# Multiple Motives for Organizational Citizenship Behavior

M. Audrey Korsgaard and Bruce M. Meglino

University of South Carolina

Scott W. Lester

University of Wisconsin-Eau Claire

Sophia Soyoung Jeong

University of South Carolina

## DRAFT

Please do not quote with permission of the authors

### **ABSTRACT**

Employees often engage in helpful, cooperative behaviors that extend beyond job requirements, known as organizational citizenship behavior (OCB, Organ, 1988). Because OCB can have a substantial impact on work unit performance, research has focused on identifying its causes, such as organizational justice and job satisfaction. However, fewer studies have explored the psychological basis for these relationships and the mechanisms of OCB continue to be debated. Drawing on the theory of other orientation and on social exchange theory, we focus on two potential mechanisms, expected returns and the norm of reciprocity, and posit that the extent to which these processes occur depends on other-oriented motives. In two laboratory studies, we demonstrate that persons higher in other orientation were more likely to reciprocate in the absence of expected future returns. In Study 1 we examined this issue using dispositional differences in other orientation. In Study 2 we replicate this finding with a situational source of other orientation and demonstrate the importance of expected returns for persons who are not other-oriented.

In addition to performing behaviors that are explicitly required of their jobs, employees often engage in helpful, cooperative behaviors that extend beyond job requirements. These extrarole activities, typically referred to as organizational citizenship behavior (OCB, Organ, 1988), include constructs such as organizational spontaneity (George & Brief, 1992), prosocial organizational behavior (Brief & Motowidlo, 1986), and contextual performance (Borman & Motowidlo, 1993). The common characteristics of these behaviors are that they are unspecified by employees' formal job requirements but necessary for the successful functioning of an organization. Indeed, research has shown that performing OCB can have a substantial impact on the quantity and quality of a work unit's performance (Podsakoff, Aherne, & MacKenzie, 1997).

A substantial amount of research has focused on identifying the predictors of OCB. These studies have found consistent support for a positive relationship between job satisfaction and OCB (Organ & Ryan, 1995; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Although fewer studies have explored the psychological basis for this association, most researchers explain this relationship in terms of social exchange theory processes (Organ & Konovsky, 1989; Van Dyne & LePine, 1998). However, there are at least two different social exchange mechanisms that can account for the positive relationship between job satisfaction and OCB. Prior research has not specifically examined these alternative mechanisms.

One such mechanism indicates that employees engage in OCB because they "are motivated by the returns they [their actions] are expected to bring ... from others" (Blau, 1964, p. 91). These expected returns include reciprocal helping from others at some time in the future. Thus, when exchanges are favorable – as indicated by high job satisfaction – employees are motivated to engage in OCB as a means of assuring that reciprocal benefits will continue to occur.

It is important to note that this mechanism is based on *expected reciprocity;* that is, it is anchored in expectations about future outcomes. Moreover, this process is implicitly rational and self-interested in that the performance of OCB is linked to the expectation of future benefits. (The rational, self-interested nature of OCB is evident from studies that find greater OCB among persons who believe that performing OCB will increase their personal outcomes; e.g., Hui, Lam, & Law, 2000; McNeely & Meglino, 1994). Thus, when employees' work experience encompasses a record of favorable exchanges and therefore higher levels of job satisfaction, these highly satisfied employees should be motivated to maintain high levels of OCB as a means of assuring that benefits will continue in the future.

Social exchange theory also suggests that OCB can be motivated by internalized, moral norms (Cropanzano & Mitchell, 2005; Gouldner, 1960) that create an *normative obligation to reciprocate* the benefits received from others. Individuals who have internalized a norm do not comply with the norm in order to gain rewards or avoid sanctions, but adhere to the norm is a goal in itself (Kelman, 2006; Perugini et al., 2003). In support of this claim, research suggests that individuals will grant favors in response to favors and will punish in response to violations of reciprocity even when there is no expectation of future exchanges and it is personally costly to do so (Perugini et al., 2003; Turillo et al., 2002). This mechanism suggests that, rather than focusing on future returns, individuals may perform OCB because they feel a sense of obligation to reciprocate benefits that were previously provided by others. In contrast to the mechanism of expected reciprocity, the normative obligation to reciprocate is not based on rational self-interest but on adherence to norms of behavior. Also, rather than being anchored in cognitions about the *future*, adherence to the norm of reciprocity is anchored in cognitions about the *past*.

Previous research has examined the first of these two mechanisms, which, as noted above, is rooted in a rational self-interested process. In a field study of newly hired employees, Lester, Meglino, and Korsgaard (in press) found a stronger relationship between job satisfaction and OCB among persons who were low in other orientation, a value that has been previously shown to be associated with rational self-interested processing (see, Korsgaard, Meglino, & Lester, 1996). In the following investigation, we examined the second of these two mechanisms, namely, whether a sense of obligation will have a greater impact on persons who are higher in other orientation (and thus less prone to rational self-interested cognitions). In two laboratory studies that specifically eliminated the possibility that performing helpful behaviors will result in positive personal outcomes, we examined whether persons who were higher in other orientation would be more likely to reciprocate a previous benefit received from another. In the first of these studies (Study 1) we examined this issue using dispositional differences in other orientation. In the second study (Study 2) we examined situational differences in other orientation and more directly addressed the role of expected returns. We begin by describing the theory of other orientation, which forms the basis for dispositional and situational differences in the tendency to act in a rationally self-interested way.

### Theory of Other Orientation

Based on research in behavioral decision making (Bazerman, 1993) and self-interest (Cropanzano, Stein, & Goldman, in press), the theory of other orientation (Meglino & Korsgaard, 2004) considers how individuals make rational and self interested choices that involve weighing costs and benefits to the self. The core premise of this theory is that individuals who are higher in other orientation – persons who express greater concern for the welfare of others – are less likely to engage in rational and self-interested assessments of the consequences

of their actions. Moreover, this process is proposed to occur even when individuals make choices that are purely personal and do not involve the accrual of outcomes to others (Korsgaard & Meglino, 2008; Meglino & Korsgaard, 2004). Thus, the theory of other orientation posits that persons who are higher in other orientation will be less likely to consider potential consequences to the self when making choices or arriving at courses of action.

The core premise of other orientation is based on evolutionary perspectives on altruism (Brewer, 2004; Simon, 1990). These perspectives posit that, because individuals have limited or bounded rationality, expending scarce cognitive resources in an exclusive reliance on rational judgment processes (i.e., weighing various personal consequences before acting) or on direct personal experience (e.g., extensive trial and error) can ultimately hamper the organism's survival. However, by relying on information provided by others (i.e., social information obtained via imitation, vicarious learning, and normative influence) individuals can acquire relevant information more quickly and, on balance, with fewer risks and costs. Thus, one's openness to social influence can be adaptive in an evolutionary sense. Such openness to social influence involves adopting and acting on cues about modes of behavior, such as rules, norms, and standards, in lieu of independently assessing courses of actions based on an exhaustive cognitive evaluation of anticipated consequences. That is, openness to social influence involves a less rational process of matching behavior to norms and social expectations. This mode of reasoning is referred to as heuristic processing (Korsgaard & Meglino, 2008).

One consequence of individuals' tendency to accept social influence is that society is able to socialize such persons to accept other oriented values (Simon, 1991). Thus, persons who manifest a greater tendency to accept social information should, in addition to being less likely to act in a rationally self interested way, also exhibit higher levels of altruistic or other oriented

values such as concern for others. Studies have found support for a positive relationship between other oriented values and lower levels of rationally self-interested behavior in a variety contexts that did not involve outcomes to other persons (see e.g., Korsgaard et al., 1996; Korsgaard, Meglino, & Lester, 1997, 2004; Meglino & Korsgaard, 2007).

There are reasons to believe that other-orientation is stimulated by contextual factors as well. Since all individuals possess at least some minimum tendency to accept social influence and thus also possess a corresponding level of other oriented values, contextual factors that trigger other oriented cognitions may also activate an equivalent tendency to engage in lower levels of rationally self-interested processing. Evidence of this effect can be seen in research showing that individuals will engage in altruistic behavior when they are instructed to adopt the perspective of another person (Batson & Shaw, 1991). Additionally, research shows that one can foster prosocial and cooperative behavior by causing individuals to believe that they are members of a common group (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Finally, priming individuals on moral or prosocial concepts also appears to induce other interest (Smeesters, Warlop, Van Avermaet, Corneille, & Yzerbyt, 2003). In summary, this research suggests that situational factors that prime an individual to think about others may result in cognitive processing that is less rational and self-interested.

Other Orientation and the Norm of Reciprocity

In the first of our two studies (Study 1), we examined helping behavior as a function of individual differences in other orientation and the salience of the norm of reciprocity. We varied the salience of the norm of reciprocity by manipulating the social obligation to reciprocate. To this end, we designed an experiment wherein expectations for future rewards were consistently low and impression management concerns were minimal. Moreover, because research has shown

that persons in a positive mood are more likely to help others (e.g., R. A. Baron, 1997; Levin & Isen, 1975; Salovey, Mayer, & Rosenhan, 1991), we took steps to assure that all participants were in a favorable mood. We expected that, in the absence of these self-interested motives, salience of the norm of reciprocity (hereafter referred to as "the norm of reciprocity") would have a stronger impact on individuals who were high in other orientation. That is, helping behavior would be greatest among individuals high in other orientation who were under a social obligation to reciprocate a favor. Specifically, we hypothesized the following:

Hypothesis 1: The impact of the norm of reciprocity on helping behavior is moderated by other orientation such that the norm of reciprocity will have a stronger effect on helping behavior for persons higher in other orientation.

## Study 1

## Participants and Design

Participants were 80 full-time undergraduate business students who volunteered to participate in the experiment in exchange for extra credit in an introductory business course. The average age of the participants was 20 years, and 56% of the sample was male. The experiment was a single factor design with a measured moderator. We manipulated the between subjects factor, salience of the norm of reciprocity, by varying the source of gifts (experimenter versus non-experimenter) that we offered to the participants. We measured participants' other orientation and their helping behavior directed at the experimenter.

### Procedure

The experiment was conducted in groups of 15-20 students. Participants first completed a pre-task questionnaire, which included a measure of other orientation. The experimenter then explained the apparent purpose of the study, a "mental models" test, which in reality was a

distracter task. In this task, participants were presented with a series of photographs of everyday objects (e.g., lamp, chair), and rated each object on a given neutral attribute (e.g., large-small). Before beginning the task, we introduced the norm of reciprocity manipulation (explained below). After participants completed the distracter task, the experimenter asked them to sign up for a follow-up experiment, which constituted the principal dependent variable. Next, participants completed a post-task questionnaire assessing their reasons for participating in research studies and the manipulation checks. Last, participants were debriefed as to the true nature of the experiment.

Norm of Reciprocity Manipulation. To stimulate the norm of reciprocity, we varied the source of gifts provided to participants. Specifically, we varied whether or not participants received these gifts (a souvenir wallet and some cookies) from the experimenter or from another source. To avoid confounding reciprocity with the mood enhancing effect of receiving gifts (Brief, Butcher, & Roberson, 1995), participants in both conditions received the same gifts, which were distributed immediately after the pre-measure and before the distracter task.

In the *high reciprocity* condition, the experimenter gave the gifts to participants in appreciation for participating in the study. The experimenter reminded participants that they would receive extra credit in exchange for attending the experiment, which was the basis of exchange when participants signed up for the experiment. Thus, the gifts were portrayed as a present; that is, a token of thanks presented by the experimenter to the participants. Note that these gifts were beyond the pre-arranged terms of exchange (i.e., participation in exchange for extra credit).

In the *low reciprocity* condition, participants received gifts that were not attributable to the experimenter. In this condition, the conference room in which the experiment took place

contained materials ostensibly left from a previous meeting; namely computer presentation equipment, literature, merchandise and snacks. Immediately after participants completed the pretest survey, an accomplice entered the room. She stated that she had just returned from escorting a guest speaker from the building and had come to remove the items left in the room. The accomplice then explained that the box of merchandise and the cookies were promotional gifts left over from the presenter. Noting that she did not need or want the extra material, the accomplice handed out the remaining gifts to the participants. The accomplice also gave the gifts to the experimenter, which ostensibly underscored that the experimenter was not responsible for the gifts.

#### Measures

Accurately assessing *other orientation* is problematic because other orientation describes a mode of behavior (i.e., helping other persons) that is socially desirable. Thus, measures of other orientation are vulnerable to social desirability bias (Crowne & Marlowe, 1964), which can seriously compromise the validity of the measure. This bias is present in normative (Likert-type) measures of other orientation (Ravlin & Meglino, 1987a). We addressed this issue by employing a forced-choice measure of other orientation. As described by Hicks (1970), forced-choice measures can be either normative or ipsative (Cattell, 1944). When the items that comprise the measure are matched in attractiveness and the irrelevant items are unscored, the procedure yields a normative measure with important properties that enhance its validity. Specifically, this procedure reduces leniency, severity, halo error, faking and response acquiescence (Hicks, 1970, p. 177).

We assessed other orientation using the Concern for Others subscale of the Comparative Emphasis Scale (CES, Raylin & Meglino, 1987a, 1987b). The CES is a 24-item forced-choice

scale that requires respondents to choose between pairs of statements representing four different values (concern for others, fairness, achievement, and honesty-integrity) that have been determined to be important in the workplace (Cornelius, Ullman, Meglino, Czajka, & McNeely, 1985). In keeping with the previously described normative procedure (Hicks, 1970), the pairs of statements in the CES are matched for social desirability. Moreover, we only scored the 12 statements that assessed other orientation (i.e., statements that assessed different values were unscored). Scores ranged from 0 to 12 depending upon the number of times the subject selected one of 12 statements representing the value of concern for others (e.g., "trying to avoid hurting other people;" "lending a helping hand to someone having difficulty").

The Concern for Others subscale has demonstrated convergence with constructs that are related to other orientation, such as empathy (Davis, 1980) and social interest (Crandall, 1975), and divergence with measures of self-orientation, such as narcissism and self-enhancement (Korsgaard et al., 1996; McNeely, 1992; McNeely & Meglino, 1994). Test-retest reliability of the subscale estimated on a separate study of 358 job applicants over a four week period was acceptable (r = .70). Because internal consistency procedures can yield erroneous estimates of reliability for forced-choice scales (H. Baron, 1996; Tenopyr, 1988), Tenopyr (1988) recommended reporting the internal consistencies of such scales using the items in normative form. This procedure yielded an internal consistency of .95 for the Concern for Others subscale (Ravlin & Meglino, 1987a).

We operationalized *helping behavior* as whether or not the participant volunteered for a follow-up experiment. Immediately after completing the distracter task, the experimenter asked participants to volunteer for a follow-up experiment. The follow-up was described as a similar task to that which the participants had just completed and lasting approximately the same amount

of time (about 20 minutes). The experimenter explained that there was no extra credit available at this time for the follow-up experiment but that their commitment was required at the present time. Thus, participants would have to commit to the follow-up experiment in the absence of an expected reward.

The experimenter indicated that participants who signed up for the experiment would be contacted to arrange the experiment in the next three weeks at a mutually convenient time. The sign-up procedure was designed to preserve the subjects' anonymity yet enable us to link their responses to the questionnaire data. The last sheet of the distracter task packet contained two removable stickers – one indicating "yes" and one indicating "no." A sheet with participants' names and contact information was circulated among the group. Students were asked to put the appropriate sticker by their name. The dependent measure was therefore a trace measure: the sticker remaining in the participants' packet indicated the obverse of their choice. The experimenter left the room during this time so that participants would not feel pressure to participate in the experiment. The sign-up sheet was put into an envelope by the last participant and sealed. Participants were led to believe that the experimenter would examine this sheet at a later date. In fact, there was no follow-up experiment and the sheet was subsequently destroyed to preserve participants' anonymity.

Additionally, we included a measure of *mood* in order to rule out alternative interpretations of the findings. Immediately after receiving the gifts, participants completed a short mood measure adapted from Burke, Brief, George, and Roberson (1989). This scale asked participants the extent to which six adjectives described their feelings at the present moment (e.g., "active," "excited," "elated"). Participants rated each item on a 5-point scale ( $1 = not \ at \ all; 5 = very \ much$ ), which we averaged to form an overall index ( $\alpha = .85$ ).

Participants also rated two items that served as the *manipulation check* for the reciprocity manipulation ("the experimenter provided me with a gift for participating in today's study," and "the experimenter provided additional incentives to encourage my participation in today's study"). They rated these items on a 7-point Likert scale (1=*strongly disagree*; 7 = strongly *agree*). The manipulation check was the average of these two items ( $\alpha = .67$ ). *Results* 

A t-test on the manipulation check indicated that the participants in the high reciprocity condition were significantly more likely to indicate that the experimenter had provided a gift and incentives for participating in the experiment ( $t_{78} = 5.66$ , p < .01,  $m_{\text{low reciprocity}} = 4.77$ , s.d. = 1.88,  $m_{\text{high reciprocity}} = 6.56$ , s.d. = 0.73). It is noteworthy that even in the low reciprocity condition, the mean on the manipulation check was rather high; suggesting that design constants in the study (e.g., the exchange of extra credit for participation) may have stimulated some minimum sense of reciprocity in both conditions. However, this significant difference indicates that the manipulation successfully created differences in reciprocity.

To test Hypothesis 1, that the effect of the norm of reciprocity on helping would be stronger for persons high in other orientation, we conducted a logistic regression on the dichotomous dependent variable of helping, with reciprocity, other orientation, and the interaction of reciprocity and other orientation as the predictors. The results of this analysis are presented in Table 1. The main effects of reciprocity and other orientation, which were not hypothesized, were not significant. As hypothesized, however, the results revealed a significant interaction ( $\chi_1^2 = 4.10$ , p < .05). Using a median split on other orientation, we estimated the rates of helping within condition for persons high versus low in other orientation, which are illustrated in Figure 1. The pattern, which supported our hypothesis, indicates that the norm of reciprocity

had a greater impact on persons high in other orientation (percentage of helping: low reciprocity = 78.26, high reciprocity = 100.00) than for persons low in other orientation (percentage of helping: low reciprocity = 81.25, high reciprocity = 73.68).

-----

Insert Table 1 and Figure 1 about here

\_\_\_\_\_

Because receiving gifts has the potential to enhance positive affect (Brief et al., 1995), we examined the effect of reciprocity on mood. Specifically, we conducted hierarchical moderated regression analysis on the mood scale. The results indicated that that norm of reciprocity did not have a significant main effect on mood ( $F_{1,75} = 0.15$ , n.s.). Moreover, this effect was not moderated by other orientation ( $F_{1,75} = 0.13$ , n.s.). Thus, the findings do not seem to be attributable to the potential mood-enhancing effect of gift giving.

### Discussion

Social exchange theory indicates that two mechanisms are responsible for employees performing OCB: the expectation of future returns and adherence to the norm of reciprocity. The process whereby expectations of future returns affect OCB is implicitly rational and self interested in that it involves the actor considering the likelihood of future personal benefits when electing to engage in OCB. In contrast, the mechanism underlying the norm of reciprocity is less rational and self-interested in that actors are believed to be acting out of a sense of moral obligation associated with an internalized norm (Gouldner, 1960). Given that the theory of other orientation maintains that other oriented individuals are more likely to act on social information (such as norms) without consideration of future benefit, we reasoned that, when the norm of reciprocity is salient, individuals high in other orientation would be more likely to act on the

norm of reciprocity in the absence of future benefits. The findings of Study 1 supported this prediction in that, compared to those who were lower in other orientation, participants higher in other orientation were significantly more likely to volunteer when the norm of reciprocity was made salient.

It is noteworthy that this finding was obtained in the absence of future returns in that participants had no promise of any future rewards or compensation if they volunteered to help. Thus, from a rational, self-interested perspective, it would not make sense to help under the circumstances in Study 1. Indeed, the norm of reciprocity did not have a main effect on helping and, as Figure 1 illustrates, there was no effect of the norm of reciprocity for persons lower in other orientation. Thus, the norm of reciprocity alone appears to be insufficient to motivate prosocial behavior among participants who are low in other orientation. Indeed, social exchange theory would suggest that motivating OCB among these individuals requires the expectation of present or future returns.

The pattern of findings shown in Figure 1 provides indirect evidence of two different judgment processes underlying prosocial behavior. Specifically, it suggests that the actions of persons who are higher in other orientation are anchored in cognitions about the past in that their behavior was influenced by previous benefits provided by others. The pattern also suggests that the actions of persons who are lower in other orientation are not dependent upon prior benefits and may indeed be anchored in rational cognitions about future benefits or returns.

Unfortunately, we can only speculate about such cognitions because we did not specifically assess participants' cognitions about future returns. Moreover, we assessed other orientation as an individual difference in Study 1, thus limiting our ability to make strong causal inferences about the effects of other orientation. Further, we measured behavioral intentions (i.e., signing

up for a future experiment) but not actual behavior. To clarify the influence of other orientation and the role of future returns, we conducted a second study (Study 2). Here, we specifically assessed participants' beliefs about whether they would obtain benefits for their helping behavior. We also manipulated other orientation, allowing us to make stronger causal inferences, and measured actual helping behavior.

### Study 2

In Study 2 we employed a priming manipulation to influence the level of other orientation. As with Study 1, we also manipulated the salience of the norm of reciprocity by providing participants with a gift. Given the results of Study 1, we expected the norm of reciprocity to have a significant effect on the helping behavior of individuals who were primed to be other oriented. However, because Study 1 showed that the norm of reciprocity alone would not motivate prosocial behavior among persons low in other orientation, we expected an effect of reciprocity only when individuals were primed to be other oriented. Therefore, our first hypothesis for Study 2 was:

Hypothesis 2: The impact of the norm of reciprocity on helping behavior is moderated by other orientation such that the norm of reciprocity will have an effect on helping behavior for persons high in other orientation but will not have an effect for persons low in other orientation.

The second purpose of Study 2 was to examine the role of cognitions on the decision to help. As noted earlier, the theory of other orientation suggests that other-oriented persons are less likely to weight the personal costs and benefits before choosing to act. In the context of social exchange relationships, this implies that the tendency to provide a benefit to another party should not be contingent on expected returns from the other party. In contrast, the rationally self-

interested person should weigh the potential for future gains when choosing to help. In other words, other orientation should attenuate the relationship between expected returns and actual helping. In sum, we hypothesize:

Hypothesis 3: The relationship between expectations of return and helping is moderated by other orientation such that this relationship is weaker when individuals are other oriented.

Recall that social exchange theory suggests two alternative mechanisms underlying the decision to engage in helping behavior. One mechanism posits that individuals will offer help because they believe that others will return benefits to them in kind. In contrast, the adherence to the norm of reciprocity does not rely on a consideration of future benefits but rather the act is guide by moral obligation. That is, the norm of reciprocity is associated with a lesser concern for future returns (Gouldner, 1960). Thus, the link between cognitions about expected returns and the choice to help should be weaker when the norm of reciprocity is activated. However, as the findings of Study 1 indicate, this norm should only have an impact among persons who are high in other orientation. Therefore, these findings suggest a multiple interaction involving helping and expected returns. That is, expected returns should have the least amount of influence on helping behavior when the norm of reciprocity is made salient among other-oriented individuals. We therefore proposed:

Hypothesis 4: The relationship between expected returns and helping is moderated by other orientation and the norm of reciprocity such that this relationship is weakest when individuals are both other oriented and exposed to the norm of reciprocity.

Participants and Design

One hundred forty-six traditional full-time undergraduate business students participated in the experiment in exchange for extra credit in an introductory business course. The average age of the participants was 20 years, and 52 percent of the sample was male. The total sample was reduced to 142 after we dropped four participants who did not understand the instructions. The experiment was a 2 x 2 factorial design in which we manipulated both other orientation (high vs. low other orientation) and reciprocity (high reciprocity vs. low reciprocity).

Procedure

The experiment was conducted in small groups ranging from 2 to 23 students with an average group size of 8. The experimenter explained that he was collecting data for the principal investigator, and described the study as a verbal task experiment. In reality, the verbal task was the same distracter task employed in Study 1. The reciprocity manipulation occurred immediately after participants signed the informed consent form. Participants next completed the distracter task, followed by the other orientation manipulation. We then asked participants to volunteer for another study and to complete a post-task questionnaire, which assessed their reasons for participating in the research study and contained the manipulation checks.

We employed the same manipulation of the norm of reciprocity as in Study 1 in that we varied the source of gifts received by the participants. However, given that we used a priming manipulation of other orientation, which is a relatively subtle and transitory operationalization, we employed a weaker gift manipulation of cookies only (as opposed to the cookies and wallets provided in Study 1).

We manipulated other orientation by having participants read narratives that varied in other-oriented content and then answer questions regarding the narratives. In the *high other orientation condition*, participants read a news article about hurricane Katrina victims and an

organization that seeks to help these victims. In the *low other orientation condition*, participants read a news article about how one should manage student loans and investments. After reading the article, participants answered short-answer questions related to the article's content. At this point, participants were asked to help the experimenter with another task (described below). Participants then completed a post-task questionnaire containing questions that assessed participants' reasons for participating in the research study, the manipulation checks, and demographic information. After completing the second packet, the participants were dismissed.

Measures. We operationalized helping behavior in Study 2 as a composite measure of effort toward helping. Participants were asked to participate in a follow up online by writing their email address on the card. To preserve their anonymity, the experimenter circulated an envelope into which participants placed the card. The experimenter explained that participation was voluntary and anonymous and that there would be no extra credit offered for completing the survey. In reality, each card had a hidden identification code that corresponded to the identification number on the questionnaire and online survey link. Participants who signed up for the second study received an email link to an online survey. The survey contained several pages of mentally taxing logic and word problems. At the end of each page, participants could elect to end the study or continue to the next. We created an index t hat encompasses both intention, action and resources (time and effort) invested in helping. Specifically, an index of helping was created by standardizing and averaging the following: (a) whether the participant volunteered for a follow-up survey, (b) number of problems in the online survey completed and (c) the total time spend on the survey. Because this variable was skewed (roughly 54% of the

respondents did not volunteer and thus did not receive an email link), we used the square-root transformation of this index.<sup>a</sup>

Expected returns was assessed in the post-questionnaire by asking the participants to rate a single item "If I do the follow-up, I might get something in return" on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree).

The manipulation check for the norm of reciprocity was the average of two, 5-point Likert-type scale assessing the extent to which participants perceived receiving a gift from the experimenter (1 = strongly disagree to 5 = strongly agree). A sample item was, "The experimenter provided you with a token of appreciation for participating in today's study."

The manipulation check for the priming of other orientation was a word stem completion task. Participants were presented with the first two letters of a word, and were asked to fill in the blanks to make it a complete word. The task consisted of 20 items, 11 items of which were designed so that they may be other oriented words (e.g., share, help, and give). The task was scored as the proportion of completed words that were other-oriented.

As in Study 1, participants completed a short mood measure adapted from Burke, Brief, George, and Roberson (1989). This scale asked participants the extent to which six adjectives described their feelings at the present moment (e.g., "active," "excited," "elated"). Each item was rated on a 5-point scale ( $1 = not \ at \ all; \ 5 = very \ much$ ), which were averaged to form an overall index ( $\alpha = .85$ ).

#### Results

We conducted t-tests to determine whether the manipulation of other orientation and reciprocity were successful. The results indicated that the mean of the reciprocity manipulation items for participants in the high reciprocity condition was significantly higher than for

<sup>&</sup>lt;sup>a</sup> The pattern of significant results were the same for the untransformed version of this measure.

participants in the low reciprocity condition ( $t_{140} = 5.54$ , p < .01,  $m_{\text{high reciprocity}} = 4.48$ , s.d. = 0.67,  $m_{\text{low reciprocity}} = 3.64$ , s.d. = 0.97). Further, participants in the other orientation condition were more likely to complete words that had other-oriented meaning ( $t_{140} = 2.16$ , p < .05,  $m_{\text{high other}}$  orientation = .46, s.d. = .22,  $m_{\text{low other orientation}} = .38$ , s.d. = .21).

As in Study 1, we addressed the potential alternative explanation that our findings could be attributed to the mood-enhancing effect of receiving a gift. To examine this possibility we conducted a regression analysis with the mood measure as the dependent variable. The results indicated that none of the independent variables, including the interaction term, had a significant effect on mood ( $F_{1,140} = 0.27$ , n.s. for other orientation;  $F_{1,140} = 0.00$ , n.s. for the norm of reciprocity;  $F_{1,140} = 0.01$ , n.s. for the interaction term). Therefore, the findings are not attributable to the mood-enhancing effect of receiving a gift.

Hypothesis 2 stated that the impact of the norm of reciprocity on helping will be moderated by other orientation, such that reciprocity will have a stronger effect on helping behavior for persons higher in other orientation. We tested this hypothesis by conducting an ANOVA on helping, which, as summarized in Table 2, revealed a significant interaction of reciprocity and other orientation. Simple effects analysis provided further support for the hypothesis in that reciprocity had a significant effect in other oriented condition ( $F_{1,64} = 9.04$ , p < .01) but had no effect in the neutral condition ( $F_{1,78} = 0.00$ , n.s.). That is, participants in the high other orientation condition were more likely to help when the norm of reciprocity was made salient. In contrast, making the norm of reciprocity salient did not result in greater helping in the neutral condition. These effects are depicted in Figure 2.

-----

Insert Table 2 and Figure 2 about here

\_\_\_\_\_

Hypotheses 3 and 4 concerned the moderating role of other orientation and reciprocity on the relationship between expected returns and helping. These hypotheses were tested in hierarchical regression reported in Table 3. Hypothesis 3 predicted that the extent to which the decision to help is based on expected returns will be moderated by other orientation. As noted in step 2, the two-way interaction of other orientation and expected returns was significant. Simple slopes were estimated and are plotted in Figure 3. As this figure indicates, expected returns had little relation to helping for participants in the other-oriented condition (b = -.03). In contrast, expected returns had a strong positive relationship to helping in the neutral condition (b = .06). This pattern supports Hypothesis 3, indicating that the helping was less motivated by anticipated benefits when individuals were primed to be other oriented.

Hypothesis 3 posited that the relationship between expectations and helping would be moderated by the joint effect of other orientation and the norm of reciprocity such that the relationship would be weakest for participants high in other orientation who were exposed to the norm of reciprocity. As indicated in Step 3 of Table 3, this finding was not significant; thus, Hypothesis 3 was not supported.

### Discussion

The purpose of Study 2 was threefold: (a) to extend the findings of Study 1, which involved individual differences in other orientation, to contextual sources of other orientation (b) to extend the findings to actual, effortful helping behavior, and (c) to further examine the processes believed to be operating in Study 1. As described earlier, the core premise of the theory of other orientation is that persons who are higher in other orientation are less likely to engage in rational and self-interested assessments when contemplating the consequences of their

actions. Thus, when confronted with the opportunity to reciprocate a positive gesture from another, persons who are higher in other orientation will be more likely to engage in the behavior when it does not result in positive outcomes to the self. The findings of Study 1 were consistent with this premise. That is, compared to persons in the high other orientation condition, the decision to help for persons in the low other orientation condition was more contingent on expected returns for helping. While the findings of Study 1 were consistent with the theory of other orientation, our use of individual differences limited our ability to make strong causal inferences about the effects of other orientation. That is, unmeasured characteristics that covary with other orientation could have been responsible for the effects of other orientation in Study 1. To insure against this interpretation, we actively manipulated other orientation in Study 2. Moreover, although we took steps to ensure anonymity of volunteer, Study 1 employed a measure of behavioral intentions which are more socially desirable than actual, effortful behavior. Therefore, we included anonymous behavioral helping that involved effort on the part of the participant. We replicated the findings of Study 1 using these alternative operationalizations in Study 2. Using a triangulation strategy (Sackett & Larson, 1990) employing different methodologies bolsters the validity of our conclusions.

The underlying rationale for the effects of other orientation on helping is the assumption that persons lower in other orientation would be less influenced by cognitions about future positive outcomes. That is, because other-oriented individuals are les likely to engage in costbenefit reasoning when deciding whether or not to help, their decisions to help should not be strongly related to their beliefs about the benefits of doing so. We sought to validate this assumption in Study 2 examining the role of expected benefits of helping and whether its relationship to helping was weaker for other oriented persons. The findings indicated that the

relationship between anticipated benefits and helping was significantly weaker for participants in the other-oriented condition. This finding lends support of the validity of the assumed link between other orientation and forward thinking cognitions.

#### General Discussion

Researchers have maintained that the processes underlying OCB, particularly the relationship between job satisfaction and OCB, are based on social exchange theory (Organ & Konovsky, 1989; Van Dyne & LePine, 1998). However, research has heretofore not adequately delineated the multiple social exchange processes that are responsible for OCB. That is, social exchange theory suggests that OCB can be influenced by two very different mechanisms. One mechanism is anchored in cognitions about the future and is based on expectations of future benefits. Evidence for this mechanism can be seen in a study by Lester, et al., (in press), which found a stronger relationship between job satisfaction and OCB among persons who were lower in other oriented values. A second mechanism is anchored in cognitions about the past (i.e., normative obligation to reciprocate) and is not based on expected benefits. Support for this mechanism was evident in both studies of this investigation. Together, these findings suggest that OCB is influenced by multiple mechanisms (i.e., expectations of benefits and normative obligations that are likely to operate differently in various organizational situations.

## Theoretical Implications

The existence of multiple mechanisms suggests important distinctions about the conditions underlying OCB and about the types of OCB that persons are likely to exhibit. For example, because the expected returns mechanism addresses OCB that serves the self, persons are more likely to exhibit OCB when such behaviors can be observed by persons who are responsible for awarding future desired outcomes (see e.g., Bolino, 1999). Moreover, OCB that

is proactive and thus inherently more visible (e.g., helping another employee) should be more affected by expected benefits than should less visible, passive behavior (e.g., refusing to complain). On the other hand, OCB that is motivated by the normative obligation to reciprocate should be independent of such conditions and thus more likely to occur across a broader range of situations. Therefore, the type of OCB may not easily be divorced from its underlying motive.

It is also likely that the methodology used to assess OCB will capture different underlying motives. OCB that is observed by an employee's supervisor may reflect a variety of motivations: mood maintenance, impression management, expected benefits, and the norm of reciprocity are all possible motives for OCB witnessed by the supervisor. Given this multiplicity of motives, it may be difficult to separate the more subtle effects of reciprocity in field studies of OCB. Clearly, future research addressing the motives underlying OCB should carefully consider the method used to assess OCB.

### Practical Implications

The findings of this study suggest that one method of encouraging OCB among employees is for organizations to pursue a strategy that fosters other orientation while also promoting the perception of satisfactory exchanges among employees. For example, managers could foster the perception of fair and advantageous social exchanges by aligning expectations regarding the transactional elements of the psychological contract (Coyle-Shapiro, 2002). Management could also invest effort and resources in employees in order to create a psychological obligation (see Schein, 1968) that is repaid through employees performing OCB. Coyle-Shapiro (2002) found that such efforts (e.g., involvement in decision making, support for learning new skills) prompted greater OCB among employees who were more accepting of the

norm of reciprocity. This strategy could be coupled with an organizational culture that emphasizes other orientation.

An other-oriented organizational culture may be cultivated through the leadership, values and practices of the organization. As well, it may be shaped through the process of attraction-selection attrition. Research suggests that persons with certain characteristics tend to congregate in the same organization (Schneider, 1987) and that one dimension along which this can occurs is prosocial values and disposition (Crandall & Harris, 1976). Similarly, Holland's (1985) theory of vocational personalities identifies "social" types who prefer prosocially-oriented occupations (e.g., teaching, training, and developmental professions) and thus exhibit higher levels of prosocial disposition. Similarly, organization can be shaped along more individualistic and competitive lines. The impact of anticipated benefits versus normative obligations is should differ strongly in such organizations It behooves managers to consider the predominant culture when attempting to promote OCB in their organizations.

### Limitations

When combined with recent research by Lester et al., (in press), the current investigation suggests that the two processes outlined above can be responsible for motivating OCB.

Unfortunately, this conclusion is based on the findings of separate investigations. In order to have greater confidence in these multiple processes, they should be considered simultaneously in the same investigation. Clearly, this is an area of future investigation. Both of the studies in this investigation were conducted in a laboratory. This allowed us to be reasonably sure that participants' helping behavior was not influenced by the expectations of future benefits. It also allowed us to exert control over the manipulation of other orientation in Study 2. However, future research is needed that examines the multiple processes underlying OCB in field settings.

Summary

Katz (1964) noted the apparent foolishness of OCB in stating that persons who perform such behaviors are generally regarded as "dedicated damn fools" (p. 143). Katz believed that this behavior was foolish because it was unrewarded and thus not in an individual's self-interest. Our findings suggest that Katz' characterization is at least partially accurate. To be sure, the norm of reciprocity mechanism stems from a moral obligation that is not rooted in self-interest (Gouldner, 1960). On the other hand, Lester et al., (in press) found that OCB can be based on expected returns and thus appears to serve the self-interests of the performer. Therefore, the presence of multiple motives underling the relationship between job satisfaction and OCB limits our ability to make unqualified statements about the basis of this relationship and encourages further exploration into the nature of these mechanisms.

#### References

- Baron, H. (1996). Strengths and limitations of ipsative measurement. *Journal of Occupational* and Organizational Psychology, 69, 49-56.
- Baron, R. A. (1997). The sweet smell of ...helping: Effects of pleasant ambient fragrance on prosocial behavior in shopping malls. *Personality and Social Psychology Bulletin, 23*, 498-503.
- Batson, C. D., & Shaw, L. L. (1991). Evidence for altruism: Toward a pluralism of prosocial motives. *Psychological Inquiry*, *2*, 107-122.
- Bazerman, M. H. (1993). Fairness, social comparison and irrationality. In J. K. Murnighan (Ed.), Social psychology in organizations (pp. 184-203). Englewood Cliffs, NJ: Prentice Hall.
- Blau, P. M. (1964). Exchange and power in social life. New York: John Wiley & Sons, Inc.
- Bolino, M. C. (1999). Citizenship and impression management: Good soldiers or good actors. *Academy of Management Review, 24*, 82-98.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 71-98). San Francisco, CA: Jossey-Bass.
- Brewer, M. B. (2004). Taking the social origins of human nature seriously: Toward a more imperialist social psychology. *Personality and Social Psychology Review*, 8(2), 107-113.
- Brief, A. P., Butcher, A. H., & Roberson, L. (1995). Cookies, disposition, and job attitude: The effect of positive mood-inducing events and negative affectivity on job satisfaction in a field experiment. *Organizational Behavior and Human Decision Processes*, 62, 55-62.
- Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behavior. *Academy of Management Review, 11*, 710-725.

- Burke, M. J., Brief, A. P., George, J. M., & Roberson, L. (1989). Measuring affect at work:

  Confirmatory analyses of competing mood structures with conceptual linkage to cortical regulatory systems. *Journal of Personality and Social Psychology*, *57*(6), 1091-1102.
- Cattell, R. B. (1944). Psychological measurement: Normative, ipsative, and interactive. *Psychological Review, 51*, 292-303.
- Cornelius, E. T., Ullman, J. C., Meglino, B. M., Czajka, J., & McNeely, B. L. (1985). *A new approach to the study of worker values and some preliminary results*. Paper presented at the Southern Management Association, Orlando, FL.
- Coyle-Shapiro, J. A.-M. (2002). A psychological contract perspective on organizational citizenship behavior. *Journal of Organizational Behavior*, 23(8), 927-946.
- Crandall, J. E. (1975). A scale of social interest. *Journal of Individual Psychology*, 31, 187-195.
- Crandall, J. E., & Harris, M. D. (1976). Social interest, cooperation, and altruism. *Journal of Individual Psychology*, 32, 50-54.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874-900.
- Cropanzano, R., Stein, J., & Goldman, B. (Eds.). (in press). *Self-interest*. Thousand Oaks, CA.: Sage.
- Crowne, J. E., & Marlowe, D. (1964). *The approval motive: Studies in evaluative dependence*. New York, NY: Wiley.
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS*Catalog of Selected Documents in Psychology, 10, 85.

- George, J. M., & Brief, A. P. (1992). Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological Bulletin*, 112, 310-327.
- Gouldner, A. W. (1960). The norm of reciprocity. American Sociological Review, 25, 161-178.
- Greene, W. H. (2003). *Econometric Analysis (5th edition)*. Upper Saddle River, NJ: Prentice-Hall.
- Hicks, L. E. (1970). Some properties of ipsative, normative, and forced-choice normative measures. *Psychological Bulletin, 74*, 167-184.
- Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Hui, C., Lam, S. S. K., & Law, K. K. S. (2000). Instrumental values of organizational citizenship behavior for promotion: A field quasi-experiment. *Journal of Applied Psychology*, 85(5), 822-828.
- Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral Science*, *9*, 131-146.
- Kelman, H. C. (2006). Interests, relationships, identities: Three central issues for individuals and groups in negotiating their social environment. *Annual Review of Psychology*, *57*, 1-26.
- Korsgaard, M. A., & Meglino, B. M. (2008). Beyond the individualistic self: A framework for prosocial motives and judgments. In H. Wayment & J. Bauer (Eds.), *Transcending Self-Interest: Psychological Explorations of the Quiet Ego*. Washington, DC: American Psychological Association.

- Korsgaard, M. A., Meglino, B. M., & Lester, S. W. (1996). The effect of other-oriented values on decision making: A test of propositions of a theory of concern for others in organizations. *Organizational Behavior and Human Decision Processes*, 68, 234-245.
- Korsgaard, M. A., Meglino, B. M., & Lester, S. W. (1997). Beyond helping: Do other-oriented values have broader implications in organizations? *Journal of Applied Psychology*, 82, 160-177.
- Korsgaard, M. A., Meglino, B. M., & Lester, S. W. (2004). The effect of other orientation on self-supervisor rating agreement. *Journal of Organizational Behavior*, 25(7), 873 891.
- Lester, S. W., Meglino, B. M., & Korsgaard, M. A. (in press). The role of ither orientation in organizational citizenship behavior. *Journal of Organizational Behavior*.
- Levin, P. F., & Isen, A. M. (1975). Further studies on the effect of feeling good on helping. *Sociometry*, 38, 141-147.
- Long, J. S., & Freese, J. (2006). Regression Models for Categorical Dependent Variables Using

  Stata (2nd edition). : . College Station, TX: Stata Press.
- McNeely, B. L. (1992). *An investigation of prosocial organizational behavior: A field study*.

  University of South Carolina, Columbia, SC.
- McNeely, B. L., & Meglino, B. M. (1994). The role of dispositional and situational antecedents in prosocial behavior: An examination of the intended beneficiaries of prosocial behavior. *Journal of Applied Psychology*, 79, 836-844.
- Meglino, B. M., & Korsgaard, M. A. (2004). Considering rational self-interest as a disposition:

  Organizational implications of other orientation. *Journal of Applied Psychology*, 89, 946–959.

- Meglino, B. M., & Korsgaard, M. A. (2007). The role of other orientation in reactions to job characteristics. *Journal of Management*, 33(1), 57-83.
- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome.

  Lexington, MA: Lexington Books.
- Organ, D. W., & Konovsky, M. A. (1989). Cognitive versus affective determinants of organizational citizenship behavior. *Journal of Applied Psychology*, 74, 157-164.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, 48, 775-802.
- Perugini, M., Gallucci, M., Presaghi, F., & Ercolani, A. P. (2003). The personal norm of reciprocity. *European Journal of Personality*, 17(4), 251-283.
- Podsakoff, P. M., Aherne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology*, 82, 262-270.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26, 513-563.
- Ravlin, E. C., & Meglino, B. M. (1987a). Effect of values on perception and decision making: A study of alternative work values measures. *Journal of Applied Psychology*, 72, 666-673.
- Ravlin, E. C., & Meglino, B. M. (1987b). Issues in work values measurement. In W. C. Frederick (Ed.), *Research in corporate social performance and policy* (Vol. 9, pp. 153-183). Greenwich, CT: JAI Press.
- Sackett, P. R., & Larson, J. R. (1990). Research strategies and tactics in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of*

- *industrial and organizational psychology* (2nd ed., pp. 419 489). Palo Alto, CA: Consulting Psychologists Press.
- Salovey, P., Mayer, J. D., & Rosenhan, D. L. (1991). Mood and helping: Mood as a motivator of helping and helping as a regulator of mood. In M. S. Clark (Ed.), *Review of Personality* and Social Psychology: Prosocial Behavior (Vol. 12, pp. 215-237). Newbury Park, CA: Sage Publications, Inc.
- Schein, E. H. (1968). Organizational socialization and the profession of management. *Industrial Management Review*, *9*(2), 1.
- Schneider, B. (1987). The people make the place. Personnel Psychology, 40, 437-453.
- Simon, H. A. (1990). A mechanism for social selection and successful altruism. *Science*, *250*, 1665-1668.
- Simon, H. A. (1991). Organizations and markets. *Journal of Economic Perspectives*, 5(2), 25-44.
- Smeesters, D., Warlop, L., Van Avermaet, E., Corneille, O., & Yzerbyt, V. (2003). Do not prime hawks with doves: The interplay of construct activation and consistency of social value orientation on cooperative behavior. *Journal of Personality and Social Psychology*, 84(5), 972-987.
- Tenopyr, M. L. (1988). Artifactual reliability of forced-choice scales. *Journal of Applied Psychology*, 73, 749-751.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987).

  \*Rediscovering the social group: A self-categorization theory. Cambridge, MA, US: Basil Blackwell.

- Turillo, C. J., Folger, R., Lavelle, J. J., Umphress, E. E., & Gee, J. O. (2002). Is virtue its own reward? Self-sacrificial decisions for the sake of fairness. *Organizational Behavior and Human Decision Processes*, 89(1), 839-865
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, *41*, 108-119.

Table 1: Logit Regression Analysis of the Impact of the Norm of Reciprocity and Other Orientation on Helping Behavior in Study 1

| Predictor                       | В     | SE   | Wald $\chi^2$ |
|---------------------------------|-------|------|---------------|
| Reciprocity                     | -1.16 | 0.79 | 2.15          |
| Other Orientation               | -0.22 | 0.16 | 1.94          |
| Reciprocity * Other Orientation | 0.32  | 0.16 | 4.10**        |
| $\chi^2$                        | 4.91  |      |               |

<sup>\*</sup> p < .05

Table 2: Analysis of Variance of the Effect of Other Orientation and the Norm of Reciprocity on Helping in Study 2

| df  | SS    | F                          | $\eta^2$                                      |
|-----|-------|----------------------------|---|
| 1   | 1.14  | 11.96*                     | 0.08  |
| 1   | 0.47  | 4.95*                      | 0.03  |
| 1   | 0.46  | 4.84*                      | 0.03  |
| 138 | 13.13 |                            |   |
|     | 1     | 1 1.14<br>1 0.47<br>1 0.46 | 1 1.14 11.96*<br>1 0.47 4.95*<br>1 0.46 4.84* |

<sup>\*</sup> p < .05

Table 3 Hierarchical Regression Testing the Three-way Interaction of Reciprocity, Other Orientation, and Expected Returns on Helping in Study 2

| Predictor                                 | В     | t      | $\mathbb{R}^2$ | F (df)       |
|---|-------|--------|----------------|--------------|
| Step 1                                    |       |        |                |              |
| Other Orientation                         | 0.09  | 1.66+  |                |              |
| Reciprocity                               | 0.14  | 2.70** |                |              |
| Expected Returns                          | 0.01  | 0.22   | .07            | 3.45*(3,134) |
| Step 2                                    |       |        |                |              |
| Other Orientation * Reciprocity           | 0.18  | 1.74+  |                |              |
| Reciprocity* Expected Returns             | -0.07 | -1.37  |                |              |
| Other Orientation * Expected Returns      | -0.10 | -2.17* | .14            | 3.61*(6,131) |
| Step 3                                    |       |        |                |              |
| Other Orientation * Reciprocity * Returns | -0.03 | -0.30  | .14            | 3.08*(7,130) |

<sup>+</sup> p < .10

<sup>\*</sup> p < .05

<sup>\*\*</sup> p < .01

 $\label{eq:Figure 1} \emph{Figure 1}. \ \ \emph{Interaction of Norm of Reciprocity and Other Orientation on Helping Behavior in Study 1}$ 

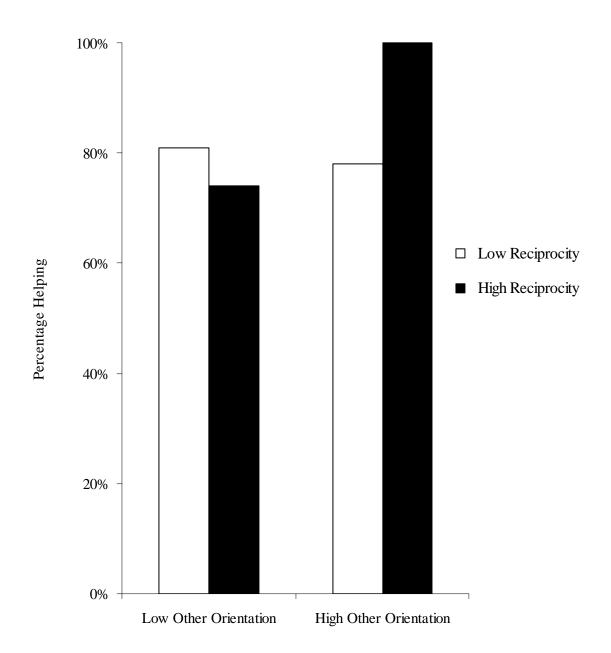
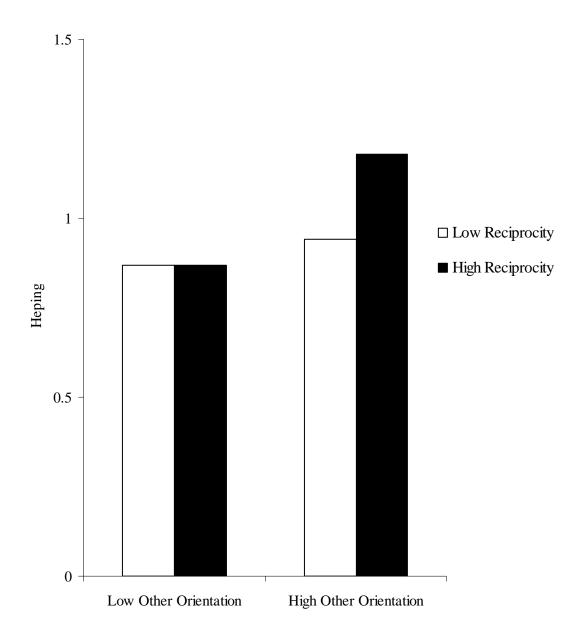
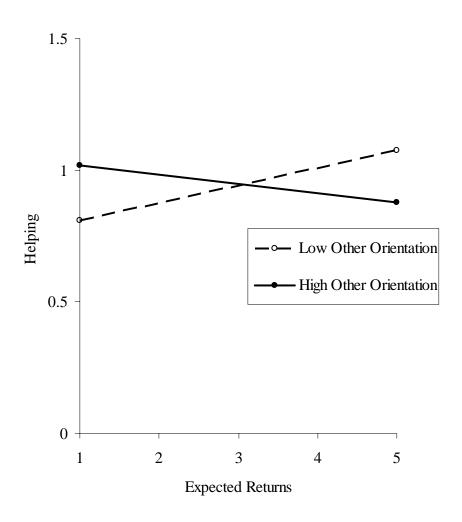


Figure 2. Interaction of the Norm of Reciprocity and Other Orientation on Helping Behavior<sup>a</sup> in Study 2



<sup>&</sup>lt;sup>a</sup> Transformed scores are reported; the pattern was consistent with untranformed version of the measure.

Figure 3. Simple Slopes for the Moderating Effect of Other Orientation on the Relationship between Expected Returns and Helping



Low Other Orientation: Y = .07X + 0.74

HighOther Orientation: Y = -.04X + 1.05