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Self-Esteem and Justice Orientation as Moderators for Individual- and Group-Level

Justice Effects

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Abstract

We examine self-esteem and justice orientation as individual difference factors that moderate the relationship between individual-level and group-level justice and potential employee reactions. Two studies were conducted using scenarios in which levels of individual-level and group-level justice were manipulated. Using a sample of 419 undergraduate students, Study 1 showed that, whereas self-esteem moderated the relationship between individual-level procedural justice and intention to leave, justice orientation moderated the relationship between group-level procedural justice and helping behaviors. Using a sample of 207 undergraduate students, Study 2 showed that justice orientation moderated the relationships between individual-level and group-level distributive justice, and helping and counterproductive behaviors. Implications for theory and practice are discussed.

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Research on organizational justice has repeatedly contended for the importance of treating employees fairly. Treating employees fairly has been found to increase a number of positive employee outcomes while treating them unfairly has been found to cause negative employee reactions. The employee outcomes that have been found to be affected by such fair/unfair treatment include job performance, organizational citizenship behaviors, organizational commitment, job satisfaction, voluntary turnover, absenteeism, retaliations and counterproductive behaviors (e.g., see Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Lavelle, Rupp, & Brockner, 2007 for reviews). Organizational justice researchers have also investigated why some people respond to the same justice treatment differently. That is, researchers have investigated individual differences as moderators of the effects of fair/unfair treatment (e.g., Colquitt & Greenberg, 2003, Colquitt, Scott, Judge, & Shaw, 2005; Scott & Colquitt, 2007; Wiesenfeld, Swann, Brockner, & Bartel, 2007). To date, several individual difference factors that moderate the effects of organizational justice have been identified, such as equity sensitivity (Huseman & Hatfield, 1987), exchange ideology (Scott & Colquitt, 2007), self-esteem (Brockner et al., 1998; Wisenfeld et al., 2007), justice orientation (Liao & Rupp, 2005), trust propensity, risk aversion and morality (Colquitt et al., 2005).

In this investigation, we focus on self-esteem and justice orientation as important individual difference factors that might moderate the relationship between fair/unfair treatment and potential employee reactions. We posit that, because of the difference in the characteristics of self-esteem and justice orientation, these two individual difference factors would generate different moderating effects of fair/unfair treatment on employee work outcomes. Self-esteem is essentially a self-evaluative disposition and would be closely related to self-interest or self-serving motivations in organizational life. On the other hand, justice orientation, developed recently by Rupp and her colleagues (Rupp, Byrne, & Wadlington,

2003), is related to a person's moral values and would be closely related to the above self-interest motivations in organizational life. Thus, these two dispositional characteristics may influence an individual's reactions to fair/unfair treatment in different ways because they involve different mechanisms or motives regarding why people seek, and react to, justice (Cropanzano et al., 2001). To put it differently, we contrast the self-interest perspective (specifically the relational model) and the moral virtues perspective when theorizing about the moderating effects of self-esteem and justice orientation. The self-interest perspective suggests that people care about justice because it is beneficial to them (Cropanzano et al., 2001). In contrast, the moral virtues perspective suggests that people value justice simply because it is moral (Colquitt & Greenberg, 2003). We argue that the former is related to self-esteem, and the latter is related to justice orientation, as moderators of the effects of organizational justice.

Another distinctive characteristic of the current investigation is that we explore the effects of two different levels of justice, these being individual-level and group-level justice. In this classification, we assume a context in which an organization has several subgroups, such as departments and work units, and examine two different levels of fair treatment that may occur in such a context. One treatment is targeted towards subgroups within the organization by higher organizational authorities, such as top management and senior executives. The other treatment is targeted towards individual members of a subgroup led by such authorities as supervisors and unit leaders. Borrowing from the concepts proposed by social justice researchers, such as Jasso (1980), Markovsky (1984) and Wenzel (2004), we define these two levels of justice as individual-level justice and group-level justice. Individual-level justice refers to fair/unfair treatment, within the subgroups, that is targeted towards each individual member of the subgroup. On the other hand, group-level justice refers to the fair/unfair treatment targeted to the subgroups as a whole.

We explore individual-level and group-level justice because many modern organizations consist of subgroups in which employees spend their working hours with their coworkers. More importantly, we posit that individual-level and group-level justice effects on employee work outcomes may be moderated differently by different individual difference variables, such as those used in the current investigation, namely, self-esteem and justice orientation. Thus, we explore how within-group employee work behaviors and attitudes are affected when the group itself is treated fairly/unfairly by higher organizational authorities. We also explore these variables when each group member is treated fairly/unfairly by supervisors or unit leaders within the subgroups, and how these effects are moderated by a person's self-esteem and justice orientation. Specifically, we examine the following employee behaviors and attitudes as potential reactions to individual-level and group-level fair/unfair treatment: (a) in-role behaviors that are usually prescribed in job descriptions (Williams & Anderson, 1991); (b) helping behaviors directed towards coworkers as a part of organizational citizenship behavior (Williams & Anderson, 1991); (c) counterproductive behaviors that are a part of the negative behaviors that occur in response to fair/unfair treatment (Skarlicki & Folger, 1997); and (d) an intention to leave that is part of an employee's withdrawal behavior (Hulin, Roznowski, & Hachiya, 1985).

INDIVIDUAL-LEVEL AND GROUP-LEVEL JUSTICE

As discussed, we examine the different levels of justice within the organizational context for organizations consisting of several subgroups. That is, we examine individual-level justice observed within the subgroup context and group-level justice observed within the organization-wide context. For example, for each group member, promotion and pay rise decisions conducted by the unit leader or group supervisor are crucial, as also is the processes or procedures by which such outcomes are determined. These cases correspond to individual-level distributive and procedural justice, respectively. On the other

hand, how a company's budget and other resources are allocated to the subgroups (e.g., departments or work units) in an organization should be critical for each subgroup, as also are the process or procedure by which such allocation occurs. This corresponds to group-level distributive and procedural justice, respectively.

As a general term, individual-level justice refers to people's evaluations and concerns about the realization of their individual entitlements (Wenzel, 2004). Thus, the individual is the perceived recipient unit and the target of one's judgment. Group-level justice, on the other hand, refers to people's evaluations and concerns about the realization of their group's entitlements. Thus, the group is the perceived recipient unit and the target of one's judgment (Azzi 1992; Jost & Azzi 1996; Markovsky, 1985). In the case of individual-level justice, one could compare oneself as an individual with others in the same group. In the case of group-level justice, one could compare one's group as a whole with other subgroups in the organization. Thus, the unit of analysis and the focus of fair treatment would be the groups themselves.

The concept of individual-level versus group-level justice can be traced back to relative deprivation theory (e.g., Runciman, 1966). Relative deprivation research distinguished between egoistic (personal) and fraternal (group) deprivation. Personal deprivation refers to individuals' evaluations of their personal outcomes relative to their personal entitlements, whereas group deprivation refers to an evaluation of a group's outcomes relative to its entitlement. These two forms differ in their definition of the recipient unit of resource allocation (Cohen, 1987; Eckhoff, 1974; Wenzel, 2000), and in the level of abstraction of the target of one's justice evaluation (person versus group).

This conceptualization of group-level justice is fundamentally different from recent studies of justice climate, to which organizational justice researchers have paid more attention because of the increased use of groups and teams in today's work settings (Colquitt et al.,

2002; Mossholder et al., 1998; Naumann & Bennett, 2000; Rupp, Bashshur, & Liao, 2006; Liao & Rupp, 2005). Although justice climate is defined as group-level justice perception relating to how the group as a whole is treated fairly, it is usually conceptualized as the aggregation of justice perceptions targeted towards individual members of the same group (Liao & Rupp, 2005). This is much like the shared perceptions of individual-level justice within the group. On the other hand, for the conceptualization and operationalization of group-level justice, the target of fair/unfair treatment is a group (subgroup) entity, which cannot be reduced to the individual level as a target. In addition, our investigation examines individual-level perception rather than shared perceptions among group members about fair/unfair treatment targeted to the group (i.e., group-level justice), and the effects of such perception on individual-level work outcomes.

Within the classifications, individual-level and group-level justice, different types of justice could exist (e.g., distributive and procedural justice). In this regard, Wenzel (2004) has argued that this typology of individual-level and group-level justice (and inclusive-level justice in his conceptualizations) could be applied to both procedural and distributive justice. Based on his argument, we examine both procedural and distributive justice at the individual and group levels.

THE SELF-INTEREST PERSPECTIVE AND SELF-ESTEEM

Several theoretical perspectives or "integrative theories" (Colquitt, Greenberg, & Zapata-Phelan, 2005) explain why people care about justice. Cropanzano et al. (2001) discuss the "three roads" to organizational justice. Two self-interest roads (instrumental or material, and interpersonal or relational identity) contend that people only care about what justice does for them, for example, the types of self-interest benefit sought. The third road, a moral principle, is the only one contending that human motives can rise above self-interest.

Of these two roads of self-interest perspectives, proposed by Cropanzano et al.

(2001), the relational model of organizational justice suggests that workers care about justice because it enhances an individual's feelings of self-worth and acceptance by others. The relational model was developed from both a group-value model and a relational model of authority (Tyler & Lind, 1992). This model argues that important inferences about the self as a member of an organization or group flow from an employee's perception of justice, thus emphasizing the implications of relational inferences for fair/unfair treatment. That is, fair treatment communicates a positive message about their group or organizational membership, while unfair treatment communicates a negative message (Blader & Tyler, 2003).

As discussed, the relational model suggests that fair treatment communicates self-evaluative information to people, and that fair treatment could affect people more or less positively, depending upon their self-esteem and associated self-related motives. Thus, an individual's self-esteem might play an important moderating role that influences the relationship between fair treatment and an employee's attitudinal and behavioral reactions.

Wiesenfeld et al. (2007) theoretically connected the self-verification perspective with self-esteem in the context of procedural justice. According to self-verification theory, once people form self-views, they work on stabilizing them by seeking and embracing experiences that match their self-views, and by avoiding or rejecting experiences that challenge them (e.g., Swann, 1983). Because favorable evaluations are both self-verifying and self-enhancing, individuals with high self-esteem should react more favorably to procedurally fair treatment than to procedurally unfair treatment. By doing so, they confirm the positive self-views. On the other hand, because the positive evaluative information inherent in fair treatment disconfirms their self-views, compared with those with high self-esteem, individuals with low self-esteem should be less eager to embrace fair over unfair treatment. Employees with high self-esteem may perceive unfair treatment as a violation of their self-views, whereas employees with low self-esteem may not be so inclined. Thus, individuals with high

self-esteem would react to unfair treatment more negatively than those with low self-esteem.

Findings from empirical studies are consistent with self-verification arguments. Research has shown that individuals with low self-esteem are less likely to exhibit the positive relationship between fair treatment and work attitudes and behaviors displayed by their counterparts who have high self-esteem. For example, Wiesenfeld et al. (2007) found a positive relationship between procedural justice and organizational commitment among individuals with high self-esteem, but not among those with low self-esteem.

With respect to individual-level and group-level justice, it is considered that individual-level justice will more likely convey information about self-worth because the target of individual-level justice treatment is each individual. On the other hand, group-level justice may not convey as much self-evaluative information as individual-level justice does, because the target of the treatment is a group as an entity, rather than each individual. Therefore, we predict that an individual's self-esteem will moderate only the effects of individual-level justice on employee reactions, and will not moderate the effects of group-level justice.

Research has shown that self-esteem moderates the relationship between individual-level procedural justice and an employee's work attitudes and behaviors (e.g., Brockner et al., 1998). By contrast, research has yet to examine how self-esteem moderates the effects of individual-level distributive justice on employee work outcomes. This may be because the relational model of organizational justice, which is closely related to self-esteem, has been developed in terms of procedural as well as interactional justice, rather than distributive justice (Cropanzano et al., 2001). However, we argue that distributive justice can also communicate self-evaluative information to individuals. If it is true, self-esteem may also moderate the effects of distributive justice. Recently, Roch and Shanock (2006) proposed that distributive justice, as well as other forms of justice, can be understood within an

exchange theory framework (e.g., Blau, 1964). That is, distributive justice is more representative of an economic exchange relationship partly because of its interest in specific outcomes, whereas procedural and interactional justice is more representative of a social exchange relationship with the organization as a whole or with members of the organization. In addition, the relational model itself is considered an integrative theory (Colquitt, Greenberg, & Zapata-Phelan, 2005) that might explain multiple types of justice. Therefore, we argue that individuals with high self-esteem are more likely than individuals with low self-esteem to believe that they deserve to receive their entitlements relative to their contribution or input. On the other hand, individuals with low self-esteem may be more likely to accept unfair and unfavorable outcomes that are below their entitlements because they do not believe they are valued by the organization.

To summarize, self-esteem would be expected to moderate the relationship between individual-level justice and employee reactions, but not the relationship between the group-level justice and employee reactions. This occurs because individual-level justice, but not group-level justice, may communicate self-verifying information effectively. In addition, not only individual-level procedural justice but also individual-level distributive justice would have the potential to communicate self-evaluative information to individuals. Specifically, we predict that individuals with high self-esteem will be more reactive than individuals with low self-esteem to individual-level distributive and procedural justice, in terms of their in-role behaviors, helping behaviors, counterproductive behaviors, and intention to leave.

> *Hypothesis 1: Self-esteem will moderate the effects of individual-level distributive and procedural justice on in-role behaviors, helping behaviors, counterproductive behaviors and intention to leave, such that the effects are stronger (more positive for in-role behaviors, helping behaviors, and more negative for counterproductive behaviors and intention to leave) for individuals who are high rather than low in self-esteem.*

THE MORAL VIRTUES PERSPECTIVE AND JUSTICE ORIENTATION

As discussed, instrumental and relational approaches to justice are categorized in terms of self-interest perspectives (Cropanzano et al., 2001). On the other hand, a third approach, termed the moral virtues or deontological model (Folger, 1998), is considered as being beyond, or not involving, an individual's self-interest. According to this model, justice is not only construed by individuals as having a self-serving goal, but also as an end in itself. That is, people care about justice because it provides basic respect for human dignity and worth (Folger, 1998; Turillo, Folger, Lavelle, Umphress, & Gee, 2002), or, more simply, people value justice because it is moral (Colquitt & Greenberg, 2003).

Fairness theory (Folger & Cropanzano, 2001), an update of earlier work on referent cognition theory (Folger, 1987), is an integrative justice theory closely related to the moral virtues perspective. This theory emphasizes counterfactual thinking (Roose, 1997) as a fundamental cognitive procedure for evaluating accountability and thus fairness. That is, fairness theory states that in order to determine if a given situation is fair or unfair, three distinct judgments must be made. First, the degree of discrepancy between the actual event and perceived alternatives will be assessed to judge whether the current condition is favorable or unfavorable (the "would" component). Second, if the situation is perceived as unfair, the person accountable for the injustice will be judged by assessing if the target (the person or entity responsible for the situation) could have acted differently (the "could" component). Third, it will be determined whether the harmful actions violate some ethical principle (the "should" component). In this way, an injustice is seen as a violation of a moral norm. Observing such a violation triggers a motivational state (termed "deonance"), which creates a desire to see that people are held accountable for their moral injunctions (Cropanzano, Goldman, & Folger, 2003; Folger, 1998, 2001). Research shows that when individuals know that a teammate has acted unfairly, they sacrifice their own resources in order to punish the

unfair person (Turillo et al., 2002). Individuals will punish unfairness even when they are merely an observer to the injustice, when they have no sense of identification with the victim, and even when the victim has no way of knowing the decision maker's choice. In short, fairness theory predicts that self-sacrificing reactions, as opposed to self-interest, punish or reward the target held accountable for unfair treatment.

As with other integrative theories of justice, fairness theory emphasizes the commonalities rather than the divergences among the divergent forms of justice. For example, the "would" counterfactual considers an event's aversiveness with no particular importance being given to whether the event is distributive, procedural, or interactional in nature (Folger & Cropanzano, 2001).

Recent research has argued that individual differences exist in the extent to which this "justice virtue" is held. That is, in order to react to fair/unfair treatment emanating from individuals' moral motives, justice must be internalized as a moral virtue to some extent. Justice orientation, developed by Rupp and her colleagues (Rupp, Byrne, & Wadlington, 2003), is a stable individual difference variable that impacts upon the processes involved when individuals are attentive to fairness around them, and indicates the extent to which they internalize justice as a moral virtue. If fair/unfair treatment is to be observed and compared with the moral principle, and if the perceived violation of the moral principle causes deontological effects (e.g., self-sacrificing reactions to punish or reward the target held accountable), justice orientation would produce differences in an individual's reactions to the fair/unfair treatment.

Individuals high in justice orientation would be more likely than individuals low in justice orientation to react to fair/unfair treatment emanating from moral motives. At the same time, individuals high in justice orientation may be more self-sacrificing than individuals low in justice orientation when they encounter unfair treatment, especially when they witness

other individuals being treated unfairly. Colquitt et al. (2005) have argued that highly moral individuals may be more likely to search for moral meanings to their behaviors, and also be less likely to engage in unjust behaviors themselves. In short, individuals high in justice orientation would react to unfair treatment with a lower emphasis on their own self-interest.

Some empirical studies have investigated the moderating effects of justice orientation on the relationship between individual-level justice and employee reactions. Rupp et al. (2003) found that justice orientation moderated the relationship between individual-level distributive, procedural and interactional justice, and employee attitudes and behaviors, such as job performance, organizational commitment, job satisfaction and emotional exhaustion. Liao and Rupp (2005) also found that justice orientation moderated the procedural justice climate, as well as supervisory commitment and satisfaction. Colquitt et al. (2005) examined the role of trait morality, which is similar to justice orientation but is a more general individual disposition to morality. They found that trait morality moderated the relationship between individual-level distributive and interactional justice and task performance. In our case of individual-level justice within the group, often the supervisors and unit leaders in the group will be responsible for unfair treatment targeted towards individual group members. In addition, individuals high in justice orientation would be more sensitive to those who can be held accountable for the unfair treatment given to individual group members. Thus, as retribution against the source of injustice (i.e., a moral remedy), individuals high in justice orientation would be more likely than individuals low in justice orientation to reduce their in-role behaviors, helping behaviors, and increase both their counterproductive behaviors and intention to leave.

On the other hand, the target of group-level justice/injustice can be identified as a group that includes not only the focal individual but also his/her coworkers and supervisors from the same group. Thus, especially for those individuals who are high on justice

orientation and sensitive to the source of the unfair treatment in response to group-level injustice, reducing the extent of their in-role behaviors, their help for coworkers in the same group, as well as exhibiting both counterproductive behaviors and intention to leave, is inconsistent with their moral values. That is, it may not be considered a moral remedy to respond in this way within the group because the group is the target, not the source, of the unfair treatment. The source of unfair treatment exists outside of the group (e.g., top management, senior executives). In addition, when facing injustice, individuals high in justice orientation may become more self-sacrificing and show commitment to their ethical standards. Thus, they would be less likely than individuals low in justice orientation to reduce their in-role behaviors and their help for coworkers, and less likely to increase both their intention to leave and their counterproductive behaviors.

Finally, consistent with fairness theory that emphasizes commonality across the various types of justice, our predictions regarding the moderating effects of justice orientation on individual-level and group-level justice apply both to distributive and procedural dimensions of justice.

In sum, we predict that justice orientation will moderate the effects of both individual-level and group-level (in)justice on employee reactions because a moral virtues perspective might apply to both levels of justice. However, while individuals high in justice orientation would be more likely to reduce their in-role behaviors and helping behaviors and to increase both their counterproductive behaviors and intention to leave in cases of individual-level unfairness as retribution against the source of injustice, these individuals would be less likely to respond in such a way than individuals low in justice orientation in cases of group-level unfairness, because their work behaviors and attitudes occur within the targeted group, which is not the source of the unfair treatment.

Hypothesis 2: Justice orientation will moderate the effects of individual-level distributive and procedural injustice on in-role behaviors, helping behaviors,

counterproductive behaviors and intention to leave such that the effects are stronger (more negative for in-role behaviors and helping behaviors, and more positive for counterproductive behaviors and intention to leave) for individuals who are high rather than low on justice orientation.

Hypothesis 3: Justice orientation will moderate the effects of group-level distributive and procedural injustice on in-role behaviors, helping behaviors, counterproductive behaviors and intention to leave such that the effects are weaker (less negative for in-role behaviors and helping behaviors, and less positive for counterproductive behaviors and intention to leave) for individuals who are high rather than low on justice orientation.

We conducted two empirical studies to test these hypotheses. Study 1 considered the procedural dimension of individual-level and group-level justice, and Study 2 dealt with distributive dimensions of individual-level and group-level justice.

STUDY 1: METHODS

Sample

Participants were recruited from management classes in two public and private universities located in Osaka, Japan. They were offered extra credit in return for participation in the study. All participants were told that participation in this study was voluntary and anonymous. Over 90% of the students who attended these classes agreed to participate in this study, resulting in a sample size of 417, which included 80.1% males and 19.9% females with an average age of 20.78 years (SD = 1.92). Over 90% of the participants had experienced part-time work. Because we collected data from two universities, we explored whether significant differences existed in the mean levels of variables central to the study's hypotheses. Independent sample t tests for each variable revealed no significant differences between the two samples, except for counterproductive behavior (t= –2.49, p < .05). Thus, we combined the two samples into one, prior to testing the hypotheses.

Procedure

We used written scenarios to manipulate a situation that could occur in the

workplace and should cause perceptions of justice/injustice. Greenberg and Eskew (1993) suggested that using written scenarios is an effective method for gauging how someone would react to a similar situation in an organization. In addition, Wiseman and Levin (1996) found that individuals often make the same decisions in hypothetical situations as in real life.

For this study, we created scenarios based on a hypothetical large regional chain of restaurants. Several pilot studies were conducted to develop the scenarios. First, 18 undergraduate students in a management class were asked to provide information about work situations in which they had perceived individual-level justice/injustice as well as group-level justice/injustice. They were also asked to provide information about the part-time jobs they had experienced. Next, in another pilot study, about 100 students provided information about their work experience, most of which involved part-time work. The results from these pilot studies revealed that a part-time job at a restaurant was the most frequently mentioned work experience. Therefore, we concluded that a restaurant is suitable for the development of realistic scenarios for undergraduate students as research participants.

In the scenarios of the hypothetical restaurant chain, each participant was asked to play the role of a part-time employee in one of the branch restaurants. Participants were randomly assigned to each treatment in a 2 (individual-level procedural justice: fair, unfair) x 2 (group-level procedural justice: fair and unfair) between-subjects factorial design. Procedural justice versus injustice at both the individual and group level was manipulated by Leventhal's (1980) criteria, including consistency and bias suppression. In addition, the order in which individual-level and group-level procedural justice situations were presented was varied. Half of the surveys presented an individual-level justice situation first, and group-level justice situation second, and the other half of the surveys presented these situations in the reverse order. As a result, eight versions of these different scenarios were created, to one of which each participant was assigned at random. Finally, a pilot study was

conducted in which 18 undergraduate students checked the realism of the scenarios and the appropriateness of the manipulations.

During a regular class session, one of the authors gave each participant a survey containing one of eight different hypothetical vignettes followed by a series of questions. Participants were asked to imagine themselves in the depicted scenario and to indicate their likelihood of engaging in several different behaviors, as well as their attitudes to the hypothetical organization (the company as a whole) and the group (the branch restaurant). Participants' individual differences as well as their demographic information were also measured in the survey questionnaires. Finally, debriefing was conducted after the participants returned their surveys.

Dependent and Moderator Variables

In-role behaviors. In-role behaviors were measured using four items from Williams and Anderson (1991). A sample item was "Adequately completes assigned duties." Cronbach's alpha for this set of items in the current study was .71.

Helping behaviors. Helping behaviors targeted towards coworkers were measured with five items from the OCBI (organizational citizenship behaviors targeted towards individuals) scale developed by Williams and Anderson (1991). An example statement is "Helps others who have heavy work loads." Cronbach's alpha for this set of items was .66.

Counterproductive behaviors. Counterproductive behaviors were measured using seven items from Robinson and O'Leary-Kelly (1998). A sample item is "Did work badly, incorrectly or slowly on purpose." Cronbach's alpha for this set of items was .81.

Intention to leave. Intention to leave was measured using three items from Shore, Newton and Thornton (1990). A sample item is "How often do you think about quitting your job at this organization?" Cronbach's alpha for this set of items was .75.

Self-esteem. Self-esteem was measured using four items from Rosenberg's (1965)

10-item scale that had the greatest face validity for participants. Participants were asked to indicate their agreement with statements such as, "I feel that I have a number of good qualities" and "I take a positive attitude toward myself." Cronbach's alpha for this set of items was .77.

Justice orientation. Justice orientation was measured using seven items from Rupp et al. (2003). A sample item is "I wish I could make amends for every single injustice I have ever committed." Cronbach's alpha for this set of items was .75.

All items representing dependent and moderator variables, originally written in English, were translated into Japanese and adjusted to the context of the scenarios. They were back-translated to ensure that the meaning had been retained (Brislin, Lonner, & Thorndike, 1973).

Manipulation Checks.

Based on Moorman (1991), six organizational justice scales were created to evaluate the manipulations of the two forms of procedural justice using a scale from 1 (strongly disagree) to 7 (strongly agree). Half of these scales, involving individual-level procedural justice, assessed the degree to which participants perceived the fairness of the process of pay raise decisions within the branch. The remaining items, involving group-level procedural justice, assessed the degree to which participants perceived the fairness of the company's system, which ranked every branch. In addition, using a seven-point scale (1 = strongly disagree, 7 = strongly agree), participants indicated the extent of their agreement with statements such as "I am pretty familiar with that kind of situation," the mean response (M) being 3.97 with a standard deviation (SD) of 1.22.

STUDY 1: RESULTS

Manipulation Checks

To ensure that justice manipulations were perceived in the expected way, we

compared the manipulation check scales across the various conditions. The results of a one-way ANOVA indicated that the justice conditions were manipulated successfully in the expected way. The participants who read an individual-level fair scenario (M = 4.66, SD = 1.24) showed a higher level of fairness than did those who read an individual-level unfair scenario (M = 2.78, SD = 1.02) (F= 292.86, p < .01). Similarly, participants who read a group-level fair scenario (M = 4.49, SD = 1.14) showed a higher level of fairness than did those who read a group-level unfair scenario (M = 2.51, SD = 1.01) (F= 359.14, p < .01).

Descriptive Statistics

Table 1 presents means, standard deviations and zero-order correlations among the variables used in this study. Of note are the correlations between justice orientation and some of the outcomes. Higher scores on justice orientation were associated with higher scores on helping behaviors and in-role behaviors (r = .31 and r = .25, respectively, p < .05) and lower scores on counterproductive behavior (r = –.24, p < .05). Self-esteem, on the other hand, was only associated with helping behaviors (r = .11, p < .05).

Insert Table 1 about here

Tests of Hypotheses

We used hierarchical regression analysis to test hypotheses. To reduce potential multicollinearity, we mean-centered independent and moderator variables before computing the product terms (Aiken & West, 1991). In the first step of the regression analysis, the main effect of justice manipulation and the moderators were entered. In the second step, two-way interactions relevant to the hypotheses, as well as the interaction between individual-level procedural justice and group-level procedural justice, were entered. The addition of interaction terms explained significant additional variance in helping behaviors (p < .01) and intention to leave (p < .05). The results of the hierarchical regression analysis are shown in Table 2.

Hypothesis 1 predicted stronger effects of individual-level procedural justice on in-role behaviors, helping behaviors, counterproductive behaviors and intention to leave when self-esteem was high. The results in Table 2 demonstrated the significant moderating effect of self-esteem on the relationship between individual-level procedural justice and helping behaviors ($p < .01$), and the marginally significant moderating effect of self-esteem between individual-level procedural justice and helping behaviors ($p < .10$). Plots of the significant interactions, using the approach recommended by Aiken and West (1991), are shown in Figure 1. As expected, the effects of individual-level procedural justice on intention to leave were stronger when self-esteem was high rather than low. As predicted, there were no significant moderating effects of self-esteem for the effects of group-level justice. Taken together, our data provided some support for Hypothesis 1 with respect to the procedural justice dimension.

Hypothesis 2 predicted stronger effects of individual-level procedural (in)justice on in-role behaviors, helping behaviors, counterproductive behaviors and intention to leave when justice orientation was high. The results in Table 2 demonstrated the marginally significant moderating effect of justice orientation between individual-level procedural justice and both helping behaviors and intention to leave ($p < .10$). Hypothesis 2 was weakly supported with respect to the procedural justice dimension.

Hypothesis 3 predicted weaker effects of group-level procedural (in)justice on in-role behaviors, helping behaviors, counterproductive behaviors and intention to leave when justice orientation was high. The results in Table 2 demonstrated the significant moderating effect of justice orientation between group-level procedural justice and helping behaviors only ($p < .05$). Plots of the significant interaction, shown in Figure 2, are in the

hypothesized directions. Thus, Hypothesis 3 was partially supported with respect to the procedural justice dimension.

Insert Figures 1 and 2 about here

STUDY 2: METHODS

Sample

Participants were recruited from management classes in a public university located in Osaka, Japan. Extra credit was given in return for participation in the study. All participants were told that their participation was voluntary and anonymous. Over 90% of attending students agreed to participate in this study, resulting in a sample size of 207, including 80.7% males and 19.3% females with an average age of 21.16 years (SD = 1.48). About 95% of the participants had experience in part-time work.

Procedure

We used the same scenarios and procedures as Study 1 except for the manipulation of individual-level and group-level justice. In this study, we manipulated individual-level and group-level distributive justice instead of procedural justice. Thus, participants were randomly assigned to a 2 (individual-level distributive justice: fair, unfair) x 2 (group-level distributive justice: fair and unfair) between-subjects factorial design. Distributive justice at both the individual and group levels was manipulated by varying the degree to which an equity allocation norm was followed in which rewards are consistent with contributions (Adams, 1965; Leventhal, 1976).

Dependent and Moderator Variables

In-role behaviors. As in Study 1, in-role behaviors were measured using four items from Williams and Anderson (1991). Cronbach's alpha was .69.

Helping behaviors. As in Study 1, helping behaviors targeted towards coworkers

were assessed with five items from the OCBI scale. Cronbach's alpha was .76.

Counterproductive behaviors. As in Study 1, counterproductive behaviors were assessed using the seven items developed by Robinson and O'Leary-Kelly (1998). Cronbach's alpha was .78.

Intention to leave. As in Study 1, intention to leave was measured using three items developed by Shore, Newton, and Thornton (1990). Cronbach's alpha was .67.

Self-esteem. As in Study 1, self-esteem was measured with four items taken from Rosenberg's (1965) 10-item scale. Cronbach's alpha was .80.

Justice orientation. As in Study 1, justice orientation was measured using seven items taken from Rupp et al. (2003). Cronbach's alpha was .70.

All items, originally written in English, were translated into Japanese and adjusted to the context of the scenarios. They were back-translated to ensure that the meaning was retained (Brislin, Lonner, & Thorndike, 1973).

Manipulation Checks.

As in Study 1, six organizational justice scales were created to evaluate the manipulations of the two forms of distributive justice, based on Moorman (1996). Half of these scales, involving individual-level distributive justice, assessed the degree to which participants perceived the fairness of any pay increase criteria used within the branch. The remaining items, involving group-level distributive justice, assessed the degree to which participants perceived the fairness of the company's system, which ranked every branch. In addition, using a seven-point scale (1 = strongly disagree, 7 = strongly agree), participants indicated the extent of their agreement with statements such as "I am pretty familiar with that kind of situation," the mean response being 4.20 with a standard deviation of 1.14.

Manipulation Checks

To ensure that the justice manipulations were perceived in the expected way, we contrasted the manipulation check scales across the various conditions. The results of a one-way ANOVA indicated that the justice conditions were successfully manipulated in the expected way. Participants who read an individual-level fair scenario showed a higher level of fairness (M = 4.09, SD = .57) than did those who read an individual-level unfair scenario (M = 3.65, SD = .56) (F(1, 205) = 31.10, p < .01). Similarly, participants who read a group-level fair scenario showed a higher level of fairness (M = 3.61, SD = .65) than did those who read a group-level unfair scenario (M = 4.03, SD = .67) (F(1, 205) = 20.71, p < .01)..

Descriptive Statistics

Table 3 presents means, standard deviations and zero-order correlations among the variables used in this study. Higher scores on justice orientation were associated with higher scores on in-role behaviors and helping behaviors (r = .22 and r = .21, respectively, p < .05) and lower scores on intent to leave (r = –.14, p < .05). Self-esteem, on the other hand, was only associated with in-role behaviors (r = .16, p < .05).

Insert Table 3 and 4 about here

Tests of Hypotheses

We used hierarchical regression analysis to test hypotheses, both independent and moderator variables being mean-centered before computing the product terms. In the first step of the regression, the main effect of justice manipulation and the moderators were entered. In the second step, two-way interactions relevant to the hypotheses, as well as the interactions between individual-level distributive justice and group-level distributive justice,

and between individual-level and group-level justice and self-esteem, were entered. The addition of interaction terms explained significant additional variance in helping behaviors and counterproductive behaviors ($p < .05$) and marginally significant additional variance in in-role behaviors ($p < .10$). The results of the hierarchical regression analysis are shown in Table 4.

Hypothesis 1 predicted stronger effects of individual-level distributive justice on in-role behaviors, helping behaviors, counterproductive behaviors and intention to leave when self-esteem was high. Contrary to the prediction, there were no significant moderating effects of self-esteem on the effects of individual-level distributive justice. On the other hand, there was a significant moderating effect of self-esteem on the relationship between group-level distributive justice and in-role behaviors ($p < .05$) in spite of the marginally significant results in terms of additional variance explained. This moderating effect was not hypothesized. Thus, Hypothesis 1 was not supported with respect to the distributive justice dimension.

Hypothesis 2 predicted stronger effects of individual-level distributive (in)justice on in-role behaviors, helping behaviors, counterproductive behaviors and intention to leave when justice orientation was high. The results in Table 4 demonstrated the significant moderating effect of justice orientation between individual-level distributive justice and both helping behavior and counterproductive behavior ($p < .05$). The moderating effect for in-role behaviors was also significant ($p < .05$) in spite of the marginally significant results in terms of additional variance explained. Plots of the significant interactions, shown in Figures 3 and 4, are in the hypothesized directions. Thus, our data provided some support for Hypothesis 2 with respect to the distributive justice dimension.

Hypothesis 3 predicted weaker effects of group-level distributive (in)justice on in-role behaviors, helping behaviors, counterproductive behaviors and intention to leave

when justice orientation was high. The results in Table 4 demonstrated the significant moderating effect of justice orientation between group-level distributive justice and both helping behaviors and counterproductive behaviors ($p < .05$). Plots of the significant interactions are shown in Figures 5 and 6. The moderating effect of helping behaviors was in the hypothetical direction, but the moderating effect for counterproductive behaviors was opposite to the prediction. Thus, there was a mixed support for Hypothesis 3 with respect to the distributive justice dimension.

Insert Figures 3, 4, 5 and 6 about here

DISCUSSION

The purpose of this investigation was to examine the moderating role of self-esteem and justice orientation on the effects of individual-level and group-level justice on potential employee reactions. We predicted that self-esteem would only have a moderating effect on individual-level justice associated with employee reactions because individual-level justice effectively communicates self-verifying information while group-level justice may not. We also predicted that justice orientation would moderate the effects of both individual-level and group-level justice on employee reactions because a moral virtues perspective might apply to both levels of justice. On the other hand, we predicted that the direction of the moderation by justice orientation would be opposite for cases of individual-level and group-level justice because of the different characteristics of these levels of justice (i.e., the source and target of the treatment). Generally, data from two studies were supportive of these basic arguments.

We found a moderating effect of self-esteem on the relationship between individual-level procedural justice and an intention to leave. In addition, the moderation effect was marginally significant for in-role behaviors. These results are consistent with past research as well as self-verification arguments. However, our results suggest that self-esteem

also moderated the relationship between group-level distributive justice and helping behaviors, which was not hypothesized. The direction of this effect was opposite to the prediction based on self-verification. This finding may be produced by mechanisms other than self-verification, which, as an effect, interacted with self-esteem. For example, behavioral plasticity theory (e.g., Brockner, 1988) suggests that individuals with low self-esteem will be more reactive to situational cues than those with high self-esteem. In our case, compared with individuals with high self-esteem, those with low self-esteem would have reacted more negatively to group-level unfair treatment, and more positively to group-level fair treatment when adjusting their helping behaviors. Overall, our findings demonstrate that any self-verification mechanism that causes the moderating effects of self-esteem would apply only to individual-level procedural justice. A different mechanism that moderates the effects of self-esteem may exist in the case of distributive and/or group-level justice.

When using justice orientation as a moderator, the most consistent finding was that justice orientation moderated group-level justice and helping behaviors for both procedural and distributive justice. These findings supported the argument that individuals high in justice orientation would be less likely to reduce helping behaviors in the event of unfair group-level treatment. This is because they tend to believe that reducing helping behaviors would only harm in-group members and supervisors from the same group that was treated unfairly. However, the significant moderating effect of justice orientation between group-level distributive justice and counterproductive behaviors was opposite to the hypothesis and inconsistent with our original argument. A possible interpretation of this result, based on a post hoc examination of the nature of the interaction, might be that individuals high in justice orientation were more appreciative of fair treatment, and thus responded more positively than did those who were low in justice orientation. Future research might explore further the

reasons for these different moderating effects of justice orientation on helping behaviors and counterproductive behaviors.

The moderating effects of justice orientation on individual-level justice and employee reactions were generally supported by the data and were consistent with past research (e.g., Rupp et al., 2003). However, these relationships were relatively weaker for individual-level procedural justice where we obtained only marginally significant moderating effects for helping behaviors and intention to leave.

Taken together, the results from these studies have important implications for the theory of organizational justice. Some previous research findings on self-esteem and justice orientation as moderators of individual-level justice were replicated. Our understanding of their moderation was also extended by examining these two variables at the same time, and by incorporating group-level justice and its effects on employee reactions. By doing so, it has become clear that these two individual difference moderators work differently at the individual and group justice levels. Of special interest, our findings regarding group-level justice are novel in the field of organizational justice. They might contribute to the new frontier of organizational justice research in management.

Implications for Practice

Our findings also have implications for management practice. First, our investigation extends the knowledge of the boundary conditions for applications of different levels and types of justice, which could improve management effectiveness. For example, our findings suggest that supervisors or unit leaders of subgroups within an organization would benefit from having group members who are high in justice orientation. Such people are relatively tolerant when the group, as a whole, is treated unfairly by higher organizational authorities. In such circumstances, they would not reduce helping behaviors within the group. However, supervisors and unit leaders should also be aware that group members who are high in justice

orientation are the ones who are more reactive to unfair treatment at an individual level within the group.

In addition, group members with high self-esteem would be more responsive to individual-level procedural fairness. Thus, supervisors and unit leaders should understand the group members' self-esteem and implement fair procedures, especially when the group members have high self-esteem.

Limitations

The results of our investigation should be considered in terms of their limitations. First, since we relied on scenarios for manipulating justice treatments, realism as well as relatively weak manipulations might have been an issue. For example, participants' strong affective reactions to unfair treatment that would otherwise have been possible in real-life situations might not have occurred in response to our scenarios. To eliminate this type of limitation, we followed the guidelines presented by Greenberg and Eskew (1993) by having our participants assume their own role in familiar situations, and by asking them to indicate how they would actually respond. Furthermore, we carefully constructed the scenarios to be as familiar as possible for the participants. Pilot studies were conducted to ensure that the manipulations worked effectively on the levels of justice.

Another but related issue arises since reactions to fair/unfair treatments were measured as self-reported intentions rather than by actual behaviors. Although Wiseman and Levin (1996) suggested that individuals often make the same decisions in hypothetical situations as in real life, and past research using similar measures (e.g., Scott & Colquitt, 2007) has produced significant results, future research might replicate and extend our findings by measuring actual reactions in field or laboratory settings.

Suggestions for Future Research

Future research might constructively replicate and extend the findings of this

investigation using different methodologies, such as laboratory studies and employee surveys conducted in field settings. Additionally, researchers of such studies might change the operationalization of individual-level and group-level justice, as well as examine different dependent variables to describe employee reactions to fair/unfair treatment. More specifically, our investigation operationalized group-level justice as individuals' perceptions because we were interested in individual difference variables as moderators of individual-level reactions to group-level fairness. However, another possibility for operationalizing group-level justice is to measure group members' shared perceptions regarding fair/unfair treatment at the group level (e.g., Chan, 1998). This method is similar to the operationalization of justice climate. Nonetheless, group-level justice, measured in this way, is different from justice climate because of a difference in the target of fair treatment. In general, conceptualizations of justice above the individual level (e.g., collective or group-level justice, justice climate) are still elusive and need to be clarified in future research.

Future research might also explore other factors that moderate the effects of individual-level and group-level justice. Although our investigation examined self-esteem and justice orientation as two individual difference variables grounded in different theoretical perspectives of justice, other individual difference or situational variables may also be used as moderators. Since group-level justice, as examined in this paper, has received less attention from organizational justice researchers, there might be opportunities to theorize and test other factors that moderate the effects of group-level justice. Potential candidates of such moderators include degree of identification to the group grounded in social identify theory (Tajfel & Turner, 1979), individual tendency of intergroup comparison (Roberson, 2006), degree of task interdependence within work units (Roberson, 2006), individualism–collectivism or self-construal (e.g., independent versus interdependent self) (Holmvall & Bobocel, 2007), all of these variables being somewhat relevant to group

behavior at work. Personality variables that have already been identified as moderators for individual-level justice effects are also worth examining in the context of group-level justice, provided they are also theoretically relevant to justice at the group level.

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TABLE 1
Descriptive Statistics and Correlations among Variables Used in Study 1

Variables	M	SD	1	2	3	4	5	6	7
1.Individual-level Procedural Justice	.50	.50	——						
2. Group-level Procedural Justice	.50	.50	.03	——					
3. Self-Esteem	4.42	1.04	-.01	-.02	——				
4. Justice Orientation	4.49	.77	-.06	-.10	.12*	——			
5. In-Role Behaviors	5.33	.89	.09	-.01	.04	.25**	——		
6. Helping Behaviors	4.66	.84	.04	.11*	.11*	.31**	.50**	——	
7. Counterproductive Behaviors	2.57	.93	-.10*	.02	.01	-.24**	-.59**	-.24**	——
8. Intention to Leave	4.19	1.21	-.33**	-.13**	-.06	-.09	-.07	-.09	.13**

Note. n = 419, * p < .05, ** p < .01.

TABLE 2
Moderated Regression Results in Study 1

Regression step	In-Role Behaviors			Helping Behaviors			Counterproductive Behaviors			Intention to Leave		
	R^2	$\triangle R^2$	β	R^2	$\triangle R^2$	β	R^2	$\triangle R^2$	β	R^2	$\triangle R^2$	β
1. Individual-Level Procedural Justice (IPJ)	07**	.07**	.11*	.10**	.10**	.06	02+	.02+	-.10*	.13**	.13**	-.33**
Group-Level Procedural Justice (GPJ)			-.01			.02			.02			-.12**
Self-Esteem			.01			.07			.02			-.07
Justice Orientation			.25**			.30**			-.10+			-.02
2. IPJ x GPJ	.09**	.01	.07	.14**	.03**	.08+	.03	.01	-.01	.16**	.03*	.03
IPJ x Self Esteem			.05			.09+			-.03			-.16**
GPJ x Self Esteem			.06			.02			-.07			.01
IPJ x Justice Orientation			.03			.09+			.04			.08+
GPJ x Justice Orientation			-.04			-.10*			-.03			-.03

Note. n = 419. $\triangle R^2$ values may not sum exactly to R^2 values due to rounding error.
+ p < .10, * p < .05, ** p < .01.

TABLE 3
Descriptive Statistics and Correlations among Variables Used in Study 2

Variables	M	SD	1	2	3	4	5	6	7
1.Individual-level Distributive Justice	.50	.50	—						
2. Group-level Distributive Justice	.50	.50	-.02	—					
3. Self-Esteem	4.48	1.07	-.05	.01	—				
4. Justice Orientation	4.47	.71	.02	.02	.26**	—			
5. In-Role Behaviors	5.33	.91	-.03	-.04	.16*	.22**	—		
6. Helping Behaviors	4.63	.94	.02	-.01	.12	.21**	.53**	—	
7. Counterproductive Behaviors	2.48	.84	.01	.05	-.08	-.11	-.56**	-.27**	—
8. Intention to Leave	4.33	1.02	-.27**	-.14*	-.07	-.14*	.06	-.04	-.07

Note. n= 207, * P < .05, ** P < .01.

TABLE 4
Moderated Regression Results in Study 2

Regression step	In-Role Behaviors			Helping Behaviors			Counterproductive Behaviors			Intention to Leave		
	R^2	$\triangle R^2$	β	R^2	$\triangle R^2$	β	R^2	$\triangle R^2$	β	R^2	$\triangle R^2$	β
1. Individual-Level Distributive Justice (IDJ)	.06*	.06*	-.03	.05*	.05*	.01	02	.02	.01	.11**	.11**	-.27**
Group-Level Distributive Justice (GDJ)			-.04			-.01			.05			-.14*
Self-Esteem			.11			.07			-.06			-.05
Justice Orientation			.19**			.19**			-.10			-.12+
2. IDJ x GDJ	.10**	.04+	-.06	.12**	.07*	.04	.08+	.06*	.04	.12**	.01	.06
IDJ x Self Esteem			-.01			-.07			-.02			-.01
GDJ x Self Esteem			-.16*			-.12			.05			.07
IDJ x Justice Orientation			.15*			.15*			-.19*			.01
GDJ x Justice Orientation			.03			-.15*			-.17*			.03

Note. n = 207. $\triangle R^2$ values may not sum exactly to R^2 values due to rounding error.
+ P < .10, * P < .05, ** P < .01.

FIGURE 1
Plots of Interaction Between Individual-Level Procedural Justice and Self Esteem on Intention to Leave
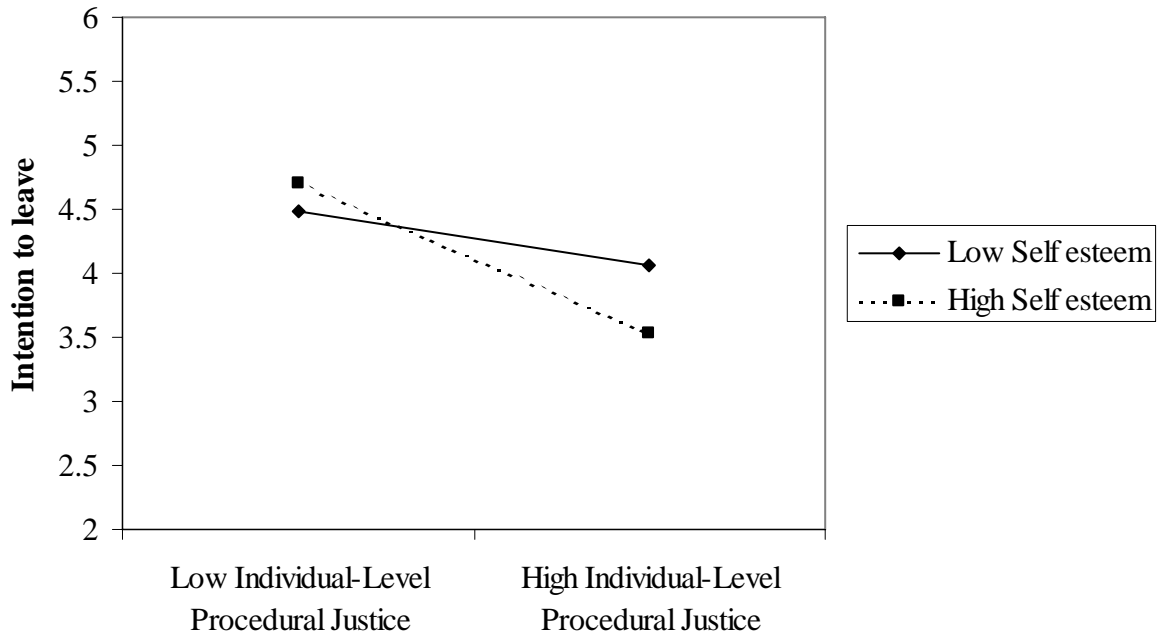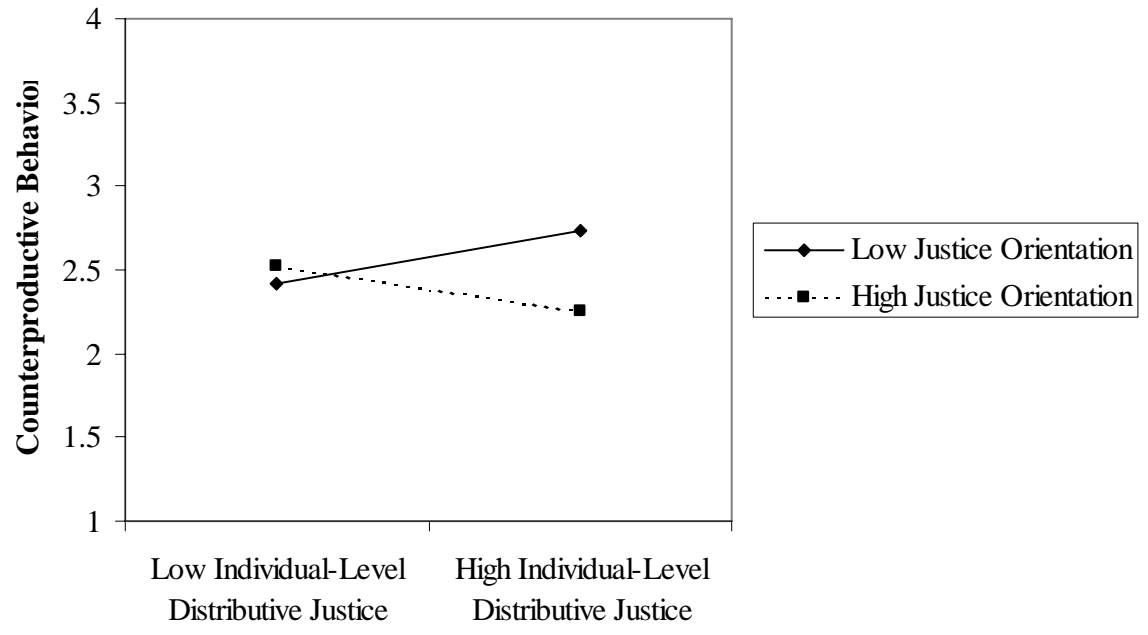

FIGURE 2
Plots of Interaction Between Group-Level Procedural Justice and Justice Orientation on Helping Behaviors
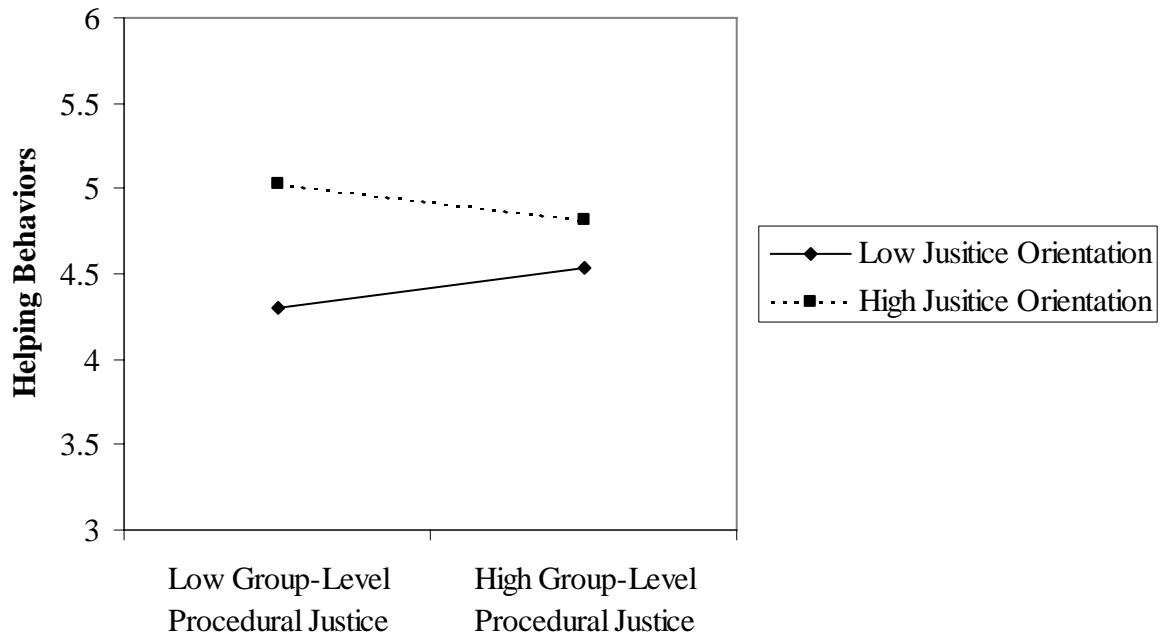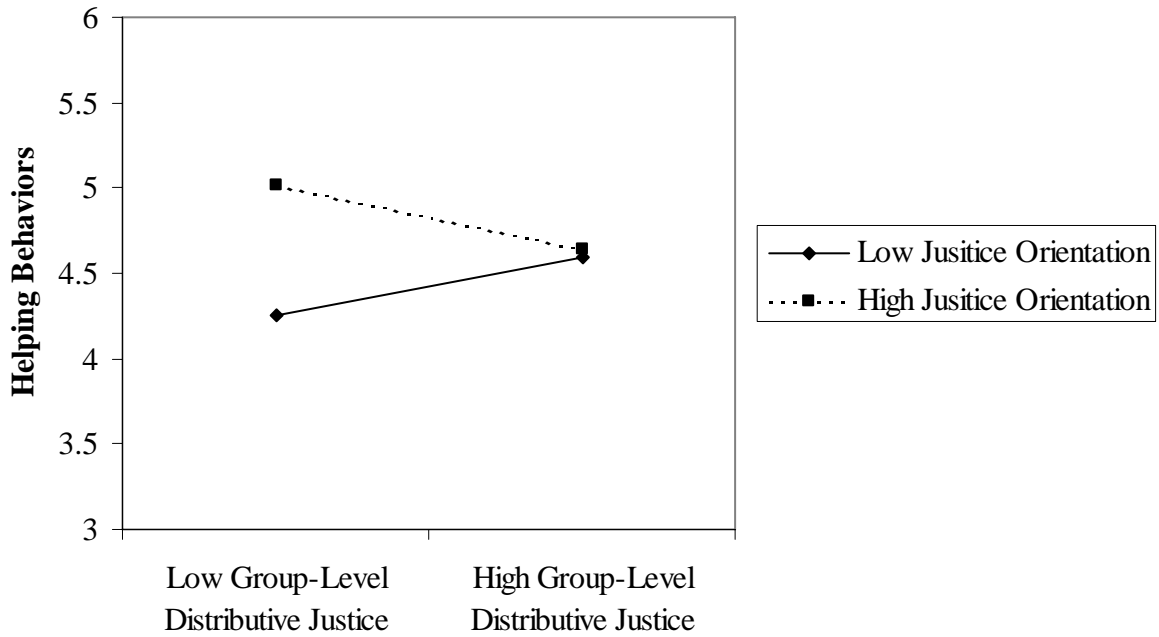
FIGURE 3
Plots of Interaction Between Individual-Level Distributive Justice and Justice Orientation on Helping Behaviors
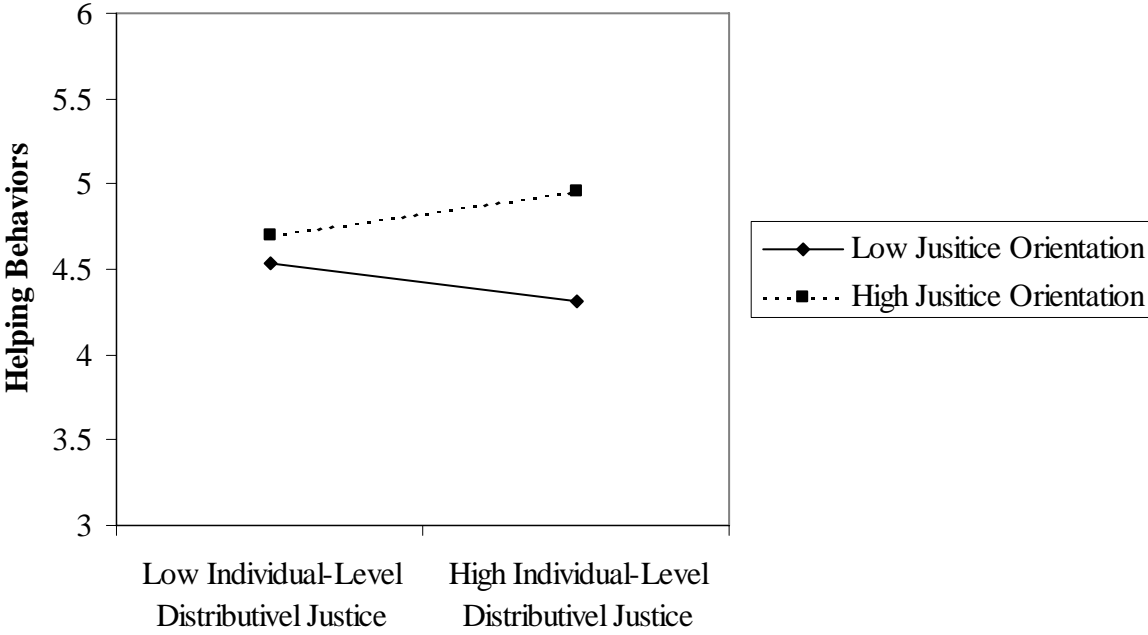
FIGURE 4
Plots of Interaction Between Individual-Level Distributive Justice and Justice Orientation on Counterproductive Behaviors

FIGURE 5
Plots of Interaction Between Group-Level Distributive Justice and Justice Orientation on Helping Behaviors

FIGURE 6
Plots of Interaction Between Group-Level Distributive Justice and Justice Orientation on Counterproductive Behaviors