Group Dynamics: Theory, Research, and Practice
2012, Vol. 16, No. 4, 289–302

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1089-2699/12/$12.00 DOI: 10.1037/a0028524

Interaction Between One's Own and Others' Procedural Justice Perceptions and Citizenship Behaviors in Organizational Teams: The Moderating Role of Group Identification

Jing Du
Wuhan University

Jin Nam Choi
Seoul National University

Fadi Hashem
Cranfield School of Management and Arab Open University

Focusing on the social aspects of procedural justice (PJ), we examine the interaction between one's own and others' PJ perceptions in organizational teams. The results derived from 183 employees of 21 work teams indicate that one's own PJ perception is a positive predictor of helping and creative behavior only when others' PJ perception is low. The role of others' PJ as a moderator of the relationship between one's own PJ and helping behavior is stronger when a member's group identification is low than when it is high. This study reveals an intriguing social-comparison process involving PJ in organizations.

Keywords: procedural justice, social comparison, helping behavior, creative behavior, group identification

Justice is a critical driver of various workplace outcomes, such as job satisfaction, organizational commitment, organizational citizenship behavior (OCB), and task performance (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). Among various types of justice (e.g., distributive and interactional justice), procedural justice (PJ) has received substantial research attention, perhaps because of its stronger association with employee attitudes and behaviors (Cohen-Charash & Spector, 2001). Moreover, employee reactions to distributive justice are shaped by PJ; that is, employees may not react negatively even when they are dissatisfied with the actual distribution of resources (e.g., pay and promotion) if they perceive the fairness of the procedure implemented during the decision-making process (Konovsky, 2000).

According to the core theoretical perspectives adopted in justice literature, such as social-comparison theory (Festinger, 1954) and equity theory (Adams, 1965), perceptions of justice do not form and influence individual attitudes and behaviors in a social vacuum. Surprisingly, however, existing studies have treated PJ mostly as an individual-level construct, disregarding the *social and comparative dynamics* involved. What will happen if a person deems a situation unjust, but his or her teammates perceive it to be fair? What can be expected when an individual considers a situation just, but others see it as unfair? In contemporary organizations that increasingly rely on teams, the social comparison between one's and others' PJ perceptions may have critical implications on individual behaviors, which represent effects that substantively differ from those of individual PJ perceptions or the work unit's PJ climate

This article was published Online First May 21, 2012.

Jing Du, Economics and Management School, Wuhan University, Wuhan, China; Jin Nam Choi, College of Business Administration, Seoul National University, Seoul, South Korea; Fadi Hashem, Cranfield School of Management, UK and Faculty of Business Studies, Arab Open University, Beirut, Lebanon.

This study was supported by research grants from the National Natural Science Foundation of China (Project No., 71172202) and from the Humanities and Social Sciences Project, Ministry of Education, China (Project No., 09YJC630173).

Correspondence concerning this article should be addressed to Jin Nam Choi, College of Business Administration, Seoul National University, Shinlim-dong, San 56-1, Gwanak-gu, Seoul, South Korea, 151-916. E-mail: jnchoi@snu.kr

(Greenberg, Ashton-James, & Ashkanasy, 2007).

Among various theories developed to understand how people perceive and react to their social environment, social-comparison theory has received extensive research attention (Greenberg et al., 2007). Research on social comparison suggests that people possess a fundamental drive to conduct social comparison for the self-evaluation of their opinions and abilities (Festinger, 1954). In the present study, we focus on self–other comparison in the PJ domain. In accordance with social-comparison theory, we propose that team members intentionally and unintentionally obtain social information on what happens to others and how others perceive PJ during social exchanges, thereby being affected by others' PJ perceptions. The interplay between one's own and others' PJ perceptions was examined in several earlier studies conducted in laboratory settings that frequently involved an unseen fictional other (Ambrose, Harland, & Kulik, 1991; Grienberger, Rutte, & Van Knippenberg, 1997; Van den Bos & Lind, 2001; Kray & Lind, 2002). Unfortunately, the findings from these studies are either nonsignificant or equivocal at best (Colquitt, 2004). Therefore, even though a few studies have examined the effect of self–other PJ comparison on individual reactions, literature is lacking in the following aspects.

First, given the prevailing focus on attitudinal outcomes, previous studies have failed to explore the influence of the interaction between one's own and others' PJ perceptions on discretionary behaviors (Van Dyne & LePine, 1998). We believe that discretionary behaviors are sensitive to and readily reflect self–other comparison because employees can easily withdraw or exhibit such behaviors without the risk of punishment (Colquitt et al., 2001). We examine two types of extrarole, discretionary behaviors, helping and creative, which reflect affiliative and challenging forms of OCB, respectively (Van Dyne & LePine, 1998). PJ reflects a fair social-exchange relationship between employees and organizations, which should enhance citizenship behaviors, such as helping and change behaviors (Moon, Kamdar, Mayer, & Takeuchi, 2008; Simmons, 2011). By comparing one's own PJ perceptions with those of others, individuals can evaluate and adapt to their situation by reducing or enhancing these discretionary behaviors (Adams, 1965; Moorman, 1991). Considering the distinct contributions of discretionary behaviors to team processes and outcomes, examining the manner by which members' self–other PJ comparison affects such behaviors is a worthwhile endeavor.

Second, in previous studies (Colquitt, 2004; Kray & Lind, 2002), both one's own and others' PJ were reported by a focal person, thereby presenting the possibility that the results were subject to a single person's retrospective, biased perceptions. To avoid such methodological biases, we operationally define one's own PJ as a focal member's perceived PJ and others' PJ as the aggregated PJ perception of other members within a team (e.g., Polzer, Milton, & Swann, 2002). This multisource approach eliminates percept–percept bias and offers a stringent test on the effects of self–other PJ comparisons on discretionary behaviors. The use of PJ perceptions rated by others instead of self-reported others' PJ perceptions is consistent with the recommended research strategy in group composition and person–environment fit literature (Kristof-Brown, Zimmerman, & Johnson, 2005), as well as with growing evidence showing that social contextual influence cannot be fully captured by within-person perceptual processes (Bargh, 2007).

Finally, the current study investigates the interaction between one's own and others' PJ perceptions, and its behavioral consequences using field samples. Research on PJ has demonstrated that PJ facilitates discretionary behavior by establishing long-term and reciprocal relationships between employees and organizations (Colquitt et al., 2001). Therefore, organizational teams with interaction history and expectations for future interpersonal exchanges offer an adequate empirical setting for examining the phenomenon in question.

In sum, the present study contributes to the understanding of the social processes that involve PJ perceptions in groups. Specifically, we propose that one team member's own PJ has a positive relationship with the two types of OCB (helping and creative behaviors), and that others' PJ moderates such a relationship. We also propose that the extent to which others' PJ moderates the effects of a focal member's own PJ depends on his or her identification with the group, which should prescribe the focal member's willingness to accept social influence from

other members. Group identification may be a meaningful moderator that signifies the boundary condition for the interplay between a focal member's own and others' PJ perceptions in work group settings. We test our hypotheses using hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002) because it can provide less biased test results in the present empirical context. Our sample comprises 183 employees from 21 work units in a Lebanese bank.

Theoretical Framework

Researchers have identified employees' PJ perceptions as a significant predictor of their voluntary extrarole contributions (Colquitt et al., 2001). In the present study, we examine two types of OCB as plausible behavioral reactions to varying levels of one's own PJ and others' PJ in organizational teams. Helping behavior, an *affiliative* form of OCB, refers to employees' discretionary behavior that goes beyond the call of duty and contributes to task performance by facilitating the prevention or resolution of the work-related problems of other members (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Creative behavior, a *challenging* form of OCB, refers to the generation of new ideas, products, or procedures that are useful for improving the situation and performance related to a task, group, and organization (Choi, 2007). These types of OCBs are becoming more critical in today's organizations, where most tasks are team-based (requiring interpersonal collaboration) and where tasks frequently involve unpredictable situations that require creative problem solving (McAllister, Kamdar, Morrison, & Turban, 2007).

One's Own Procedural Justice Perception

We propose that a focal member's own PJ perception has positive effects on helping and creative behaviors. PJ reflects the extent to which resource-allocation decisions are made in line with principles of justice, such as consistency across time and person, accuracy of information, correctibility, and bias suppression (Leventhal, 1980). These practices promote fair social-exchange relationships between members and a team, and develop the expectation of fair treatment in the long run (Blau, 1964). This positive expectation signals that members can gain an equitable reward for their investment in a task and team. This sense of safety with regard to the reciprocal relationship enables members to exert extra effort in helping others or generating creative ideas to solve work-related problems.

By presenting the image of fair treatment of and benevolent motivation toward members, organizations may prompt members to feel obligated to repay the "debt" and complete the cycle of reciprocity, which should increase discretionary contributions (cf. psychological contract, Zhao, Wayne, Glibkowski, & Bravo, 2007). Meta-analytic studies on OCB (Podsakoff et al., 2000) and PJ (Colquitt et al., 2001) demonstrated that PJ is a significant antecedent of helping, which is an interpersonal dimension of OCB. With regard to creative behavior, however, scholars have begun considering PJ as a predictor only recently. Simmons (2011) reported that PJ is significantly related to creative performance through its enhancement of self-value and intrinsic motivation. Moon et al. (2008) found that PJ is a positive predictor of taking charge, a construct similar to creative behavior. Overall, we predict that one's own PJ perception is a positive predictor of extrarole behaviors.

> *Hypothesis 1:* One's own PJ perception is positively related to helping and creative behaviors.

Others' Procedural Justice Perceptions

The function of one's own PJ perception in shaping individual behavior cannot be fully understood without taking into account the person's social context, especially within a team context where social interaction is more intensive. Social-comparison theory acknowledges that people possess a fundamental drive to obtain social information to evaluate themselves (Festinger, 1954). By gaining information through social interactions (social information-processing theory; Salancik & Pfeffer, 1978), team members spontaneously assess their relative position within a team and determine answers to issues, such as how they are performing and what they should think and feel (Gibbons & Buunk, 1999). They even intentionally search information to protect themselves, especially in threatening situations, by enhancing their self-esteem (Gibbons & Buunk, 1999). With

regard to just treatment, Ployhart and Harold (2004) maintained that aside from one's own PJ perception, those of others provide information for members to evaluate their social context.

To theorize how one's own and others' PJ perceptions work together to shape members' discretionary behavior in work teams, we propose an interactive relationship between the two PJ constructs. Attribution theory suggests that people make sense of events by identifying the cause to either personal, internal reasons or situational, external reasons, resulting in the assessment of the controllability and stability of the given event or context (Jaspars, 1983; Shapcott & Carron, 2010). When most members in a team perceive high PJ, the focal member may ascribe PJ to stable external causes such as organizational practices (O'Laughlin & Malle, 2002). Given this external attribution, the focal member may believe that PJ is a general resource offered by the system and available to all members (Ployhart & Harold, 2004). This belief may diminish the salience of PJ for each member, because PJ is taken for granted by members (cf. ambient stimuli, Choi, Price, & Vinokur, 2003). With the reduced distinctiveness of PJ within the team, PJ may become less effective in enhancing extra, discretionary contributions, such as the helping and creative behaviors of each member.

In contrast, when others' perception of PJ is low, PJ cannot be attributed to external causes and is regarded as a general resource. It becomes salient and evokes a focal member's attention. In this case, PJ becomes a distinct resource that may provide unique benefits and privileges that are unavailable to other members (cf. discretionary stimuli, Choi et al., 2003). When PJ becomes available only to the focal member, he or she actively attempts to justify the situation and believes that the distinct PJ is due to his or her own credit or input. This is the classic situation of positive inequity (Adams, 1965), in which a person is motivated to raise input perhaps by engaging in discretionary behaviors to restore equity and justify the prestige he or she receives (Ramamoorthy, Flood, Slattery, & Sardessai, 2005). Equity theory also indicates that high discretionary behaviors can maintain focal members' high self-concept (high distinctiveness in PJ) and can help them fulfill those obligations induced by a potentially over-rewarding situation (Adam, 1965). Therefore, others' low perception of PJ is likely to strengthen the salience of PJ as a distinct resource available to an individual. In sum, we predict that when others' PJ is low, the effect of one's own PJ on discretionary behaviors is likely accentuated by provoking positive inequity and enhancing the salience of PJ.

> *Hypothesis 2:* The positive relationships between one's own PJ perception and helping and creative behaviors are moderated by others' PJ perceptions, such that the relationships are stronger when others' PJ perceptions are low than when they are high.

Group Identification

Colquitt (2004) proposed that the collectivistic values of members may strengthen the effect of the interaction between one's own PJ and others' PJ, because collectivistic individuals tend to value group membership and are willing to sacrifice for the group's interest. Nevertheless, in his study, this three-way interaction was nonsignificant, indicating that collectivistic values may not be a significant moderator. In the present study, instead of members' values, group identification is examined as a potential moderator of the interaction between one's own and others' PJ perceptions. Group identification refers to "a relatively enduring state that reflects an individual's readiness to define him- or herself as a member of a particular social group" (Haslam, 2001, p. 383). As social-identity theory suggests (Hogg & Terry, 2000), individuals with high group identification feel a sense of oneness with a group and are motivated to promote the interest of the group because they accept group membership as part of their self-definition. Thus, highly identified members of a group tend to be loyal to the group and are open to influence from it (Kidwell, Mossholder, & Bennett, 1997). By contrast, for those with low group identification, personal identity is more salient than group identity because self-definition is dominantly formed at the personal level, lacking group-based self-definition (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Unlike collectivistic values that may not be active in a given team setting, the group identification of members more directly taps into their psychological readiness to compro-

mise their own interests and care about the wellbeing of others.

We propose that the interaction between one's own and others' PJ perceptions becomes stronger when a focal member's group identification is high. Here, we draw on Colquitt's (2004) argument that the interaction between one's own and others' PJ is more pronounced with high collectivistic members, who are more susceptible to group influence. Compared with members with low identification, those with high group identification are more sensitive and responsive to others' PJ perceptions (O'Laughlin & Malle, 2002). Thus, when faced with low others' PJ, members with high identification react more strongly in accordance with their own PJ levels. The situation of potential positive inequity created by increasing levels of one's own PJ combined with low others' PJ may impose greater psychological tension on the focal person when he or she more strongly identifies with the group. When a member who feels a strong sense of belongingness to the group enjoys special privileges while others are deprived of such resources, he or she is driven to increase efforts for the group so that he or she can pay back other members and justify the distinct benefits he or she enjoys (Ployhart & Harold, 2004). Therefore, to avoid the severe stress of positive inequity, members with high group identification contribute more strongly to the advancement of group goals by collaborating with others and suggesting ideas to improve team performance (Ashforth & Mael, 1989).

Conversely, members with low identification are less vulnerable to the motivational effect of potential positive inequity because they can create a psychological distance from others and ignore others' unfavorable situations (low others' PJ) while fully enjoying the distinct benefits accrued from increasing levels of their own PJ (Dietz-Uhler & Murrell, 1998). Thus, members with low group identification may not feel psychological discomfort caused by potential positive inequity because of their strong self-focused identity and willingness to advance their own self-interests at the expense of others (Turner et al., 1987). In sum, we hypothesize that group identification further strengthens the interaction effects of own and others' PJ perceptions on discretionary behavior.

Hypothesis 3: The moderating effect of others' PJ perceptions on the relationship between one's own PJ perception and helping and creative behaviors is further moderated by group identification, such that the moderating effect of others' PJ is stronger when group identification is high than when it is low.

Method

Sample and Data-Collection Procedure

We tested our hypotheses using data collected from the employees and managers of a bank in Lebanon. We recruited 22 work teams that included functional departments in the headquarters (e.g., product development, IT services, HR) and sales branches. Our initial sample included 240 employees and their managers. With the assurance of anonymity of responses, 185 employees (response rate = 77.1%) and all 22 managers of the sampled work teams returned the completed questionnaires directly to the researchers by mail. We excluded one team from our analysis because only two members from this team participated in the study. The final sample included 183 employees and 21 managers from 21 work teams. The number of employees from each team ranged from 3 to 22 ($M = 8.7$; $SD = 5.12$). Females comprised 57% of the employee sample. The average age and company tenure of the employees were 36.4 years and 12.3 years, respectively. These employees had either a bachelor's degree (83%) or a vocational degree (17%).

Measures

Own PJ. We used a four-item scale ($\alpha = .86$) adopted from the Procedural Justice Scale developed by Roch and Shanock (2006) to measure employees' perception of PJ. The items included both control-based PJ, such as "I am able to express my views and feelings during the procedures of determining my work outcomes," and rule-based PJ, such as "The procedures for evaluating work outcomes are applied consistently." The participants responded to the items using a 7-point Likert-type scale (1 = *not at all true*, 7 = *very true*).

Others' PJ. In previous studies (Colquitt, 2004; Kray & Lind, 2002), the focal person

reported both own PJ and others' PJ, which may produce perceptual biases due to the use of a single source. For example, when the focal person feels uncomfortable with the current situation, he or she may report low own PJ and high other's PJ, even if others actually also feel injustice. In order to investigate the actual social influence and avoid the potential biases, Kristof (1996) proposed that context characteristics (e.g., organization or group value) could be measured by aggregating perceptions of others in person-organization fit research. For example, to examine interpersonal congruence effects, Polzer et al. (2002) compared self-reported self-views of the focal person and others' appraisals of the focal person obtained by averaging others' evaluations.

Drawing on these studies, the present study operationalizes others' PJ for each participant as the aggregated score of all other members' PJ ratings within the same team. To this end, for each member, the average of his or her coworkers' own PJ ratings measured using the four-item scale described above was computed. Through this procedure, unique others' PJ scores were assigned to each member in the same team, providing an intact referent for social comparison that reflects the factual PJ context for the focal member. To check if all members' PJ ratings within the same team had sufficient sharedness as a collective phenomenon, we computed aggregation statistics, such as ICC and r_{wg} values (Ostroff, Shin, & Kinicki, 2005). The ICC(1), ICC(2), and r_{wg} coefficients for the procedural justice scale were .12, .56, and .61 ($p < .05$; Dunlap, Burke, & Smith-Crowe, 2003), respectively. These coefficients indicate a moderate level of between-groups variance and shared perceptions among members (Lance, Butts, & Michels, 2006), showing that each member's personal judgment of PJ represented a distinct individual phenomenon, but at the same time, held significant agreement based on shared experiences (Van Mierlo, Vermunt, & Rutte, 2009).

Group identification. To measure the group identification, we employed the four-item scale ($\alpha = .85$) developed by Kidwell et al. (1997). Sample items included, "I feel that I am really part of my work group" and "The work Group I belong to is a close one." The participants rated these items using the same 7-point scale used for procedural justice.

Helping behavior. To measure the extent to which the participants helped other members, we adopted five items ($\alpha = .93$) from Moorman and Blakely (1995), which included "This employee willingly gives his or her time to help others who have work-related problems" and "This employee shows genuine concern and courtesy toward coworkers, even under the most trying business or personal situations." Managers evaluated their subordinates' helping behavior using a 10-point scale (1 = *rarely*, 10 = *quite often*).

Creative behavior. We measured employees' creative behavior using four items ($\alpha = .81$) taken from Zhou and George (2001). The items included, "This employee suggests new ways of performing work tasks" and "This employee comes up with new and practical ideas to improve performance." Managers rated these items for each participant using the same 10-point scale used for helping behavior.

Control variables. Existing studies indicate that extrarole behaviors tend to be influenced by demographic variables (Organ, Podsakoff, & MacKenzie, 2006). In the present study, we included gender and organizational tenure as demographic controls.

Results

To examine the empirical distinctiveness of the study variables, we conducted two sets of confirmatory factor analyses (CFA). First, a two-factor CFA for procedural justice and group identification reported by the employees produced an acceptable model fit ($\chi^2(df = 26) = 47.24$, $p < .01$; CFI = .97, RMSEA = .067). Second, another two-factor CFA for helping behavior and creative behavior reported by the managers also resulted in a satisfactory fit ($\chi^2(df = 24) = 51.37$, $p < .001$; CFI = .98, RMSEA = .079). In both cases, an alternative one-factor model produced a significantly worse fit than the hypothesized two-factor solution (both $p < .001$). The means, standard deviations, and interscale correlations for all study variables are reported in Table 1.

In the current data, a member's own PJ is used to compute others' PJ score for his or her coworkers, which necessarily creates the nonindependence issue among own PJ and others' PJ variables within the same unit. In addition to the interdependence among members from the

Table 1
*Means, Standard Deviations, and Interscale Correlations (*N = *183)*

Variables	*M*	*SD*	1	2	3	4	5	6
1. Gender	.43	.49	—					
2. Tenure	12.30	9.45	.25***	—				
3. Own procedural justice	4.15	1.38	.14	.15*	—			
4. Others' procedural justice	4.15	.66	.05	.14	.27***	—		
5. Group identification	5.30	1.24	.09	.17*	.41***	.15*	—	
6. Helping behavior	7.41	1.15	−.09	−.15*	.07	.04	.06	—
7. Creative behavior	6.88	1.46	−.10	−.09	.11	.14	.07	.72***

Note. Gender: male = 0, female = 1.
* $p < .05$. *** $p < .001$.

same unit, the ratings of helping and creative behavior offered by the managers of the work unit also present the possibility of nonindependence among individual cases. For this reason, although others' PJ is operationalized as an individual-level variable and thus the study does not include any group-level variables, we employed a multilevel analytic approach (HLM; Raudenbush & Bryk, 2002) to take into account the shared group context offered by the 21 work units. Following Hofmann, Morgeson, and Gerras (2003) and Erdogan and Enders (2007), we obtained the estimates for explained variance using ordinary-least-squares regressions that provided information on statistical significance, which are not available in HLM.

Hypothesis Testing

The results of our HLM analysis are summarized in Table 2. In the first block of the hierarchical model, we entered two control variables and one's own PJ to predict helping and creative behavior (see Models 1 and 4 in Table 2). In the present data, employees' own PJ did not have a significant effect on the two extrarole behaviors (Hypothesis 1 not supported).

Moderating effect of others' PJ. In the second block, others' PJ and the interaction between one's own PJ and others' PJ were introduced to the equation to test the moderating role of others' PJ. As reported in Models 2 and 5 in Table 2, the main and moderating effects of others' PJ provided marginally significant and signif-

Table 2
Hierarchical Linear Models Predicting Helping and Creative Behaviors

	Helping behavior			Creative behavior		
Dependent variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Predictors						
Gender	−.11	−.09	−.11	−.16	−.13	−.18
Tenure	−.02*	−.02*	−.02*	−.01	−.01	−.01
Own PJ	.10	.12†	.11	.12	.17	.19
Others' PJ		.07	.02		.28†	.23
Own PJ × Others' PJ		−.17*	−.15*		−.21*	−.18*
Group identification			−.07			−.15
Own PJ × Group identification			.02			−.07
Others' PJ × Group identification			−.03			.02
Own PJ × Others' PJ × Group identification			.14**			.13**
R^2	.03†	.06*	.09†	.03	.07*	.09†
R^2 change		.03†	.03		.04*	.02

Note. PJ = procedural justice.
† $p < .10$. * $p < .05$. ** $p < .01$.

icant increases of the explained variance of helping and creative behavior, respectively ($\Delta R^2 = .03$, $p < .10$ and $\Delta R^2 = .04$, $p < .05$, respectively). Supporting Hypothesis 2, the results showed a negative interaction between one's own PJ and others' PJ on helping ($\beta = -.17$, $p < .05$) and creative behaviors ($\beta = -.21$, $p < .05$).

We further examined these significant two-way interactions following the simple-slope analysis procedure (Aiken & West, 1991). As depicted in Figure 1, the interaction pattern confirms Hypothesis 2. The effects of one's own PJ on helping and creative behaviors are more positive when others' PJ is low than when it is high. For helping behavior, one's own PJ was a significant positive predictor when others' PJ was low ($b = .29$, $p < .05$), but not when it was high ($b = -.09$, n.s.). Similarly, one's own PJ was positively related to creative behavior as a significant positive predictor when others' PJ was low ($b = .35$, $p < .05$), but not when it was high ($b = -.07$, n.s.).

Moderating effect of group identification. The last set of variables added to the HLM equation included group identification and its three-way interaction (Own PJ × Others' PJ × Identification), along with its two-way interactions with PJ variables to control for potential confounding from lower order interactions. Group identification and its two-way interactions did not show any significant effects on the outcomes. However, the three-way interaction was a significant predictor of helping ($\beta = .14$, $p < .01$) and creative behaviors ($\beta = .13$, $p < .01$).

Following Aiken and West's (1991) procedure, we graphed these three-way interactions (see Figure 2). Unexpectedly, the moderating effect of others' PJ was observed only when the person's group identification was low. The two slopes for high and low others' PJ under the condition of low group identification showed significant and marginally significant difference from each other for helping ($p < .05$) and creative behaviors, respectively ($p < .10$). In contrast, under the condition of high group identification, the slopes for high and low others' PJ were almost identical for helping and creative behaviors (both $p > .90$). This pattern is somewhat different from our theoretical expectation that employees will be influenced by others' PJ more strongly when they strongly identify with the group, and thus regard other members as a socially meaningful reference in shaping their behaviors. The present results indicate that employees are in fact more strongly affected by the interaction between own PJ and others' PJ when they do not identify with the group. This counterintuitive pattern will be discussed later.

Post hoc Analysis

In the current analysis, we employed an average of other members' PJ perceptions to operationalize a focal member's social surrounding in regard to PJ. Although the arithmetic mean or average has been regarded and most widely used as the central tendency that represents a set of numbers (Hofmann et al., 2003; Li & Cropanzano, 2009), alternative approaches could be adopted. One such alternative can be a median, which can be a valid measure of central tendency when the sample of numbers shows a skewed distribution with outliers. To examine the robustness of our empirical findings with

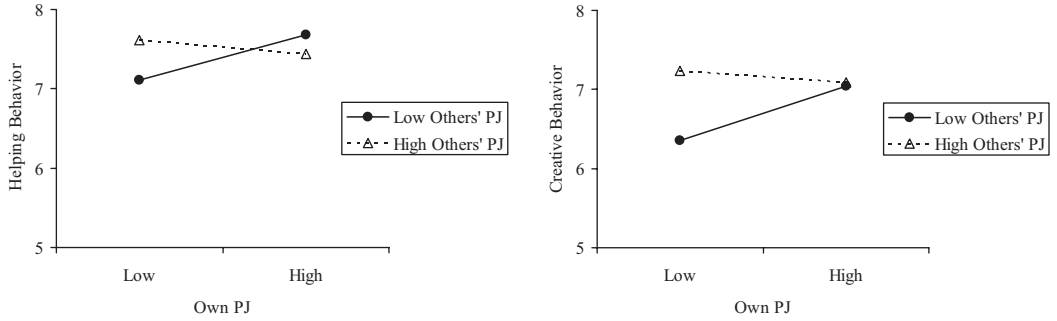

Figure 1. Interaction between own PJ and others' PJ.

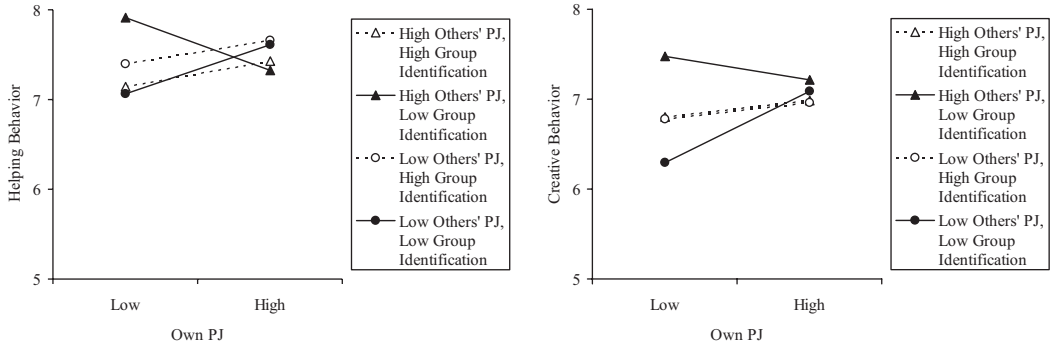

Figure 2. Three-way interaction of own PJ, other's PJ, and group identification.

this plausible alternative measure, we replicated the current analysis using the median as the operationalization of others' PJ. This post hoc analysis indicates that the results based on the median of others' PJ were almost identical to those based on the mean, although the results became slightly less significant. This additional analysis suggests the robustness of the current results across different measures of central tendency used to operationalized others' PJ, further bolstering our confidence in the findings.

Discussion

PJ has been widely investigated as a meaningful predictor of employee attitudes and behaviors in organizations (Colquitt et al., 2001). To overcome the prevailing focus on the individual perception of PJ, scholars examined PJ at the group level as a facet of group climate (Li & Cropanzano, 2009; Walumbwa, Hartnell, & Oke, 2010; Morrison, Wheeler-Smith, & Kamdar, 2011) and investigated the interpersonal dynamics involving PJ. Given that individuals develop a sense of fairness through social-comparison processes (Festinger, 1954), the relative standing of one's own PJ against others' PJ may offer meaningful insight that cannot be gained from examining one's own PJ alone. Unfortunately, previous studies regarding the interaction between one's own and others' PJ perceptions suffer from various shortcomings that limit our understanding of the interactive dynamics involving oneself and others in organizations (e.g., Kray & Lind, 2002). The present study extends literature by examining the interaction between one's own and others' PJ perceptions in real organizational teams. Below, we discuss the theoretical and practical implications of the study as well as its limitations.

Theoretical Implications

Our analysis demonstrates that one's own PJ perception is positively related to helping and creative behaviors only when others' PJ perceptions are low. This pattern signifies the importance of positive inequity caused by social comparison as the driver of extrarole behaviors. Perhaps this pattern stems from the high distinctiveness of one's own PJ perception when those of others are low (Choi et al., 2003). Our finding is somewhat different from that of Colquitt (2004), in which a higher level of role performance was observed when one's own PJ perception was consistent with those of others. In Colquitt's Study 1, however, both one's own and others' PJ were collected through self-reports, in which the participants could have reported high own PJ and high others' PJ when they felt comfortable with the situation, regardless of the others' actual evaluations of the situation. In Study 2 (Colquitt, 2004), one's own PJ and others' PJ were experimentally manipulated, and the student participants did not have sufficient experience of interactions and mutual obligations. These features could have reduced the effects of the motivational potential of positive inequity situations. Our results imply that the effect of social comparison is more pronounced in organizational teams with interdependent working relationships and expecta-

tions. The present results resonate the finding that employees are most motivated when their pay is moderately higher than those of their colleagues than when their pay is similar to those of others (Judge, Piccolo, Podsakoff, Shaw, & Rich, 2010).

Contrary to our expectation that the moderating function of others' PJ perception would be stronger for individuals with high group identification, the data indicate that others' PJ does not have any interaction with one's own PJ for members with high identification. Our initial theoretical expectation was that members with high group identification regard other members as a meaningful reference for social comparison, and that they are more willing to make extra contributions in potential positive inequity situations. In contrast to our expectation, a strong interaction was observed between one's own PJ and others' PJ among members with low (rather than high) group identification in predicting helping and creative behaviors (see Figure 2).

This unexpected pattern may be explained by two factors. High-identification members may share a strong sense of oneness with the group, and they do not need to draw a clear line that distinguishes themselves from the other members of a team (Hogg & Terry, 2000). Consequently, such members may engage in less within-group comparison and are inattentive to the relative distribution of resources, such as PJ among group members. Thus, for a member with high group identification, others' PJ appears to operate as an ambient-group context instead of a social-comparison target (Choi et al., 2003).

On the other hand, low-identification members see others as "them" instead of "us." Therefore, they are more likely to actively engage in comparing their relative standing against others (Turner et al., 1987). Given this mindset, members with low group identification become sensitive to the issues of "who gets more" and "who gets less" in the group. Moreover, they become more cognizant of overrewarding and underrewarding situations, resulting in more pronounced reactive behaviors. As Colquitt (2004) showed, equity sensitivity tends to magnify the interaction between one's own PJ and others' PJ. In summary, our findings suggest the possibility that group identification actually diminishes social comparison with other members and operates as a buffer that reduces the effect of others' PJ on employees' discretionary behaviors.

An interesting pattern is that among the members with low group identification, one's own PJ perception showed a marginally significant *negative* effect on helping and creative behaviors when others' PJ was high. We speculate that this pattern represents a temporary situation in which members with low group identification utilize discretionary, extrarole behavior to exchange short-term benefits with peers, supervisors, and the group (LePine & van Dyne, 2001). A weak sense of belongingness to the group combined with a distinctly low PJ perception compared with those of other members can cause feelings of isolation and frustration, given the dearth of social support, thereby possibly engendering a social crisis for the member (Ashforth & Mael, 1989). Although a highly likely reaction under this circumstance is withdrawal in various forms, such as absence or turnover (Colquitt et al., 2001), exit from or avoidance of the situation is often an implausible option. As an attempt to avoid this highly stressful situation and potential loss of rewards, a focal member may exhibit more citizenship behaviors with the goal of enhancing his or her standing and impression within the group and eschewing any penalty in resource allocation decisions (Bolino, Varela, Bande, & Turnley, 2006). This extra effort to survive by low-identification members should diminish as they obtain a level of PJ perception similar to those of other members, a situation which obviates the need for such discretionary behaviors with instrumental goals (Amiot & Sansfacon, 2011).

Study Limitations and Conclusion

Several limitations of this study should be considered. First, our results were based on cross-sectional data. Thus, we cannot specify the causal directions among the variables, because people shape their social perceptions using information from others through social interactions, and such social processes between self and others are continuous and reciprocal (Gibbons & Buunk, 1999; Salancik & Pfeffer, 1978). The temporal dynamics and recursive feedback loops involving one's own PJ, and others' PJ, as well as employee behavior, may be an intriguing issue for future studies.

Second, the present research setting was a Lebanese bank. Research has shown that Lebanese culture encourages competition (Green, Deschamps, & Páez, 2005). Hence, social comparison (and the influence of others' PJ perceptions) in Lebanon could be more severe than in countries with low competitive cultures, such as Spain and Chile. Therefore, the present empirical results may not be entirely generalizable to employees with other cultural backgrounds.

Third, although we have attempted to provide a more stringent test on self–other PJ comparison by separating the sources of two PJ perceptions and using managerial ratings of citizenship behaviors, the current measure of PJ included two distinct collapsed aspects of PJ: control-based and rule-based PJ. Given that the former is about personal control of a procedure and the latter is about the system offering PJ (Colquitt, 2004), they may initiate somewhat different psychological processes involving social comparison. Future studies may pursue a more fine-grained approach to conceptualizing PJ to enrich and offer a more comprehensive understanding of the given phenomenon.

Finally, the present study did not control the effects of other meaningful variables that could modify the frequency and strength of social comparison. For example, task interdependence can enhance the frequency of spontaneous social comparison that stems from intensive social interaction, thereby possibly exaggerating the effects of self–other PJ comparisons. In addition, individual characteristics, such as high equity sensitivity and unstable self-image due to high neuroticism, can boost or diminish individual inclination toward social comparison with others because those individual dispositions shape the need for self-evaluation and self-improvement (Colquitt, 2004; Gibbons & Buunk, 1999). Future studies should incorporate the structural or personal variables that may modify the underlying dynamics of social comparison in organizational teams.

Nevertheless, the present study offers valuable practical and theoretical implications. Practically speaking, the results suggest that for members with high group identification, the situation is simple: Their leaders may enhance the overall level of PJ, perhaps by creating a climate conducive to it (Li & Cropanzano, 2009; Walumbwa et al., 2010). For members with low group identification, however, developing potential positive inequity and/or negative inequity situations appears to be a more favorable approach. Both situations seem to motivate employees to perform citizenship behaviors through different psychological mechanisms. Theoretically, the present study reveals the meaningful social dynamics of PJ and identifies the boundary conditions that change the function of PJ for individuals in organizational teams. Previous studies focused primarily on affective reactions in student teams, whereas the present study reveals the behavioral consequences of self–other PJ comparisons. The incongruence between one's own and others' PJ perceptions resulted, interestingly, in favorable discretionary behavioral outcomes for team members, particularly when they do not strongly identify with a team and are willing to exploit the instrumental value of citizenship behaviors. Future studies may further investigate whether this counterintuitive effect takes place for other contextual perceptions, such as perceived organizational support, organizational culture, and interpersonal trust.

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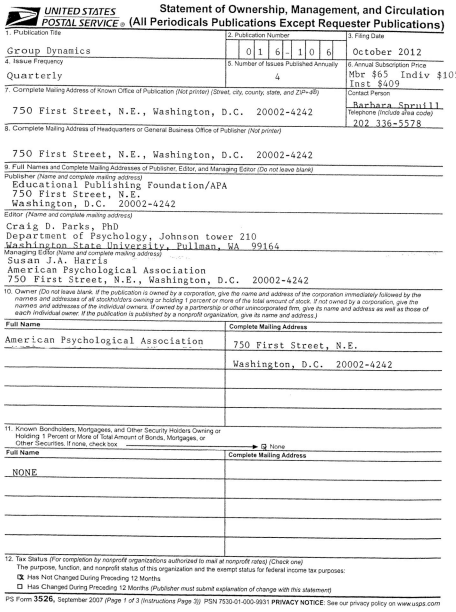
Received March 16, 2011
Revision received February 8, 2012
Accepted March 21, 2012 ■



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4. Issue Frequency	5. Number of Issues Published Annually	6. Annual Subscription Price
Quarterly	4	Mbr $65 Indiv $10[illegible] Inst $409

7. Complete Mailing Address of Known Office of Publication (Not printer) (Street, city, county, state, and ZIP+4®): 750 First Street, N.E., Washington, D.C. 20002-4242 — Contact Person: Barbara Spruill; Telephone (Include area code): 202 336-5578

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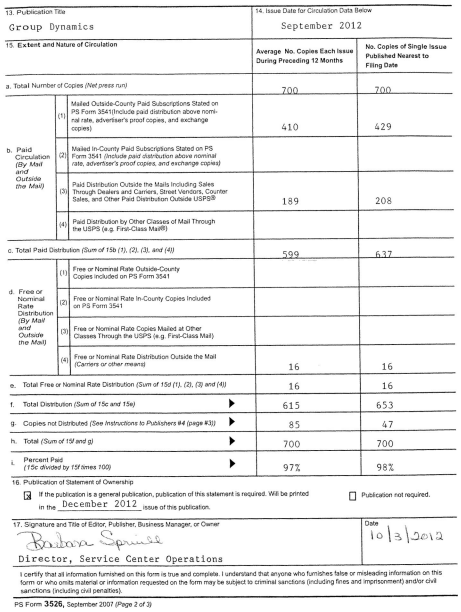

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