

Mission Possible? The Performance of Prosocially Motivated Employees Depends on Manager Trustworthiness

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The authors propose that in mission-driven organizations, prosocially motivated employees are more likely to perform effectively when trust cues enhance their perceptions of task significance. The authors develop and test a model linking prosocial motivation, trust cues, task significance, and performance across 3 studies of fundraisers using 3 different objective performance measures. In Study 1, perceiving managers as trustworthy strengthened the relationship between employees' prosocial motivation and performance, measured in terms of calls made. This moderated relationship was mediated by employees' perceptions of task significance. Study 2 replicated the interaction of manager trustworthiness and prosocial motivation in predicting a new measure of performance: dollars raised. It also revealed 3-way interactions between prosocial motivation, manager trustworthiness, and dispositional trust propensity, such that high trust propensity compensated for low manager trustworthiness to strengthen the association between employees' prosocial motivation and performance. Study 3 replicated all of the previous mediation and moderation findings in predicting initiative taken by professional fundraisers. Implications for work motivation, work design, and trust in organizations are discussed.

Keywords: prosocial motivation, trust, task significance, performance

As concerns about human welfare and corporate social responsibility continue to rise, mission-driven organizations are increasingly common (Podolny, Khurana, & Hill-Popper, 2005). Mission-driven organizations have core purposes that emphasize protecting and promoting human well-being, not merely earning profits (Brickson, 2007; Margolis & Walsh, 2003). They are dedicated to benefiting stakeholders, not only shareholders, by pursuing social goals, public service missions, ideological causes, and contributions to community and societal interests (Thompson & Bunderson, 2003). Mission-driven organizations comprise a large segment of organizations and employees; they include hospitals, fire and police departments, governments, armed forces, universities, and NGOs and nonprofits working for health, educational, political, religious, environmental, and humanitarian causes, as well as high-reliability organizations such as airlines and power plants (Hofmann, Jacobs, & Landy, 1995; Weick & Roberts, 1993). In the language of Selznick (1957), mission-driven organizations are

institutions infused with social value (Perry & Hondeghem, 2008). Given the rise of these organizations and employees' attraction to them (Turban & Greening, 1997), scholars and practitioners alike are seeking to gain a deeper understanding of the factors that affect the performance of employees in mission-driven organizations.

Mission-driven organizations often attract employees with high levels of prosocial motivation, who care about benefiting others and thus feel drawn to organizations that provide opportunities to help others and make a difference (e.g., Perry & Hondeghem, 2008; Thompson & Bunderson, 2003). Work motivation researchers have begun to propose and find that in mission-driven organizations, prosocially motivated employees often achieve high levels of task and extrarole performance. From a theoretical perspective, researchers have argued that prosocially motivated employees are likely to achieve high performance in mission-driven organizations by showing commitment and dedication (Besharov, 2008; Thompson & Bunderson, 2003); pursuing common goals and seeking to serve the common good (Perry & Hondeghem, 2008; Shamir, 1991); helping coworkers, supervisors, and customers (Bolino, 1999); displaying high levels of cooperation (Parker & Axtell, 2001); and using negative feedback to improve their skills and performance strategies (Korsgaard, Meglino, & Lester, 1997). In support of these arguments, recent research has shown that prosocial motivation can predict higher levels of performance in government work (Perry & Hondeghem, 2008), firefighting and fundraising (Grant, 2008a; Rioux & Penner, 2001), nursing (Riggio & Taylor, 2000), hospital and educational work (Ilies, Scott, & Judge, 2006), and engineering (Kamdar & Van Dyne, 2007; Moon, Kamdar, Mayer, & Takeuchi, 2008).

However, in many mission-driven organizations, employees face ambiguity about task significance (Hackman & Oldham, 1980). They lack clear information about whether their work is

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having a positive impact on beneficiaries—the individuals, groups, or stakeholders whom the organization is dedicated to serving (Blau & Scott, 1962; Katz & Kahn, 1966). Task significance is often ambiguous in mission-driven organizations for several reasons. First, employees in mission-driven organizations frequently encounter red tape, which can prevent them from feeling that they have achieved their goals (Scott & Pandey, 2005) and leave them questioning whether their missions are possible (Weick, 1984). Second, employees in mission-driven organizations often receive little direct feedback about how their actions are affecting beneficiaries, which may leave them questioning whether their missions have been accomplished. For example, in health care organizations, it can take years for employees' efforts to be translated into drugs, vaccines, and technologies that produce benefits for medical patients. Research suggests that in mission-driven organizations, when prosocially motivated employees lack opportunities to have or see an impact on beneficiaries, their performance suffers: They care about doing work that has a positive impact on beneficiaries but are left questioning whether their work is making a difference (Grant, 2008b). From both theoretical and practical perspectives, we lack a clear understanding of the factors that can facilitate the performance of prosocially motivated employees in mission-driven organizations.

In this article, we seek to address this gap by providing theoretical, empirical, and practical insight into the conditions under which prosocial motivation is linked to performance in mission-driven organizations. We integrate theories of trust and work design to propose that the association between prosocial motivation and performance will be strengthened when employees receive trust cues that enhance their perceptions of task significance. We test our hypotheses across three field studies of fundraisers using three different samples and measures of performance, and we discuss the implications of our results for advancing current knowledge about work motivation, work design, and trust in organizations.

Prosocial Motivation and Performance in Mission-Driven Organizations

Our focus in this article is on the contingent relationships between prosocial motivation and performance in mission-driven organizations. *Prosocial motivation* is the desire to expend effort in order to benefit other people (Grant, 2008a), and *performance* describes the degree to which employees' behaviors succeed in contributing to organizational goals (e.g., Motowidlo, 2003). In the following sections, we explain how trust cues are likely to strengthen the association between prosocial motivation and performance in mission-driven organizations by enhancing employees' perceptions of task significance. We draw on theories of trust and work design to propose that employees will be more likely to have confidence in trustworthy managers' mission communications and actions; this will enable employees to see how their work is helping beneficiaries and enhance the performance of those who are prosocially motivated.

Manager Trustworthiness

In mission-driven organizations, managers play a critical role in shaping employees' beliefs about the impact of their work on others (Piccolo & Colquitt, 2006; Podolny et al., 2005; Purvanova, Bono, & Dzieweczynski, 2006; Thompson & Bunderson, 2003). Managers have the opportunity to share mission communications,

vision statements, and inspiring stories that strengthen employees' perceptions of task significance—their beliefs that their jobs have a positive impact on beneficiaries (Hackman & Oldham, 1980; Salancik & Pfeffer, 1978). Below, for example, the manager of an emergency helpline reinforces to her employees that their work serves the mission of saving children's lives.

We have to rescue the child, get him or her to a safe place, and later try to rehabilitate him or her with the family . . . Be passionate . . . Remember our mission: The child comes first. We work for the child. The child comes first. Now, there are 400,000 most vulnerable kids living on the streets. These are the main target kids we want to reach . . . We have to reach out to these children. (Bornstein, 2004, pp. 71–72)

Manager Trustworthiness and Task Significance

However, managers' mission communications are often ambiguous. Employees can interpret mission communications as genuine attempts by managers to show them that their missions are possible and being achieved, but they can also interpret these communications more cynically as attempts by managers to manipulate them to work harder even though their missions may be unrealistic (Cha & Edmondson, 2006; Conger, 1990). Indeed, research on work design and social information processing has shown that mission communications from managers are often ineffective in changing employees' perceptions of task significance (Zalesny & Ford, 1990). We draw on theories of trust (Mayer, Davis, & Schoorman, 1995) to propose that employees will be most likely to believe mission communications, and thus perceive their work as higher in task significance, when they see their managers as trustworthy.

Trust researchers argue that employees see managers as trustworthy when they judge their managers as deserving of positive expectations, which is a function of three dimensions: benevolence, integrity, and ability (Mayer et al., 1995; see also Colquitt, Scott, & LePine, 2007; Kramer, 1999). Employees see managers as trustworthy insofar as they perceive them as holding good intentions (benevolence), subscribing to and acting upon a set of valued or acceptable principles (integrity), and being capable of meeting expectations (ability). We expect that when employees see their managers as possessing benevolence and integrity, they will experience higher perceptions of task significance.¹ The logic underlying this proposition is that benevolence and integrity are other-oriented values, as benevolence involves concern for the well-being of other people with whom one is in personal contact (Meglino & Ravlin, 1998; Schwartz, 1992) and integrity involves a broad emphasis on social justice and sincerity (Marcus, Lee, & Ashton, 2007).

¹ In our studies, we examine benevolence and integrity separately to assess whether our predictions hold across both of these dimensions of manager trustworthiness. We expect that the benevolence and integrity dimensions of manager trustworthiness, but not the ability dimension of trustworthiness, will influence employees' perceptions of task significance. Whereas benevolence and integrity focus on managers' values and motives, ability focuses on managers' competencies. Motivation theorists have argued and found that managers' efforts to motivate employees are based primarily on "will do" rather than "can do" factors (Heath et al., 1998). We propose, consistent with this notion, that employees' reactions to managers' mission communications depend on employees' perceptions of their manager's values and motivations (do employees believe that managers care about others?), rather than their abilities (are they capable of managing effectively?). Thus, ability as a dimension of manager trustworthiness is unlikely to be related to employees' perceptions of task significance.

Theory and research on trust suggests that when employees see their managers as trustworthy, they will perceive their work to be higher in task significance. Seeing managers as trustworthy will increase employees' confidence in managers' words, intentions, and actions (Mayer et al., 1995). When managers deliver mission communications about how the work is making a difference, employees who see managers as trustworthy will have greater confidence that their communications are genuine, sincere, and honest (Zalesny & Ford, 1990). When managers act, employees who see managers as trustworthy will have greater confidence that managers are genuinely seeking to do good (Mayer et al., 1995). Interpreting managers' mission communications and actions as trustworthy will reinforce employees' beliefs that the organization's work is helping beneficiaries, thereby strengthening employees' perceptions of task significance. Because employees view trustworthy managers as holding strong other-oriented values of benevolence and integrity, employees can count on these managers to share reliable information in their mission communications and engage in behaviors that advance the organization's mission of helping beneficiaries. Indeed, Agle, Mitchell, and Sonnenfeld (1999) found that managers with strong other-oriented values emphasizing helpfulness and compassion were more likely than managers with weak other-oriented values to place high priority on the interests of employees, customers, the government, and the community. Thus, seeing managers as trustworthy will strengthen employees' confidence that managers' words and actions are genuinely directed toward helping beneficiaries, and employees will perceive their work to be higher in task significance as a result.

Hypothesis 1: Manager trustworthiness is positively associated with employees' perceptions of task significance.

Manager Trustworthiness, Task Significance, and the Performance of Prosocially Motivated Employees

We further propose that by strengthening employees' perceptions of task significance, manager trustworthiness will increase the performance of prosocially motivated employees. Past research on work design has revealed equivocal relationships between perceptions of task significance and job performance (Fried & Ferris, 1987). Recent work design theory and research has resolved these equivocal results by showing that task significance increases performance for prosocially motivated employees but not for employees with more self-interested motivations and values (Grant, 2008b). Because prosocially motivated employees care about benefiting others, their willingness to expend effort toward achieving performance is heavily dependent on their perceptions of task significance. Employees with lower levels of prosocial motivation, on the other hand, are less concerned about doing work that benefits others. Thus, task significance increases the performance of prosocially motivated employees by enabling them to experience their work as more meaningful and more helpful to and valued by beneficiaries (Grant, 2008b). In summary, these arguments suggest that manager trustworthiness is likely to increase the performance of prosocially motivated employees by enhancing their perceptions of task significance.

Hypothesis 2: Manager trustworthiness moderates the relationship between employees' prosocial motivation and performance. The higher employees' perceptions of managers as

trustworthy, the stronger the positive association of employees' prosocial motivation with their performance.

Hypothesis 3a: Perceived task significance moderates the relationship between prosocial motivation and performance. The higher the perceived task significance, the stronger the positive association of employees' prosocial motivation with their performance.

These hypotheses are displayed visually in Figure 1, and we illustrate them with this example. At the Federal Reserve Bank, senior managers share stories with junior examiners about how the organization's work protects thousands of Americans' life savings (Heath, Larrick, & Klayman, 1998). Our hypotheses suggest that such stories are most likely to be believed by employees who see their managers as trustworthy and that these stories will be most effective in increasing the performance of employees who are prosocially motivated. Thus, we have proposed that manager trustworthiness strengthens the association between prosocial motivation and performance by enhancing employees' perceptions of task significance. We have predicted that the moderating effect of manager trustworthiness on the relationship between prosocial motivation and performance is mediated by perceived task significance. Because mediated moderation is present when a moderating effect is explained by a mediating process (e.g., Edwards & Lambert, 2007), our arguments suggest the following hypothesis:

Hypothesis 3b: The moderating effect of manager trustworthiness on the relationship between prosocial motivation and performance is mediated by perceived task significance.

Trust Cues From Personal Dispositions

In addition to trust cues from managers, personal dispositions may also serve as important sources of information about task significance. Trust theorists have long argued that in addition to relying on external contextual cues, in making trust judgments, employees intuitively rely on internal dispositional cues (Rotter, 1971). Individual differences in trust propensity—the general dispositional tendency to hold positive expectations about others (Mayer et al., 1995)—appear to play a critical role in shaping how employees process information and translate that information into motivation (Colquitt et al., 2007).

Drawing on theories of trust, we propose that a high dispositional trust propensity may compensate for a lack of confidence that managers are trustworthy.² The logic underlying this idea is that in the absence of manager trustworthiness, employees may use their own high dispositional trust propensities to make judgments about task significance. General support for this proposition appears in Mayer et al.'s (1995) integrative model of organizational trust. Mayer and colleagues argued that in the absence of information about trustworthiness, dispositional trust propensity

² By compensatory, we refer to a process through which one variable substitutes or makes up for the absence of another (Côté & Miners, 2006). We are predicting that when perceptions of manager trustworthiness are lacking, a high dispositional trust propensity may substitute, or make up for, this absence of perceived trustworthiness to enhance the relationship between prosocial motivation and performance.

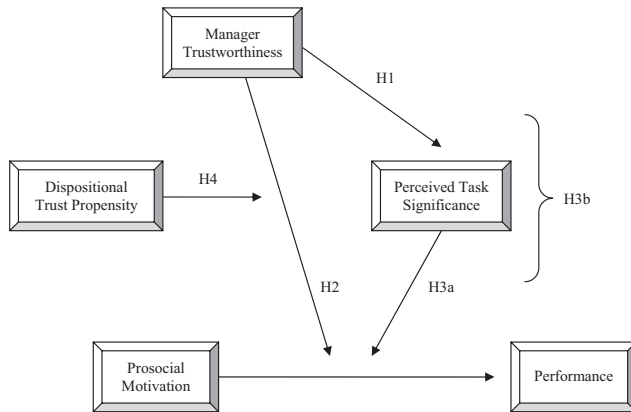


Figure 1. Model of hypotheses linking prosocial motivation, manager trustworthiness, and dispositional trust propensity to performance. H in H1–H4 = hypothesis.

plays an important role in employees' judgments, but when information about trustworthiness is present, employees rely more heavily on this information to form their judgments. As such, the absence of trustworthiness cues may constitute a "weak situation" (e.g., Mischel & Shoda, 1995) that prompts employees to intuitively use their own dispositional trust propensities as a cue about whether their efforts will benefit others.

Thus, in the absence of cues about manager trustworthiness, trust theories suggest that employees with a high dispositional trust propensity will have greater confidence in their managers' mission communications and will thereby be more likely to believe that their work is high in task significance. Accordingly, when employees question whether managers are trustworthy, a high dispositional trust propensity may serve a compensatory function in strengthening the association between prosocial motivation and performance. We therefore propose that the relationship between prosocial motivation and performance will be weakest when both manager trustworthiness and dispositional trust propensity are low; in this situation, prosocially motivated employees are least likely to feel confident that their efforts will benefit others.

Hypothesis 4: There will be a three-way interaction of prosocial motivation, manager trustworthiness, and dispositional trust propensity in predicting performance, such that the association between prosocial motivation and performance will be weakest when both manager trustworthiness and dispositional trust propensity are low.

Overview of the Present Research

To test these hypotheses, we focus on the context of fundraising for mission-driven organizations. In fundraising, the large sums of money on the table are not always distributed in full to the intended beneficiaries, as evidenced by recent United Way scandals in which managers embezzled several hundred thousand dollars. Moreover, many fundraising organizations employ professional for-profit companies to solicit donations, distributing only 10%–15% of all funds raised to the intended beneficiaries. Accordingly, we expected fundraising to provide a rich venue in which to capture variability in the perceived trustworthiness of

managers. To capture mission-driven organizations, in all three studies we focus on fundraisers soliciting donations for public universities to benefit several causes, including student scholarships and fellowships, faculty salaries, and athletic programs. In all three organizations, fundraisers received little information about who benefited from their efforts and how these beneficiaries were affected, and we expected this ambiguity to create variance in perceptions of task significance.

We conducted three studies of fundraisers to test our hypotheses with three different objective measures of performance. In Study 1, we tested Hypotheses 1, 2, 3a, and 3b with a sample of fundraisers working for a for-profit call center in the southeastern region of the United States whose performance was defined in terms of the number of calls made. In Study 2, we constructively replicated our test of Hypothesis 2 and also tested Hypothesis 4 with a sample of fundraisers working for a for-profit call center in the Midwest whose performance was defined in terms of the amount of money raised. In Study 3, we constructively replicated our tests of all hypotheses with a sample of professional major gift officers raising funds for a public university in the Southeast whose performance was defined in terms of initiative.

Study 1

Method

Sample and Procedures

We collected lagged data from fundraising callers working for a for-profit company to solicit donations from the alumni of a public university in the Southeast. The for-profit company ran a call center employing 57 fundraisers, all of whom participated in our study. We selected the call center based on the observation that callers received little information about the impact of their fundraising efforts on other people. The callers were students at the university working part-time; they were 70.2% female with an average tenure in the company of 6.77 months ($SD = 7.87$ months). Callers spent approximately 2 weeks on each pool of alumni donors, and in the time frame of our study, they were calling parents of current students as well as married alumni who had donated in the past. The funds raised in this time frame were distributed to the chancellor's general fund, which allowed them to be channeled to several different groups of beneficiaries—including scholarship students, faculty members, and university staff and administrators—as needed.

We visited the organization and were introduced to callers as a team of researchers studying work motivation. Managers invited callers to participate in the study in exchange for regular hourly pay while completing surveys. The surveys contained measures of prosocial motivation, manager trustworthiness, and perceived task significance. We ensured confidentiality by asking managers to leave the room while callers completed surveys. When callers had finished their surveys, they handed them directly to a member of the research team or mailed them in a sealed envelope to the lead researcher. Managers provided objective data on the callers' performance during the subsequent month, and we predicted performance from the callers' survey responses.

Measures

Dependent variable: Performance. The director of the call center supplied the performance data in a 2-week interval during the month following the surveys. Managers identified the 2-week interval as a time frame in which all callers were contacting alumni from a shared pool of potential donors with similar giving records. This signifies that employees' performance would be heavily influenced by differences in caller motivation and effort, rather than differences in contextual opportunities or situational affordances (Johns, 2006).

Mindful of the fact that performance is defined in terms of organizational goals (e.g., Motowidlo, 2003), we interviewed managers to gain a deeper understanding of how they defined performance. Managers informed us that in this setting, the key measure of performance was the number of calls made by each caller. They explained that although they evaluate organizational performance in terms of funds raised, for several reasons they consider individual callers effective based on the number of calls they make. For example, making sure that all alumni are called every year helps to build and maintain long-term relationships, which increases the likelihood that alumni will donate over time. This statement was corroborated in interviews with the university administrators who hired the for-profit company to operate the call center. The administrators evaluated the for-profit company's performance in terms of whether callers were maximizing the number of calls made so that all alumni of the university were contacted every year. Thus, for individual callers, performance was defined primarily in terms of the number of calls that they made. Accordingly, we measured performance with objective, automatically recorded data on the total number of calls that each caller made over the course of the study. Aside from these objective performance data, all other variables were measured through employee surveys with Likert-type scales ranging from 1 (*disagree strongly*) to 7 (*agree strongly*).

Independent variable: Prosocial motivation. We assessed prosocial motivation with a five-item scale adapted from measures of prosocial motivation (Grant, 2008a) and goal orientation at work (VandeWalle, 1997). The items were introduced with a statement asking callers to identify the people and groups of people outside the call center who benefited from their work. Two raters who coded responses with 100% agreement found that 90% of callers mentioned scholarship students and families, 60% mentioned faculty, and 67% mentioned university staff and administration. Other beneficiaries were mentioned by only a minority of callers (31% mentioned alumni, 8% mentioned athletes, and 8% mentioned the general public). As such, we focused on the three core groups of beneficiaries that were spontaneously mentioned by a majority of callers: scholarship students and families, faculty, and university staff and administration. We introduced the prosocial motivation scale by asking the callers to think of these three core groups of beneficiaries as the "others" referenced in the scale. The items were "I get energized by working on tasks that have the potential to benefit others," "It is important to me to have the opportunity to use my abilities to benefit others," "I prefer to work on tasks that allow me to have a positive impact on others," "I do my best when I'm working on a task that contributes to the well-being of others," and "I like to work on tasks that have the potential to benefit others" ($\alpha = .96$).

Moderator variable: Manager trustworthiness. We measured employees' perceptions of the integrity dimension of manager trustworthiness with the six-item scale developed by Mayer and Davis (1999). The items assessed the extent to which managers have a strong sense of justice, are consistent in their behaviors, and act based on sound principles ($\alpha = .88$).

Mediator: Perceived task significance. We measured employees' perceptions of task significance by using six context-specific items adapted from measures of perceived task significance (Hackman & Oldham, 1980; Morgeson & Humphrey, 2006). We once again asked employees to focus on scholarship students and families, faculty members, and university staff and administration—the prime beneficiaries of their job outside the call center. The items were "If I perform my job well, others will benefit from the funds that I raise," "I feel that my performance will have a positive impact on the well-being of others," "I believe that if I succeed in raising funds, others will be better off," "I am confident that my performance will help others," "I see a clear linkage between my performance and benefiting others in this community," and "I expect that if I am successful in my job, other people at this university will be better off" ($\alpha = .95$).

Control variables. In our analyses, we controlled for tenure, gender, and number of hours worked. We chose tenure and number of hours worked because managers suggested that (a) employees with higher tenure would generally be more knowledgeable and therefore more effective and (b) callers who worked more hours would be able to make more calls. By controlling for these variables, we were able to reduce the possibility that they would affect our results. We chose gender in light of evidence that women tend to be more prosocially motivated than men (Taylor, 2006; cf. Eagly & Crowley, 1986). If these assumptions were true, there could be a spurious relationship between prosocial motivation and performance caused by gender influencing prosocial motivation and the willingness of alumni to donate, rather than by prosocial motivation contributing to performance.

Results

Means, standard deviations, and correlations for our key variables are displayed in Table 1. We began by conducting an exploratory factor analysis of the self-report items with principal axis factoring with maximum likelihood estimation and an oblique rotation. The analysis revealed a three-factor solution (eigenvalues = 6.65, 3.58, and 2.80, respectively). The three factors explained 76.67% of the variance, and the item loadings are displayed in Table 2.

Two-Way Interaction of Prosocial Motivation and Manager Trustworthiness

We tested our hypotheses with hierarchical ordinary least squares (OLS) regression analyses to predict callers' performance. Following the procedures recommended by Cohen, Cohen, West, and Aiken (2003), we mean-centered all predictor variables and calculated partial product terms to represent the interactions of prosocial motivation with manager trustworthiness and perceived task significance.

In support of Hypothesis 1, manager trustworthiness was positively associated with perceived task significance ($B = 0.33$, $SE =$

Table 1
Study 1 Means, Standard Deviations, and Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Performance (calls made)	97.88	54.46	—				
2. Prosocial motivation	5.67	0.93	.03	.96			
3. Manager trustworthiness (integrity)	5.43	0.88	-.04	.35**	.88		
4. Perceived task significance	6.02	0.85	-.01	.24	.34*	.95	
5. Prosocial Motivation × Manager Trustworthiness	0.34	1.15	.31*	-.45**	-.01	.00	—
6. Prosocial Motivation × Perceived Task Significance	0.24	1.18	.34*	-.30*	.00	.10	.51***

Note. Coefficient alphas appear across the diagonal in bold.

* $p < .05$. ** $p < .01$. *** $p < .001$.

0.12, $\beta = .34$, $t = 2.64$, $p = .01$). The results of our analyses examining Hypothesis 2 are displayed in Table 3, Steps 1 and 2. We found a statistically significant interaction between prosocial motivation and manager trustworthiness as a predictor of performance. In the analysis without control variables, the partial product term explained a surprising 15% of variance in performance, even after controlling for its components of prosocial motivation and manager trustworthiness. We interpreted the interaction by plotting the simple slopes for the relationships between prosocial motivation, manager trustworthiness, and performance at 1 standard deviation above and below the means. Figure 2 suggests that prosocial motivation was more positively associated with performance when employees reported high rather than low manager trustworthiness. Indeed, the simple slopes for the relationship between prosocial motivation and performance were positive and differed significantly from 0 at high levels of manager trustworthiness ($B = 35.63$, $SE = 13.50$, $\beta = .65$), $t(51) = 2.64$, $p = .01$, but did not differ significantly from 0 at low levels of manager

trustworthiness ($B = -5.62$, $SE = 8.12$, $\beta = -.10$), $t(51) = -.69$, $p = .49$. These results indicate that in support of Hypothesis 2, manager trustworthiness strengthened the relationship between prosocial motivation and the performance outcome of calls made. Prosocial motivation was positively related to performance when manager trustworthiness was high but not low.

Test of Mediated Moderation by Perceived Task Significance

We then sought to examine whether perceived task significance mediated the moderating effect of manager trustworthiness on the relationship between prosocial motivation and performance. To do so, we used the path analysis framework developed by Edwards and Lambert (2007). Because our previous results supported the link between manager trustworthiness and perceived task significance, we turned to Hypothesis 3a, which stated that perceived task significance would moderate the association between proso-

Table 2
Study 1 Exploratory Factor Analysis of Self-Report Items

Item label and item	Perceived task significance	Prosocial motivation	Manager trustworthiness (integrity)
Perceived task significance			
1. If I perform my job well, others will benefit from the funds that I raise.	.79	.07	.08
2. I feel that my performance will have a positive impact on the well-being of others.	.93	-.04	.09
3. I believe that if I succeed in raising funds, others will be better off.	.90	.03	.01
4. I am confident that my performance will help others.	.92	.11	-.04
5. I see a clear linkage between my performance and benefiting others in this community.	.89	-.11	-.01
6. I expect that if I am successful in my job, other people at this university will be better off.	.90	-.02	-.05
Prosocial motivation			
1. I get energized by working on tasks that have the potential to benefit others.	.11	.92	-.15
2. I like to work on tasks that have the potential to benefit others.	-.08	.84	.06
3. I prefer to work on tasks that allow me to have a positive impact on others.	.01	.92	.02
4. I do my best when I'm working on a task that contributes to the well-being of others.	-.01	.85	.01
5. It is important to me to have the opportunity to use my abilities to benefit others.	-.01	.81	.09
Manager trustworthiness (integrity)			
1. Managers have a strong sense of justice.	.14	.06	.75
2. I never have to wonder whether managers will stick to their word.	-.10	-.02	.69
3. Managers try hard to be fair in dealings with others.	-.03	-.03	.76
4. Managers are very consistent in their actions and behaviors.	.00	.08	.75
5. I like the values that managers hold.	.10	-.07	.81
6. Sound principles seem to guide the behavior of managers.	.05	.04	.74

Note. Loadings with an absolute value greater than .40 are displayed in bold.

Table 3
Study 1 Hierarchical Ordinary Least Squares Regressions Predicting Performance (Calls Made)

Variable	Step 1				Step 2				Step 3			
	B	SE	β	t	B	SE	β	t	B	SE	β	t
Step 1												
Tenure	-0.39	0.56	-.05	-0.69	-0.32	0.49	-.05	-0.65	-0.42	0.49	-.06	-0.86
Gender	10.05	8.33	.08	1.21	6.74	7.44	.06	0.91	7.66	7.30	.06	1.05
Hours worked	5.42	0.46	.86	11.90***	5.21	0.41	.83	12.77***	5.05	0.41	.80	12.35***
Prosocial motivation	-1.46	3.97	-.03	-0.37	6.29	4.08	.11	1.54	7.11	4.07	.13	1.75
Manager trustworthiness	3.89	3.80	.07	1.02	1.26	3.44	.02	0.37	0.97	3.49	.02	0.28
Step 2												
Prosocial Motivation $\times$ Manager Trustworthiness					12.13	3.24	.25	3.74***	9.28	3.48	.19	2.67
Step 3												
Perceived task significance									-0.43	3.36	-.01	-0.13
Prosocial Motivation $\times$ Perceived Task Significance												
Significance									6.29	3.14	.13	2.00*
R ² without control variables				0.00				0.15*				0.21*
ΔR^2 without control variables								0.15**				0.06*
R ² with control variables				0.80***				0.85***				0.86***
ΔR^2 with control variables								0.05***				0.01*

Note. Statistics appearing in bold represent tests of our hypotheses. The pattern of results did not change when the control variables were removed. Because hours worked were so highly correlated with the dependent variable of performance (calls made), R^2 values both with and without the control variables have been reported.

* $p < .05$. ** $p < .01$. *** $p < .001$.

cial motivation and performance. Following recommendations from Edwards and Lambert, we tested this hypothesis with a hierarchical regression analysis in which we first controlled for prosocial motivation, manager trustworthiness, and the partial product of prosocial motivation and manager trustworthiness (see Table 3, Step 2) and then entered perceived task significance and the partial product of prosocial motivation and perceived task significance (see Table 3, Step 3). The results in Table 3, Step 3, show that as hypothesized, the partial product of prosocial motivation and perceived task significance significantly predicted performance.

We interpreted the interaction by plotting the simple slopes for the relationships between prosocial motivation, perceived task significance, and performance at 1 standard deviation above and below the means. As displayed in Figure 3, the simple slopes indicated that prosocial motivation was more positively associated with performance when employees reported high rather than low

perceived task significance. Similar to the pattern that we observed for manager trustworthiness, the simple slopes for the relationship between prosocial motivation and performance were positive and differed significantly from 0 at high levels of perceived task significance ($B = 28.05$, $SE = 11.64$, $\beta = .51$), $t(51) = 2.41$, $p = .02$, but did not differ significantly from 0 at low levels of perceived task significance ($B = -8.87$, $SE = 8.32$, $\beta = -.16$), $t(51) = -1.07$, $p = .29$. These results indicate that in support of Hypothesis 3a, perceived task significance strengthened the relationship between prosocial motivation and the performance outcome of calls made.

Hypothesis 3b predicted that perceived task significance would mediate the moderating effect of manager trustworthiness on the association between prosocial motivation and performance. We completed the test of mediation following the recommendations from Edwards and Lambert (2007): We estimated the indirect effects of the Prosocial Motivation $\times$ Manager Trustworthiness

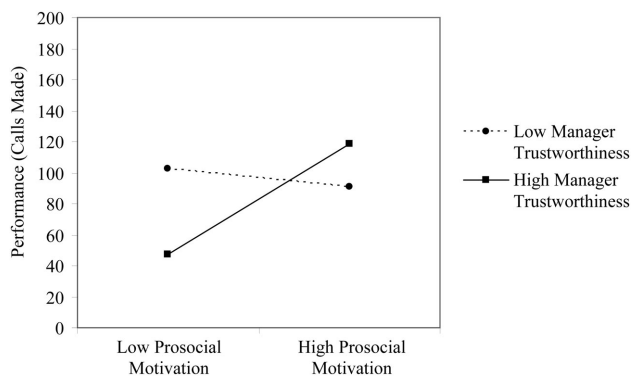


Figure 2. Study 1 regression slopes for the interaction of prosocial motivation and manager trustworthiness.

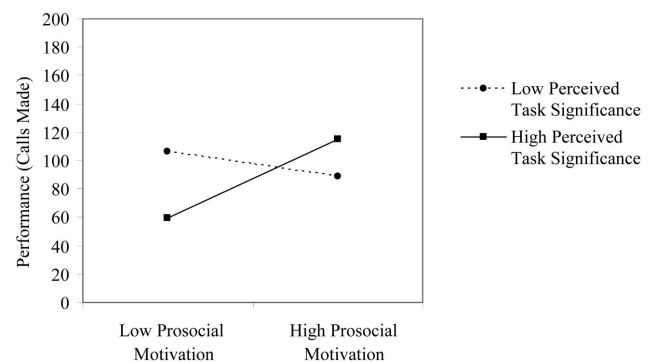


Figure 3. Study 1 regression slopes for the interaction of prosocial motivation and perceived task significance.

interaction through perceived task significance. We used the coefficients from the prior analyses and then applied bootstrapping methods to construct bias-corrected confidence intervals on the basis of 1,000 random samples with replacement from the full sample. Mediation occurs when the size of an indirect effect differs significantly from 0 (MacKinnon, Fairchild, & Fritz, 2007). The size of our indirect effect from the full sample was 4.28 (0.329×13.02), and the 95% confidence interval excluded 0 (1.33, 11.46). Thus, in support of Hypothesis 3b, perceived task significance mediated the moderated effect of manager trustworthiness on the relationship between prosocial motivation and performance.

Discussion

These results provided initial support for Hypotheses 1, 2, 3a, and 3b. Manager trustworthiness strengthened the relationship between prosocial motivation and the number of calls that fundraisers made, and this moderating effect was mediated by perceived task significance. However, the results are subject to several limitations. First, because we tested our hypotheses with a small sample, it is important to examine whether they can be replicated in larger samples. Second, although the number of calls made is an important dimension of performance in fundraising, many fundraising organizations ultimately define performance in terms of the amount of money they are able to collect. As such, it is critical to investigate whether our results extend to dollars raised. This provides a more conservative indicator of performance; whereas fundraisers have direct control over the number of calls they make, the amount of money they obtain is ultimately influenced by the alumni on the other end of the phone. Third, because we measured manager trustworthiness in terms of integrity, it is necessary to examine whether our results also apply to benevolence. Fourth, due to limited survey time available in this sample, we were unable to measure dispositional trust propensity. Additional research is therefore needed to test our three-way interaction hypothesis about the compensatory role that dispositional trust propensity plays in the relationship between prosocial motivation, manager trustworthiness, and performance.

Study 2

Our objective in this study was to strengthen our results by addressing the aforementioned limitations. First, we collected data from a larger sample of fundraisers in an effort to replicate the initial support for the role of manager trustworthiness in moderating the association between prosocial motivation and performance. Second, we obtained access to a different call center in which performance was defined not in terms of calls made but rather in terms of the amount of money raised. Third, we measured manager trustworthiness in terms of benevolence rather than integrity. Fourth, we measured dispositional trust propensity to test the hypothesized three-way compensatory interaction.

Method

Sample and Procedures

We collected lagged data from a sample of 102 callers employed by a for-profit company to raise money from the alumni of a public university in the Midwest. As was the case

at the previous call center in the Southeast, at this call center callers received little information about how funds were distributed and to whom. As in Study 1, the callers were students at this university working part-time; they were 54.9% female with an average tenure in the company of 2.77 months ($SD = 3.79$ months). When we visited the organization, we were introduced as a team of scholars conducting a research project on work motivation. Managers invited callers to participate in the study in return for regular hourly pay while filling out surveys. The surveys contained measures of prosocial motivation and the trust cues of manager trustworthiness and dispositional trust propensity. The response rate was greater than 95%, and we ensured confidentiality by enabling the callers to complete surveys in private rooms that managers were not allowed to enter. As soon as employees had finished their surveys, they handed them directly to a member of the research team. Managers provided objective data on the callers' performance during the following month, and we used the callers' survey responses to predict their performance.

Measures

Dependent variable: Performance. The director of the call center supplied the performance data in a 2-week interval during the month after callers completed the surveys. As in the previous study, managers recommended this 2-week interval as a period in which all callers were contacting alumni from a common pool with similar donation histories, which indicated that performance would be based primarily on motivation and effort rather than on opportunity. In this call center, interviews with managers and former employees revealed that money raised was the critical indicator of performance. A vice president of development substantiated that the university was ultimately concerned with raising as much money as possible and that administrators evaluated the for-profit company's performance in terms of dollars raised. We thus assessed performance with an objective indicator of the total dollar amount of funds that callers raised. We measured all other variables through employee surveys with Likert-type scales that ranged from 1 (*disagree strongly*) to 7 (*agree strongly*).

Independent variable: Prosocial motivation. We assessed prosocial motivation with a three-item scale from Grant (2008a) adapted to focus on scholarship students, whom managers and callers described as the primary beneficiaries of the funds raised. A sample item is "It is important to me to make a positive difference in scholarship students' lives through my work" ($\alpha = .93$).

Moderator 1: Manager trustworthiness. We measured employees' perceptions of the benevolence dimension of manager trustworthiness with three items adapted from measures used by Mayer and Davis (1999). The items asked employees to report the extent to which they saw managers as caring, generous, and concerned about making a positive difference in other people's lives ($\alpha = .80$).

Moderator 2: Dispositional trust propensity. We measured trust propensity with the IPIP dispositional trust scale (Goldberg, 1999), which includes items such as "I distrust people" (reverse-scored; $\alpha = .84$).

Control variables. We once again controlled for tenure, gender, and number of hours worked.

Results

Means, standard deviations, and correlations for our key variables are displayed in Table 4. We began by conducting a confirmatory factor analysis with EQS software (Version 6.1) with maximum likelihood estimation procedures. We specified a four-factor solution with prosocial motivation, manager trustworthiness, and dispositional trust propensity modeled as distinct correlated constructs. We relied on conservative rules of thumb to assess model fit (see Hu & Bentler, 1999). The model demonstrated excellent fit with the data, $\chi^2(59, N = 102) = 71.20, p = .13$, nonnormed fit index (NNFI) = .98, comparative fit index (CFI) = .99, standardized root-mean-square residual (SRMR) = .052, root-mean-square error of approximation (RMSEA) = .045, RMSEA 95% confidence interval (CI; 0.000, 0.079), exceeding all of Hu and Bentler's (1999) criteria.

We tested Hypotheses 2 and 4 with hierarchical OLS regression analyses to predict callers' performance (money raised). As in the previous study, we mean-centered all predictor variables and calculated partial product terms to represent the interactions of prosocial motivation and our moderating variables (Cohen et al., 2003).

Two-Way Interaction of Prosocial Motivation and Manager Trustworthiness

The results of our analyses examining Hypothesis 2 in this new sample are displayed in Table 5. We found a statistically significant interaction between prosocial motivation and manager trustworthiness as a predictor of performance. The partial product term explained 10% additional variance in performance, even after controlling for its components of prosocial motivation and manager trustworthiness. We once again interpreted the interaction by plotting the simple slopes for the relationships between prosocial motivation, manager trustworthiness, and performance at 1 standard deviation above and below the means. Figure 4 suggests that prosocial motivation was more positively associated with performance when employees reported high rather than low manager trustworthiness. As in the previous study, the simple slopes for the relationship between prosocial motivation and performance were

positive and differed significantly from 0 at high levels of manager trustworthiness ($\beta = .48$), $t(97) = 3.20, p < .01$, but did not differ significantly from 0 at low levels of manager trustworthiness ($\beta = -.05$), $t(97) = -0.41, p = .68$. These results indicate that in support of Hypothesis 2, manager trustworthiness strengthened the relationship between prosocial motivation and the performance outcome of dollars raised.

Three-Way Interaction of Prosocial Motivation, Manager Trustworthiness, and Dispositional Trust Propensity

We tested Hypothesis 4 by examining the three-way interaction between prosocial motivation, manager trustworthiness, and dispositional trust propensity. We entered all lower-order terms (all predictors and two-way interactions), followed by the three-way interaction term, in the regression analyses. As displayed in Table 6, the three-way interaction term for prosocial motivation, manager trustworthiness, and dispositional trust propensity was a significant predictor of performance, explaining 6% additional variance.

We interpreted the significant three-way interaction by following the steps suggested by Dawson and Richter (2006). We began by plotting the simple slopes for performance, which revealed the hypothesized compensatory interaction: Prosocial motivation appeared to be positively associated with performance in all circumstances except when both manager trustworthiness and dispositional trust propensity were low (see Figure 5). To assess this inference empirically, we used Dawson and Richter's slope difference tests, the results of which are displayed in Table 7. As predicted, the slope for the relationship between prosocial motivation and performance outcomes when both trustworthiness and dispositional trust propensity were low differed significantly from each of the other three slopes. When trustworthiness and dispositional trust propensity were both low, the association between prosocial motivation and performance was significantly weaker than when either or both trust cues were high. No other slope differences were significant. These findings support Hypothesis 4, suggesting that dispositional trust propensity may compensate for low manager trustworthiness by strengthening the relationship between prosocial motivation and performance.

Table 4
Study 2 Means, Standard Deviations, and Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Performance (dollars raised)	\$2,329.36	\$3,456.88	—						
2. Prosocial motivation	4.41	1.30	.13	.93					
3. Manager trustworthiness (benevolence)	4.70	1.07	.03	.40***	.80				
4. Dispositional trust propensity	4.46	1.23	-.07	.08	.14	.84			
5. Prosocial Motivation × Manager Trustworthiness	0.40	1.28	.26**	-.30**	-.14	-.04	—		
6. Prosocial Motivation × Trust Propensity	0.08	1.07	.28**	-.15	-.05	-.07	.19	—	
7. Manager Trustworthiness × Trust Propensity	0.13	1.02	.30**	-.05	.00	.10	.32**	.57***	—
8. Prosocial Motivation × Manager Trustworthiness × Trust Propensity	-.05	1.39	-.29**	.21*	.34**	.46***	-.28**	-.21**	-.14

Note. Coefficient alphas appear across the diagonal in bold.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 5
Study 2 Test of Hypothesis 2

Variable	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
Step 1								
Tenure	43.01	95.76	.05	0.45	39.94	91.15	.04	0.44
Gender	195.41	729.63	.03	0.27	503.09	700.65	.07	0.72
Hours worked	20.54	48.16	.04	0.43	48.39	46.61	.11	1.04
Prosocial motivation	490.90	397.64	.14	1.23	738.86	385.84	.21	1.91
Manager trustworthiness	−35.29	390.76	−.01	−0.09	−82.09	372.17	−.02	−0.22
Step 2								
Prosocial Motivation $\times$ Manager Trustworthiness					998.66	302.75	.33	3.30**
R^2				0.02				0.12*
ΔR^2								0.10**

Note. Statistics appearing in bold represent tests of our hypotheses.

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

Discussion

These results replicated and extended our findings from Study 1. In a larger sample, we found that the benevolence dimension of trustworthiness—rather than integrity, as in the previous study—strengthened the association between prosocial motivation and the performance outcome of money raised. In addition, we found that as predicted, dispositional trust propensity compensated for low manager trustworthiness to increase the association between prosocial motivation and performance. Although these results are encouraging, they raise several questions. First, can the three-way interaction be replicated in a different sample and for the integrity dimension as well as the benevolence dimension of manager trustworthiness? Second, will both the two-way and three-way interactions, as well as the mediated moderation findings in Study 1, generalize to a sample of adults working full-time in more complex, professional jobs outside the context of entry-level call center work? Third, researchers now recognize that job performance is increasingly dependent not only on the proficiency with which employees fulfill their core task responsibilities but also on the extent to which employees take the initiative to engage in proactive behaviors (Frese & Fay, 2001; Grant & Ashford, 2008; Parker, Williams, & Turner, 2006). Such proactive behaviors are particularly important in work contexts characterized by high

levels of uncertainty and interdependence, where it is difficult to formalize expectations and predict and evaluate performance in terms of core task proficiency (Griffin, Neal, & Parker, 2007). In these contexts, organizations have begun to define performance in terms of the extent to which employees take initiative to be proactive (Crant, 2000). In such a context, will prosocial motivation and trust cues interact to predict proactive as well as in-role dimensions of job performance?

Study 3

In this study, we sought to answer these three questions by gaining access to a sample of professional fundraisers employed by a public university to obtain major gifts from alumni. The fundraisers were employees with six-figure salaries who travel around the country to build relationships and obtain donations but still receive little information about how the funds are used and who benefits from them. The fundraisers completed surveys measuring prosocial motivation, both the integrity and benevolence dimensions of manager trustworthiness, dispositional trust propensity, and perceived task significance. Because they were responsible for completing highly uncertain and interdependent tasks, their performance was defined in terms of proactive behaviors: to what extent they took initiative in pursuing new solicitations and making proposals for special gifts.

Method

Sample and Procedures

We collected lagged data from a sample of 75 fundraisers responsible for obtaining major gifts to a public university in the Southeast. The fundraisers were 55% female with an average tenure at the university of 6.08 years ($SD = 6.67$ years). At a staff meeting, the vice chancellor invited fundraisers to complete surveys that contained measures of prosocial motivation and the trust cues of manager trustworthiness and dispositional trust propensity. The response rate exceeded 95%, and we ensured confidentiality by collecting the surveys in person directly from the participants. We obtained data from a development office statistician on the fundraisers' performance over the subsequent 3 months, and we

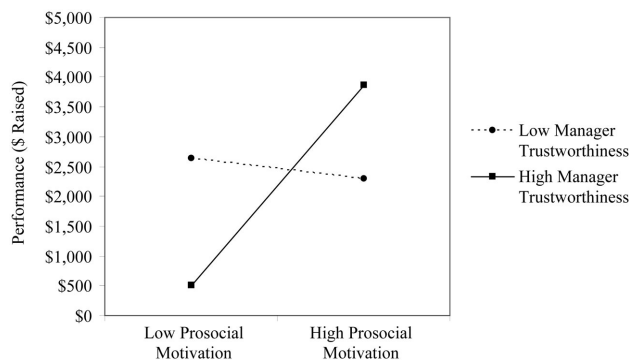


Figure 4. Study 2 regression slopes for the interaction of prosocial motivation and manager trustworthiness.

Table 6
Study 2 Test of Hypothesis 4

Variable	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
Step 1								
Tenure	51.70	88.77	.06	0.58	56.82	85.89	.06	0.66
Gender	767.00	696.52	.11	1.10	768.01	673.74	.11	1.14
Hours worked	61.92	45.08	.13	1.37	43.63	44.13	.10	0.99
Prosocial motivation	803.28	372.11	.23	2.16	802.52	359.94	.23	2.23*
Manager trustworthiness	-112.61	357.59	-.03	-0.31	81.81	353.34	.02	0.23
Trust propensity	-285.67	333.31	-.08	-0.86	138.14	358.74	.04	0.39
Prosocial Motivation $\times$ Manager Trustworthiness	900.19	299.32	.30	3.01	821.09	291.02	.28	2.82**
Prosocial Motivation $\times$ Trust Propensity	823.12	390.16	.25	2.11	754.89	378.25	.23	2.00*
Manager Trustworthiness $\times$ Trust Propensity	382.10	417.40	.11	0.92	358.54	403.84	.10	0.89
Step 2								
Prosocial Motivation $\times$ Manager Trustworthiness $\times$ Trust Propensity					-814.83	302.45	-.28	-2.69**
R^2				0.23**				0.29**
ΔR^2								0.06**

Note. Statistics appearing in bold represent tests of our hypotheses.

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

once again utilized the fundraisers' survey responses to predict their performance.

Measures

Dependent variable: Performance. In the long run, the university defines collective performance in terms of the amount of donation money that fundraisers obtain. However, fundraisers operate in a highly uncertain and interdependent environment, as major gifts are unpredictable, uncontrollable, and ultimately reliant on donors' decisions. Because of these uncertainties and interdependencies, it takes many years to cultivate major gifts, and the vice chancellor noted that dollars collected are a poor indicator of fundraisers' performance: landing a single major gift of multiple millions of dollars can catapult a fundraiser to the top of the performance chart, even if the fundraiser has otherwise shirked responsibilities. Likewise, having a pending gift fall through can sink the financial records of even the most motivated, committed, persistent fundraisers. Knowing this, the vice chancellor and as-

sociate vice chancellor assess the fundraisers' performance in terms of an objective indicator of proactive behavior: initiative. They measure initiative in terms of the total number of new solicitations that fundraisers initiate and the total number of special gift proposals that fundraisers make to donors. The vice chancellor explained that top performers are fundraisers who frequently take initiative by pursuing new solicitations and making special gift proposals to donors. Accordingly, a development office statistician provided us with objective data, verified by supervisors, on the total number of solicitations and proposals made by each fundraiser in the 3 months following the surveys. We measured all other variables through employee surveys with Likert-type scales ranging from 1 (*disagree strongly*) to 7 (*agree strongly*).

Independent variable: Prosocial motivation. We assessed prosocial motivation with the same scale as that used in Study 1 ($\alpha = .94$). As in Study 1, we asked the fundraisers to list the people and groups who benefited from their work. Two raters coded the responses, achieving 100% agreement, and the two most common groups were scholarship students and families (90%) and faculty

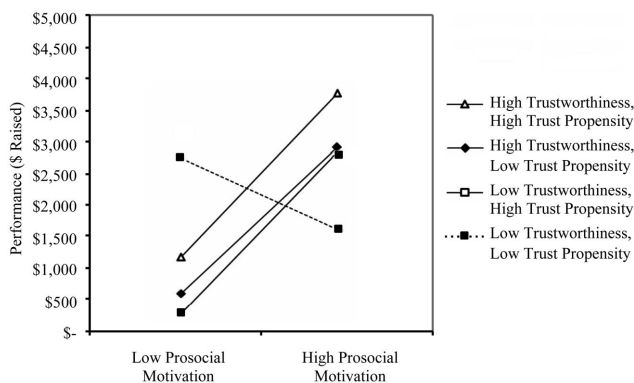


Figure 5. Study 2 regression slopes for the three-way interaction of prosocial motivation and trust cues.

Table 7
Study 2 Results of Slope Difference Tests for Three-Way Interactions

Pair of slopes	<i>t</i>
1 and 2	0.15
1 and 3	0.02
1 and 4	2.03*
2 and 3	-0.14
2 and 4	2.55*
3 and 4	2.15*

Note. 1 = high manager trustworthiness, high dispositional trust propensity; 2 = high manager trustworthiness, low dispositional trust propensity; 3 = low manager trustworthiness, high dispositional trust propensity; 4 = low manager trustworthiness, low dispositional trust propensity.

* $p < .05$.

(66%); no other group received more than 38% of mentions. Therefore, we introduced the prosocial motivation scale by asking fundraisers to consider members of these two groups as the other people benefiting from their efforts.

Moderator 1: Manager trustworthiness. In this study, we measured both the integrity and benevolence dimensions of manager trustworthiness. We measured integrity with the same six items as in Study 1 ($\alpha = .92$), and we measured benevolence with the same three items as in Study 2 ($\alpha = .85$).

Moderator 2: Dispositional trust propensity. We measured dispositional trust propensity with Mayer and Davis's (1999) trust propensity scale, which includes items such as "Most people can be counted on to do what they say they will do" ($\alpha = .73$).

Mediator: Perceived task significance. We measured employees' perceptions of task significance with Hackman and Oldham's (1980) three-item scale, which includes items such as "A lot of other people can be positively affected by how well my job gets done" ($\alpha = .83$). Our instructions asked employees to focus on scholarship students and families, as well as faculty members, as the other people referenced in the task significance items.

Results and Discussion

Means, standard deviations, and correlations for our key variables are displayed in Table 8. We conducted a confirmatory factor

analysis of the self-report items with the same procedures as in Study 2. We specified a five-factor solution modeling prosocial motivation, the two manager trustworthiness dimensions (benevolence and integrity), dispositional trust propensity, and perceived task significance as distinct correlated constructs. The model demonstrated acceptable fit with the data, $\chi^2(160, N = 75) = 240.46$, $p < .01$, NNFI = .91, CFI = .92, SRMR = .078, RMSEA = .084, RMSEA 95% CI (0.061, 0.105). As in the prior study, we tested Hypotheses 2 and 4 with hierarchical OLS regression analyses to predict fundraisers' initiative, and we mean-centered all predictor variables and computed partial product terms to represent the interactions of prosocial motivation and our moderating variables.

Two-Way Interactions of Prosocial Motivation and Manager Trustworthiness

As in the previous two studies, we found statistically significant interactions between prosocial motivation and manager trustworthiness (both the integrity and benevolence dimensions) as predictors of performance (see Table 9, Step 1). The partial product terms explained additional variance in performance of 8% even after controlling for their components. The simple slopes for both integrity and benevolence revealed that consistent with our prior findings, prosocial motivation was more positively associated with performance when employees reported high rather than low man-

Table 8
Study 3 Means, Standard Deviations, and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Performance (initiative)	8.26	15.95	—												
2. Prosocial motivation	6.06	0.76	-.05	.94											
3. Manager integrity	4.87	1.14	-.01	.05	.92										
4. Manager benevolence	5.14	0.96	-.10	.03	.79***	.85									
5. Dispositional trust propensity	4.30	0.69	.07	.27*	.13	.15	.73								
6. Perceived task significance	5.76	0.91	-.07	.45***	.26*	.22*	.29*	.83							
7. Prosocial Motivation × Manager Integrity	0.05	1.11	.27*	-.03	-.06	-.19	-.07	-.04	—						
8. Prosocial Motivation × Manager Benevolence	0.03	1.22	.28*	.03	-.17	-.30*	-.08	-.14	.83***	—					
9. Prosocial Motivation × Dispositional Trust Propensity	0.27	1.04	.19	.02	-.08	-.09	.08	-.07	.36**	.27*	—				
10. Manager Integrity × Dispositional Trust Propensity	0.13	1.08	.02	-.08	-.20	-.11	-.16	-.02	.21	.23*	-.01	—			
11. Manager Benevolence × Dispositional Trust Propensity	0.15	1.22	.05	-.08	-.10	-.14	-.28*	-.02	.22	.25*	.00	.84***	—		
12. Prosocial Motivation × Manager Integrity × Dispositional Trust Propensity	-0.08	1.33	-.26*	.32**	.19	.23*	.02	.17	-.15	-.13	-.04	-.35**	-.35**	—	
13. Prosocial Motivation × Manager Benevolence × Dispositional Trust Propensity	-0.10	1.53	-.30*	.23*	.20	.25*	.03	.20	-.12	-.20	-.07	-.34**	-.34**	.93***	—
14. Prosocial Motivation × Perceived Task Significance	0.41	0.94	.31**	-.05	-.04	-.15	-.08	.12	.41***	.33**	.50***	.17	.21	-.09	-.09

Note. Coefficient alphas appear across the diagonal in bold.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 9
Study 3 Test of Hypotheses 2 and 4

Variable	Step 1				Step 2				Step 3			
	B	SE	β	t	B	SE	β	t	B	SE	β	t
Integrity												
Step 1												
Prosocial motivation	-0.63	1.83	-.04	-0.35	-1.00	1.92	-.06	-0.52	0.44	1.99	.03	0.22
Manager trustworthiness	0.54	1.79	.03	0.30	0.47	1.87	.03	0.25	1.02	1.84	.07	0.55
Prosocial Motivation $\times$ Manager Trustworthiness	3.93	1.65	.27	2.38*	3.47	1.84	.24	1.88	3.16	1.80	.22	1.76
Step 2												
Dispositional trust propensity					1.16	1.90	.08	0.61	0.57	1.87	.04	0.31
Prosocial Motivation $\times$ Dispositional Trust Propensity												
Propensity					1.58	1.93	.10	0.82	1.58	1.88	.10	0.84
Manager Trustworthiness $\times$ Dispositional Trust Propensity					-0.01	1.76	.00	0.00	-1.24	1.81	-.09	-0.68
Step 3												
Prosocial Motivation $\times$ Manager Trustworthiness $\times$ Dispositional Trust Propensity									-3.32	1.56	-.28	-2.12*
R ²				0.08				0.09				0.15
ΔR^2								0.01				0.06*
Benevolence												
Step 1												
Prosocial motivation	-0.88	1.82	-.06	-0.48	-1.27	1.91	-.08	-0.66	-0.15	1.92	-.01	-0.08
Manager trustworthiness	-0.04	1.87	.00	-0.02	-0.20	1.91	-.01	-0.11	0.68	1.90	.04	0.36
Prosocial Motivation $\times$ Manager Trustworthiness	3.71	1.57	.28	2.37*	3.34	1.69	.26	1.98	3.06	1.64	.23	1.87
Step 2												
Dispositional trust propensity					1.39	1.94	.09	0.72	0.66	1.92	.04	0.34
Prosocial Motivation $\times$ Dispositional Trust Propensity												
Propensity					1.77	1.85	.12	0.96	1.68	1.80	.11	0.93
Manager Trustworthiness $\times$ Dispositional Trust Propensity					0.07	1.57	.01	0.04	-1.11	1.62	-.09	-0.69
Step 3												
Prosocial Motivation $\times$ Manager Trustworthiness $\times$ Dispositional Trust Propensity									-2.95	1.33	-.28	-2.22*
R ²				0.08				0.11				0.17
ΔR^2								0.03				0.06*

Note. Statistics appearing in bold represent tests of our hypotheses.

* $p < .05$.

ager trustworthiness (Figure 6 displays the slopes for integrity; the slopes for benevolence followed the same pattern). Providing additional support for Hypothesis 2, manager trustworthiness strengthened the relationship between prosocial motivation and the performance outcome of initiative.

Three-Way Interaction of Prosocial Motivation, Manager Trustworthiness, and Dispositional Trust Propensity

We once again tested Hypothesis 4 by examining the three-way interaction between prosocial motivation, manager trustworthiness, and dispositional trust propensity. After controlling for all predictors and two-way interactions, the three-way interaction of prosocial motivation, manager trustworthiness, and dispositional trust propensity was a significant predictor of performance. For both the integrity and benevolence dimensions of trustworthiness, the three-way interaction explained 6% additional variance in performance (see Table 9). The simple slopes suggested a pattern matching the compensatory interaction from Study 2: Prosocial motivation was positively associated with performance in all cases except when both manager trustworthiness and dispositional trust propensity were low (Figure 7 displays the slopes for integrity; the

slopes for benevolence followed the same pattern). Dawson and Richter's (2006) slope difference tests showed that as in Study 2, the slope for the relationship between prosocial motivation and performance outcomes when both trustworthiness and dispositional trust propensity were low differed significantly from each of the other three slopes, and no other slope differences were significant (see Table 10). These findings are again consistent with Hypothesis 4, suggesting that dispositional trust propensity may compensate for low manager trustworthiness by strengthening the relationship between prosocial motivation and performance.

Test of Mediated Moderation by Perceived Task Significance

Finally, we tested whether perceived task significance mediated the moderating effect of manager trustworthiness with the same Edwards and Lambert (2007) path analysis framework as in Study 1. In support of Hypothesis 1, manager trustworthiness was positively associated with perceived task significance (see Table 8). Our previous analyses provided support for Hypothesis 2, and in support of Hypothesis 3a, perceived task significance moderated the association between prosocial motivation and performance.

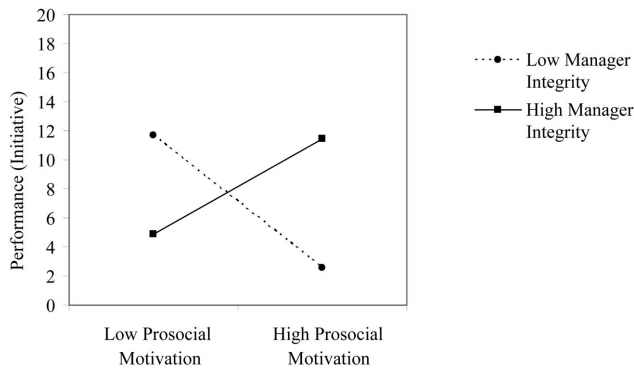


Figure 6. Study 3 regression slopes for the interaction of prosocial motivation and the integrity aspect of manager trustworthiness.

After controlling for prosocial motivation and perceived task significance, we found that the partial product term was a significant predictor of performance ($B = 5.50$, $SE = 2.01$, $\beta = .32$, $t = 2.73$, $p = .01$), and it remained significant even after controlling for manager trustworthiness and its interaction with prosocial motivation. The form of the Prosocial Motivation $\times$ Perceived Task Significance interaction mirrored that of Figure 3 in Study 1. We completed the test of mediation by estimating the indirect effects of the Prosocial Motivation $\times$ Manager Trustworthiness interactions through perceived task significance. We began with the coefficients from the preceding analyses and utilized bootstrapping methods to construct bias-corrected confidence intervals that were based on 1,000 random samples with replacement from the full sample. The size of the indirect effect from the full sample was 1.13 for integrity and 0.88 for benevolence, and the 95% confidence intervals excluded 0 for both integrity (0.193, 2.999) and benevolence (0.22, 2.804). Thus, providing further support for Hypothesis 3b, perceived task significance mediated the moderated effect of manager trustworthiness on the relationship between prosocial motivation and performance.

General Discussion

We examined the conditions under which prosocial motivation predicts higher levels of performance in mission-driven organizations.

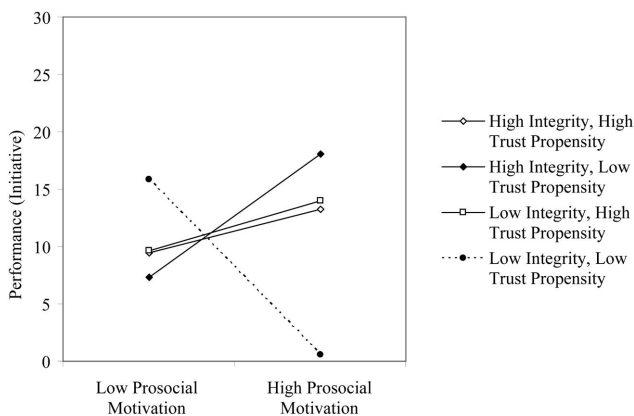


Figure 7. Study 3 regression slopes for the three-way interaction of prosocial motivation and manager trust cues (integrity and dispositional trust propensity).

Table 10

Study 3 Results of Slope Difference Tests for Three-Way Interactions

Pair of slopes	<i>t</i> (integrity)	<i>t</i> (benevolence)
1 and 2	-0.71	-0.57
1 and 3	-0.07	0.05
1 and 4	2.30*	2.27*
2 and 3	0.52	0.51
2 and 4	2.83**	2.96**
3 and 4	2.01*	2.10*

Note. 1 = high manager trustworthiness, high dispositional trust propensity; 2 = high manager trustworthiness, low dispositional trust propensity; 3 = low manager trustworthiness, high dispositional trust propensity; 4 = low manager trustworthiness, low dispositional trust propensity.

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

In Study 1, data from 57 callers provided initial support for our hypothesis that manager trustworthiness strengthens the association between prosocial motivation and performance, measured in terms of calls made. We also found that this moderating association was mediated by perceived task significance. In Studies 2 and 3, with data from 102 callers and 75 professional fundraisers, respectively, we replicated the interaction of manager trustworthiness and prosocial motivation as a predictor of two new indicators of performance: money raised (Study 2) and initiative taken (Study 3). In both studies, we found support for the predicted three-way interaction, which suggested that a high dispositional trust propensity may compensate for low manager trustworthiness to enhance the performance of prosocially motivated employees. In Study 3, we also replicated our finding from Study 1 that perceived task significance mediated the moderating effect of manager trustworthiness on the relationship between prosocial motivation and performance. Across the three studies, we replicated our findings across different dimensions of manager trustworthiness; different measures of prosocial motivation, dispositional trust propensity, and perceived task significance; and different types and indicators of fundraisers' performance. This triangulation decreases the probability that our results are caused by methodological artifacts, strengthening the validity of our conclusions (Campbell & Fiske, 1959). Thus, taken together, our findings suggest that prosocial motivation is more likely to predict performance when trust cues signal to employees that their efforts will have a positive impact on beneficiaries. Our study offers important contributions to theory and research on work motivation, work design, and trust in organizations.

Theoretical Contributions

Work Motivation and Work Design

Our findings have significant implications for theory and research on work motivation and work design. First, our study extends a growing body of research on prosocial motivation. Rather than assuming that prosocial motivation is always associated with performance in mission-driven organizations, we examined the conditions under which prosocial motivation would be more and less likely to predict these outcomes. Our article thus addresses recent calls to develop contingency perspectives on the relationship between prosocial motivation and performance outcomes (Grant, 2008a). In doing so, our findings provide novel insights into the role of trust cues in

supporting prosocial motivation. Trust and prosocial motivation have both been defined as relational variables, since prosocial motivation involves a desire to benefit other people (Grant, 2007) and trust involves positive expectations about and a willingness to be vulnerable toward other people (Kramer, 1999). However, researchers have yet to connect these two relational variables. We have linked trust and prosocial motivation by showing how employees' trust in one group (managers) plays an important role in influencing whether their prosocial motivation directed toward another group (beneficiaries) contributes to performance. Our findings suggest that trust cues may strengthen the prosocial motivation–performance relationship by serving the important function of signaling to employees that their desires to do good can be realized.

Second, our findings provide a fresh window into an issue of core concern in the work design literature. Several decades ago, work design researchers proposed that placing employees in contact with beneficiaries would enable them to directly see their impact, enhancing their perceptions of task significance and thus their motivation and performance (Hackman & Oldham, 1980). Recent research has supported this proposition by demonstrating that when employees are connected to beneficiaries through contact or stories, they display higher effort, persistence, and performance (Grant et al., 2007). Our findings suggest that researchers have overlooked a theoretically and practically compelling motivational alternative to contact with beneficiaries. Our results indicate that when employees are not in direct contact with beneficiaries, seeing managers as trustworthy can increase employees' perceptions of task significance. This is likely to enhance the performance of prosocially motivated employees and appears to be especially important for those with low dispositional trust propensities.

Furthermore, although researchers have recently called for empirical investigations of the role of trust in work design and job perceptions (Clegg & Spencer, 2007), little research has answered this call. Our research addresses this issue by showing that manager trustworthiness is associated with stronger perceptions of task significance, which in turn increase the association between prosocial motivation and performance. As such, our research reveals that trustworthy managers can play an important role in increasing the performance of prosocially motivated employees by enabling them to see how their work makes a difference. Our findings build on early social information processing theories (Salancik & Pfeffer, 1978) and more recent research on leaders as meaning makers (Piccolo & Colquitt, 2006; Podolny et al., 2005; Purvanova et al., 2006; Thompson & Bunderson, 2003) to accentuate the impact that managers can have on employees' perceptions of task significance.

Trust in Organizations

Our findings also offer several contributions to theory and research on trust in organizations. Dirks and Ferrin (2001, pp. 450–451) observed that researchers have predominantly predicted and investigated direct links between trust and performance, at the expense of research examining the conditions under which trust enables performance:

A handful of studies suggest that trust is beneficial because it facilitates the effects of other determinants on desired outcomes. Hence, instead of proposing that trust directly results in desirable outcomes,

this model suggests that trust provides the conditions under which certain outcomes, such as cooperation and higher performance, are likely to occur . . . this perspective is relatively undeveloped . . . The broader theoretical issues which may provide a solid foundation for understanding the moderating role of trust have received little attention.

We have sought to answer Dirks and Ferrin's (2001) call to devote more systematic theoretical and empirical attention to the moderating role of trust. We predicted and found that employees' perceptions of manager trustworthiness moderated the association between prosocial motivation and performance and that this interaction was moderated by dispositional trust propensity. We believe this is the first research to show that trust cues can strengthen the relationship between prosocial motivation and performance.

Accordingly, our results identify a new mechanism for explaining the relationship between trust and performance. Existing evidence suggests that trust enables employees to focus attention on value-producing activities rather than being distracted by concerns about protecting their jobs or monitoring managers' activities (Mayer & Gavin, 2005). We found that perceived task significance provides a different theoretical explanation for the performance benefits of trust. Our findings suggest that perceiving managers as trustworthy may enhance the performance of prosocially motivated employees by enabling them to feel that their efforts will benefit others. As such, our study takes a step toward integrating burgeoning research on trust and performance with classic theories of work design.

Finally, our findings extend existing research on the relationship between contextual and dispositional trust cues. Mayer et al. (1995) suggested a compensatory interaction between contextual and dispositional trust cues, such that trust propensity may be most important when trustworthiness cues are absent. However, empirical research has tended to focus more heavily on the independent relationships between trustworthiness and trust propensity and outcome variables, rather than their interactive relationships. Indeed, in a recent meta-analysis, Colquitt et al. (2007, p. 911) stated that whether trust propensity continues to matter once trustworthiness judgments have been formed is an "unanswered question." We hypothesized and found, germane to this question, a three-way interaction suggesting that when manager trustworthiness is lacking, dispositional trust propensity becomes more important as a moderator of the association between prosocial motivation and performance. To the best of our knowledge, this is the first research to show that trustworthiness and dispositional trust propensity interact in a compensatory fashion to predict performance.

Limitations and Future Directions

Our findings must be qualified by a number of limitations. First, although we collected lagged multisource data linking employee perceptions to subsequent objective performance, we cannot rule out alternative causal pathways. We recommend that researchers use experimental designs to more rigorously test the assumed causal directions. This can be accomplished by assigning participants to tasks in which they are carrying out an important mission with managers. Prosocial motivation may be manipulated through varying levels of task significance or recipient need, and manager trustworthiness may be manipulated through comments from a confederate or other participants. In addition, dispositional levels

of prosocial motivation and trust propensity may be measured prior to beginning the task. Researchers may then examine whether participants' performance is influenced by interactions of prosocial motivation with the manipulated and measured moderators.

Second, we were not able to empirically examine our explanation for why seeing managers as trustworthy is associated with higher perceptions of task significance. We proposed that employees are more likely to have confidence in the mission communications and actions of managers who they view as holding other-oriented values of benevolence and integrity. This argument raises the possibility that mission communications will moderate the relationship between manager trustworthiness and perceived task significance: Manager trustworthiness should be more likely to enhance perceived task significance when managers deliver messages to employees about how their work benefits others. In addition, it is possible that mission communications will mediate the relationship between manager trustworthiness and perceived task significance: Trustworthy managers may strengthen employees' perceptions of task significance by engaging in more frequent, inspiring, or credible mission communications. We strongly recommend that researchers investigate these issues in future studies.

On a related note, we found evidence that perceived task significance mediated the moderating effect of manager trustworthiness on the prosocial motivation–performance relationship, but our data cannot address complementary explanations of this relationship. For example, trust cues may enhance employees' feelings of being valued by others or may increase feelings of complementary and supplementary fit by signaling to employees that their prosocial motives are matched by job supplies and benevolent, high-integrity managers. In addition, prosocially motivated employees may be willing to work harder for trustworthy managers with high levels of benevolence and integrity. By sharing prosocially motivated employees' other-oriented values, trustworthy managers may enhance employees' feelings of value congruence and belongingness in a group or organization that matches their social identities. Moreover, perceiving managers as trustworthy may strengthen employees' expectancy beliefs and feelings of self-efficacy, as trusting relationships can increase employees' confidence in their own abilities (Parker et al., 2006). These potentially complementary mediating mechanisms should be examined in future research.

Third, we were surprised to discover that employees with low prosocial motivation and high manager trustworthiness appeared to display the lowest performance across our studies. Although it is important to be cautious about interpreting points from simple slopes in moderated regression (Cohen et al., 2003), it may be the case that employees with low prosocial motivation interpret high manager trustworthiness as a signal that it is safe to be complacent. Perceiving their managers as trustworthy may encourage these employees to be opportunistic (e.g., Williamson, 1985), doing the minimum amount necessary to serve their own interests without sacrificing their managers' trust. On the other hand, if employees with low prosocial motivation perceive that their managers are not trustworthy, they may work harder to earn their managers' trust and protect their self-interests. We hope that researchers will examine this possibility and other explanations that may account for why employees with low prosocial motivation displayed higher performance when manager trustworthiness was low than when it was high. In addition, we hope that researchers will explore the

points in our three-way interactions in more depth to examine whether particular combinations of prosocial motivation and trust cues result in different levels of performance.

Moreover, it will be important for researchers to explore why the forms of the interactions differed to some extent across the studies. For example, the slope for the relationship between prosocial motivation and performance did not differ significantly from 0 at low levels of manager trustworthiness in the first two studies but was negative in the third study for both the integrity and benevolence dimensions of trustworthiness. It will be necessary for researchers to investigate why these differences emerged. A plausible explanation lies in the differences in age, seniority, experience, time investment, and work orientations between the two samples. In the first two studies, the fundraisers were college students working part-time to support themselves. They would not have the opportunity to continue working in their organizations upon graduating, and as a result of this limited attachment, they may have been less concerned about whether their managers were trustworthy. In the third study, on the other hand, the fundraisers were full-time employees whose careers were invested in this job and this organization. Consequently, they were more psychologically and behaviorally engaged in their work and may have held higher expectations for managers to be trustworthy. Thus, a lack of manager trustworthiness may have violated their high expectations, leading them to question the extent to which their work would benefit others. This would discourage those who were prosocially motivated from expending high levels of effort toward effective performance. We hope to see future studies investigate this account.

Fourth, our findings are limited to three indicators of performance in three samples within mission-driven fundraising organizations. Further research is required to investigate whether our findings generalize to other jobs, organizations, occupations, and industries, as well as to other important behavioral outcomes such as cooperation and citizenship behaviors and other trust cues such as procedural justice. Fifth, we focused on a specific expression of prosocial motivation that is valued in fundraising: soliciting donations to benefit others within a university setting. However, it is critical to note that the link between the desire to do good and the outcome of doing well may depend on goal alignment. From this perspective, employees who seek to do good in ways that are valued by the organization should be most likely to translate their prosocial motivation into performance. Sixth, in many organizations, employees may be prosocially motivated to benefit coworkers and supervisors, particularly when they are sequentially or serially interdependent (e.g., Hackman & Oldham, 1980) or engaged in formal or informal mentoring relationships (e.g., Allen, Eby, & Lentz, 2006). We suggest that researchers conduct further studies on prosocial motivation directed toward coworkers and supervisors within the organization, rather than ultimate beneficiaries, customers, and clients outside the organization.

Finally, our research does not inform whether our hypotheses will hold in organizations that would not be characterized as mission-driven. We hope to see future research explore this issue, as well as examine whether the nature and effects of prosocial motivation vary across different types of mission-driven organizations. We encourage researchers to compare mission-driven organizations along key dimensions such as for-profit versus nonprofit, internal versus external beneficiaries, culture, and globalization.

Toward this end, we hope that our focus on mission-driven organizations will build a bridge between scholars studying public service organizations (Kelman, 2007; Perry & Hondeghem, 2008), high-reliability organizations (Hofmann et al., 1995; Weick et al., 1999), and socially responsible organizations (Margolis & Walsh, 2003), as well as nonprofit, nongovernmental, and social service organizations. Our research takes a step toward uniting these organizations under the common rubric of mission-driven organizations (Besharov, 2008).

Practical Implications and Conclusion

Our findings identify several steps that mission-driven organizations can take to support the performance of prosocially motivated employees. It appears that mission-driven organizations stand to benefit from hiring trustworthy managers who value benevolence and integrity. Employees may be more likely to have confidence in these managers' mission communications and actions, which will help to increase the performance of those who are prosocially motivated. In addition, as the norm of self-interest becomes increasingly pervasive in organizations (Miller, 1999), even trustworthy managers may mistakenly assume that most employees are not interested in benefiting others. Under these conditions, mission-driven organizations may wish to actively encourage managers to communicate task significance to prosocially motivated employees. It may be valuable to train managers who supervise prosocially motivated employees in mission-driven organizations to embrace meaning making as one of their primary roles. As a whole, our findings highlight that prosocial motivation does not always translate into effective performance in mission-driven organizations. Our results suggest that the performance of employees who want to do good depends on trust cues.

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