior*, **29**, 899–922.
- Gebauer, J., Riketta, M., Broemer, P. and Maio, G. (2008). 'Pleasure and pressure based prosocial motivation: Divergent relations to subjective well-being'. *Journal of Research in Personality*, **42**, 399–420.
- Gelfand, M. J., Erez, M. and Aycan, Z. (2007). 'Cross-cultural organizational behavior'. *Annual Review of Psychology*, **58**, 479–514.
- Gnyawali, D. R., Madhavan, R., He, J. and Bengtsson, M. (2016). 'The competition–cooperation paradox in inter-firm relationships: A conceptual framework'. *Industrial Marketing Management*, **53**, 7–18.
- Grant, A. M. (2008). 'Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity'. *Journal of Applied Psychology*, **93**, 48–58.
- Grant, A. M. (2013). *Give and Take: Why Helping Others Drives Our Success*. New York: Viking Penguin Group.
- Grant, A. M., Dutton, J. E. and Rosso, B. D. (2008). 'Giving commitment: Employee support programs and the prosocial process'. *Academy of Management Journal*, **51**, 898–918.

- Grant, A. M., Molinsky, A., Margolis, J., Kamin, M. and Schiano, W. (2009a). 'The performer's reactions to procedural injustice: When prosocial identity reduces prosocial behavior'. *Journal of Applied Social Psychology*, **39**, 319–49.
- Grant, A. M., Parker, S. and Collins, C. (2009b). 'Getting credit for proactive behavior: Supervisor reactions depend on what you value and how you feel'. *Personnel Psychology*, **62**, 31–55.
- Halbesleben, J. R. B., Bowler, W. M., Bolino, M. C. and Turnley, W. H. (2010). 'Organizational concern, prosocial values, or impression management? How supervisors attribute motives to organizational citizenship behavior'. *Journal of Applied Social Psychology*, **40**, 1450–89.
- Hamel, G. (1991). 'Competition for competence and interpartner learning within international strategic alliances'. *Strategic Management Journal*, **12**, 83–103.
- Hardy, C. L. and Van Vugt, M. (2006). 'Nice guys finish first: The competitive altruism hypothesis'. *Personality and Social Psychology Bulletin*, **32**, 1402–13.
- Hayes, A. F. and Preacher, K. J. (2010). 'Quantifying and testing indirect effects in simple mediation models when the constituent paths are nonlinear'. *Multivariate Behavioral Research*, **45**, 627–60.
- Houser-Marko, L. and Sheldon, K. M. (2006). 'Motivating behavioral persistence: The self-as-doer construct'. *Personality and Social Psychology Bulletin*, **32**, 1037–49.
- Huo, W. W., Yi, H., Men, C., Luo, J., Li, X. and Tam, K. L. (2017). 'Territoriality, motivational climate, and idea implementation: We reap what we sow'. *Social Behavior and Personality: An International Journal*, **45**, 1919–32.
- Johnson, D. and Johnson, R. (1983). 'The socialization and achievement crisis: Are cooperative learning experiences the solution?'. *Applied Social Psychology Annual*, **4**, 119–64.
- Kim, H. and Gong, Y. (2009). 'The roles of tacit knowledge and OCB in the relationship between group-based pay and firm performance'. *Human Resource Management Journal*, **19**, 120–39.
- Kim, T. Y., Liu, Z. and Diefendorff, J. M. (2015). 'Leader-member exchange and job performance: The effects of taking charge and organizational tenure'. *Journal of Organizational Behavior*, **36**, 216–31.
- Kim, Y. J., Van Dyne, L., Kamdar, D. and Johnson, R. E. (2013). 'Why and when do motives matter? An integrative model of motives, role cognitions, and social support as predictors of OCB'. *Organizational Behavior and Human Decision Processes*, **121**, 231–45.
- Kulik, B. W., O'Fallon, M. J. and Salimath, M. S. (2008). 'Do competitive environments lead to the rise and spread of unethical behavior? Parallels from Enron'. *Journal of Business Ethics*, **83**, 703–23.
- Le Roy, F. and Fernandez, A. S. (2015). 'Managing cooperative tensions at the working-group level: The rise of the cooperative project team'. *British Journal of Management*, **26**, 671–88.
- LeBreton, J. M. and Senter, J. L. (2008). 'Answers to 20 questions about interrater reliability and interrater agreement'. *Organizational Research Methods*, **11**, 815–52.
- LePine, J. A., Erez, A. and Johnson, D. E. (2002). 'The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis'. *Journal of Applied Psychology*, **87**, 52–65.
- Lin, W., Ma, J., Wang, L. and Wang, M. (2015). 'A double-edged sword: The moderating role of conscientiousness in the relationships between work stressors, psychological strain, and job performance'. *Journal of Organizational Behavior*, **36**, 94–111.
- Lewicki, R., Barry, B. and Saunders, D. M. (2019). *Essentials of Negotiation*. 8th ed. New York, NY: McGraw-Hill Education.
- Lundgren-Henriksson, E.-L. and Kock, S. (2016). 'A sensemaking perspective on cooptation'. *Industrial Marketing Management*, **57**, 97–108.
- Lynch, P. D., Eisenberger, R. and Armeli, S. (1999). 'Perceived organizational support: Inferior versus superior performance by wary employees'. *Journal of Applied Psychology*, **84**, 467–83.
- Meglino, B. M. and Korsgaard, A. (2004). 'Considering rational self-interest as a disposition: Organizational implications of other orientation'. *Journal of Applied Psychology*, **89**, 946–59.
- Method, J. R., Lepak, D., Shipp, A. J. and Boswell, W. R. (2017). 'Good citizen interrupted: Calibrating a temporal theory of citizenship behavior'. *Academy of Management Review*, **42**, 10–31.
- Moorman, R. H. and Blakely, G. L. (1995). 'Individualism-collectivism as an individual difference predictor of organizational citizenship behavior'. *Journal of Organizational Behavior*, **16**, 127–42.
- Morris, M. W. and Leung, K. (2000). 'Justice for all? Progress in research on cultural variation in the psychology of distributive and procedural justice'. *Applied Psychology: An International Review*, **49**, 100–32.
- Muthén, L. and Muthén, B. (2012). *Mplus Version 7 User's Guide*. Los Angeles, CA: Muthén & Muthén.
- Naidoo, S. and Sutherland, M. (2016). 'A management dilemma: Positioning employees for internal competition versus internal collaboration. Is cooptation possible?' *South African Journal of Business Management*, **47**, 75–87.

- Naumann, B. N. and Bennet, A. P. (2000). 'Organisational size and workers' attitude to work'. *Journal of Applied Psychology*, **17**, 10–23.
- Obstfeld, D. (2005). 'Social networks, the tertius iungens orientation, and involvement in innovation'. *Administrative Science Quarterly*, **50**, 100–30.
- Penner, L. A., Midili, A. R. and Kegelmeyer, J. (1997). 'Beyond job attitudes: A personality and social psychology perspective on the causes of organizational citizenship behavior'. *Human Performance*, **10**, 111–31.
- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M. and Blume, B. D. (2009). 'Individual-and organization-level consequences of organizational citizenship behaviors: A meta-analysis'. *Journal of Applied Psychology*, **94**, 122–41.
- Podsakoff, P. M., MacKenzie, S. B. and Podsakoff, N. P. (2011). 'Sources of method bias in social science research and recommendations on how to control it'. *Annual Review of Psychology*, **63**, 539–69.
- Preacher, K. J., Zyphur, M. J. and Zhang, Z. (2010). 'A general multilevel SEM framework for assessing multilevel mediation'. *Psychological Methods*, **15**, 209–33.
- Priesemuth, M., Schminke, M., Ambrose, M. L. and Folger, R. (2014). 'Abusive supervision climate: A multiple-mediation model of its impact on group outcomes'. *Academy of Management Journal*, **57**, 1513–34.
- Ramarajan, L., Berger, I. E. and Greenspan, I. (2017). 'Multiple identity configurations: The benefits of focused enhancement for prosocial behavior'. *Organization Science*, **28**, 495–513.
- Rapp, A. A., Bachrach, D. G. and Rapp, T. L. (2013). 'The influence of time management skill on the non-linear relationship between organizational citizenship behavior and task performance'. *Journal of Applied Psychology*, **98**, 668–77.
- Rubin, R. S., Dierdorff, E. C. and Bachrach, D. G. (2013). 'Boundaries of citizenship behavior: Non-linearity and context in the citizenship and task performance relationship'. *Personnel Psychology*, **66**, 377–406.
- Salancik, G. R. and Pfeffer, J. (1978). 'A social information processing approach to job attitudes and task design'. *Administrative Science Quarterly*, **23**, 224–53.
- Shao, D., Zhou, E. and Gao, P. (2019). 'Influence of perceived socially responsible human resource management on task performance and social performance'. *Sustainability*, **11**, 1–22.
- Sluss, D. M. and Ashforth, B. E. (2007). 'Relational identity and identification: Defining ourselves through work relationships'. *Academy of Management Review*, **32**, 9–32.
- Smith, W. K. and Lewis, M. W. (2011). 'Toward a theory of paradox: A dynamic equilibrium model of organizing'. *Academy of Management Review*, **36**, 381–403.
- Spector, P. E. (2006). 'Method variance in organizational research: Truth or urban legend?'. *Organizational Research Methods*, **9**, 221–32.
- Spurk, D., Keller, A. C. and Hirschi, A. (2019). 'Competition in career tournaments: Investigating the joint impact of trait competitiveness and competitive psychological climate on objective and subjective career success'. *Journal of Occupational and Organizational Psychology*, **92**, 74–97.
- Stadler, L. and Van Wassenhove, L. N. (2016). 'Coopetition as a paradox: Integrative approaches in a multi-company, cross-sector partnership'. *Organization Studies*, **37**, 655–85.
- Strese, S., Meuer, M. W., Flatten, T. C. and Brettel, M. (2016). 'Examining cross-functional coopetition as a driver of organizational ambidexterity'. *Industrial Marketing Management*, **57**, 40–52.
- Swann, W. B. (1987). 'Identity negotiation: Where two roads meet'. *Journal of Personality and Social Psychology*, **53**, 1038–51.
- Taber, T. D. and Deosthali, K. (2014). 'Analysis of self-reported motives for task-related helping: Implications for an integrated theory of helping'. *Journal of Business and Psychology*, **29**, 343–66.
- Takeuchi R., Bolino M. C., Lin C. C. (2015). 'Too many motives? The interactive effects of multiple motives on organizational citizenship behavior. *Journal of Applied Psychology*, **100** (4), 1239–1248. <https://doi.org/10.1037/apl0000001>.
- Tsui, A. S. and Farh, J. L. (1997). 'Where Guanxi matters: Relational demography and Guanxi in the Chinese context'. *Work and Occupations*, **24**, 56–79.
- Van der Vegt, G. S. and Janssen, O. (2003). 'Joint impact of interdependence and group diversity on innovation'. *Journal of Management*, **29**, 729–51.
- Weiner, B. (1985). 'An attributional theory of achievement motivation and emotion'. *Psychological Review*, **92**, 548–73.
- Willer, R. (2009). 'Groups reward individual sacrifice: The status solution to the collective action problem'. *American Sociological Review*, **74**, 23–43.