I Won't Let You Down . . . or Will I? Core Self-Evaluations, Other-Orientation, Anticipated Guilt and Gratitude, and Job Performance

Adam M. Grant University of Pennsylvania

Amy Wrzesniewski Yale University

Although core self-evaluations have been linked to higher job performance, research has shown variability in the strength of this relationship. We propose that high core self-evaluations are more likely to increase job performance for other-oriented employees, who tend to anticipate feelings of guilt and gratitude. We tested these hypotheses across 3 field studies using different operationalizations of both performance and other-orientation (prosocial motivation, agreeableness, and duty). In Study 1, prosocial motivation strengthened the association between core self-evaluations and the performance of professional university fundraisers. In Study 2, agreeableness strengthened the association between core self-evaluations and supervisor ratings of initiative among public service employees. In Study 3, duty strengthened the association between core self-evaluations and the objective productivity of call center employees, and this moderating relationship was mediated by feelings of anticipated guilt and gratitude. We discuss implications for theory and research on personality and job performance.

Keywords: core self-evaluations, other-orientation, anticipated guilt, anticipated gratitude, prosocial motivation

When and why does having a positive self-concept predict better job performance? Considerable research suggests that employees with high core self-evaluations—who tend to have high self-esteem, self-efficacy, beliefs in personal control, and emotional stability (Judge, Locke, & Durham, 1997)—are motivated to achieve higher performance. Because they feel capable of succeeding and view themselves as more worthy and in control, employees with high core self-evaluations engage in more frequent goal-setting, display greater effort and persistence toward achieving their goals, and capitalize more effectively on their opportunities and resources (Erez & Judge, 2001; Judge & Bono, 2001; Judge, Erez, Bono, & Thoresen, 2002; Judge & Hurst, 2007; Wanberg, Glomb, Song, & Sorenson, 2005).

Although research to date generally establishes a positive association between core self-evaluations and performance, the conditions under which this association is strengthened or weakened are largely unknown. Organizational scholars have begun to express concerns about the costs of high core self-evaluations (Hiller & Hambrick, 2005), and there is evidence that their associations with performance can and do vary. In organizational research, a meta-

Adam M. Grant, The Wharton School, University of Pennsylvania; Amy Wrzesniewski, School of Management, Yale University.

We appreciate constructive suggestions from Carolyn Axtell, Gilad Chen, Will Felps, Toby Wall, and participants in the proactivity workshop at the Institute of Work Psychology at the University of Sheffield (especially Mark Griffin and Dave Holman). For assistance with data collection, we thank Rebecca Bramlett, Beth Braxton, Stan Campbell, Jenny Deveau, Howard Heevner, Susan Lerch, Maggie O'Brien, Marty Whelan, and Jessica White.

Correspondence concerning this article should be addressed to Adam M. Grant, The Wharton School, University of Pennsylvania, 3620 Locust Walk, Suite 2000 SH/DH, Philadelphia, PA 19104-6370. E-mail: grantad@wharton.upenn.edu

analysis of 81 studies identified an average positive correlation of .27 between core self-evaluations and performance, but there was substantial variability across the studies, several of which showed negative rather than positive relationships (Judge & Bono, 2001). Despite the fact that this variability suggests the presence of moderators (e.g., Johns, 2006), little research has examined the conditions under which high core self-evaluations are likely to be associated with higher versus lower levels of job performance.

To address this issue, we drew on recent developments in theory and research on other-orientation (De Dreu & Nauta, 2009; Meglino & Korsgaard, 2004; Moon, Kamdar, Mayer, & Takeuchi, 2008), which suggests that employees may respond differently to core self-evaluations as a function of the degree to which they value and feel concerned for the well-being of others. We propose that high core self-evaluations are less likely to lead to complacency for other-oriented employees, who may be more prone to anticipating feeling guilty about letting others down if they fail and anticipating others feeling grateful if they succeed. As such, we propose that other-orientation, by fostering feelings of anticipated guilt and gratitude, strengthens the relationship between core selfevaluations and job performance. We test our hypotheses across three other-oriented traits using three measures of performance in studies of professional fundraisers, public service employees, and outbound call center employees, and we discuss implications for theory and research on personality and job performance.

Core Self-Evaluations and Job Performance: The Moderating Role of Other-Orientation

Core self-evaluations are "fundamental premises that individuals hold about themselves and their functioning in the world" (Judge, Erez, & Bono, 1998, p. 161). Judge et al. (1997) have conceptualized core self-evaluations as a higher order trait indicated indirectly by self-esteem, or beliefs in one's self-worth;

generalized self-efficacy, or beliefs in one's capability to succeed; locus of control, or beliefs in the extent to which events are caused by internal or external forces; and neuroticism-stability, or tendencies to focus on negative versus positive aspects of the self. Specifically, Judge et al. viewed core self-evaluations as a unidimensional latent construct that causes employees to view themselves as having higher self-esteem, higher generalized selfefficacy, lower neuroticism, and an internal locus of control. Thus, employees with high core self-evaluations hold more favorable self-concepts than employees with low core self-evaluations (Judge et al., 1998). Although originally used to predict differences in levels of job satisfaction, core self-evaluations have been shown to predict job performance as well (Erez & Judge, 2001; Judge, 2009), though in both positive and negative directions (Judge & Bono, 2001). Job performance is the degree to which employees' behaviors are effective in meeting organizational objectives (e.g., Beal, Cohen, Burke, & McLendon, 2003; J. P. Campbell, 1990; McCloy, Campbell, & Cudeck, 1994; Motowidlo, 2003). Our objective was to explore the conditions under which high core self-evaluations are associated with higher job performance.

Hypothesis Development

As noted above, although previous research has identified a positive relationship between core self-evaluations and job performance, variability in this relationship highlights both a need and an opportunity to discover moderators of this relationship (Judge & Bono, 2001). High core self-evaluations have been linked to high performance, but scholars have also expressed concerns that they may lead employees to overestimate their abilities, encouraging complacency about investing the level of time, energy, and effort necessary to succeed in achieving high performance. For example, Stajkovic (2006) argued that highly positive self-views can cause "complacency, which may lead to inaction and negative outcomes. . . . Confidence may be the source of arrogance" (p. 1215). Thus, the fundamental, broad, positive assessments of the self suggested by high core self-evaluations have the potential to limit performance. In a global sense, then, positive-self views can breed a complacent approach that actually undermines motivation and performance.

We propose that the relationship between core self-evaluations and job performance depends on other-orientation. *Other-orientation* refers to the extent to which employees value and experience concern for the well-being of other people (De Dreu & Nauta, 2009; Meglino & Korsgaard, 2004). Research indicates that other-oriented employees are motivated to take actions that contribute to other people and the organization (Grant & Mayer, 2009; Moon et al., 2008; Rioux & Penner, 2001; Schwartz, 1992), even when doing so requires them to face negative feedback that threatens their egos and self-images (Korsgaard, Meglino, & Lester, 1997; Moon, 2001). Accordingly, we expect that other-orientation, by fostering feelings of concern for others, will increase the value that employees place on performance (Hollenbeck & Klein, 1987). This will encourage employees to channel high core self-evaluations toward effective performance.

Although we treat core self-evaluations as a unitary construct, there is evidence to suggest that the performance effects of each of the four traits that indirectly indicate this construct will be similarly influenced by other-orientation. Because other-orientation

directs employees' attention and efforts toward benefiting others, it is likely to trigger self-regulatory processes that channel selfefficacy, self-esteem, locus of control, and emotional stability toward effective performance. First, other-orientation is likely to prevent employees with high self-efficacy from becoming overconfident. By cultivating a focus on and concern for the well-being of others, other-orientation increases the costs of poor performance and the benefits of effective performance, enhancing the attractiveness of working harder (Hollenbeck & Klein, 1987). Second, research indicates a tendency for employees "with high selfesteem to make inflated assessments and predictions about themselves [that carry] the risk of making commitments that exceed capabilities, thus leading to failure" (Baumeister, Heatherton, & Tice, 1993, p. 141). The self-esteem of other-oriented employees depends not only on their own performance but also on its consequences for others (Crocker & Wolfe, 2001). As a result, otherorientation will encourage employees with high self-esteem to make more appropriate commitments and invest additional effort toward benefiting others in order to protect, maintain, and enhance their self-concepts as helpful, caring individuals.

Third, research shows that an internal locus of control is associated with optimism about success (e.g., Schweizer & Schneider, 1997), which can lead individuals to invest less time and energy in planning and working than are necessary to succeed (Norem & Cantor, 1986). By drawing attention to risks for others, otherorientation may lead to more realistic assessments of the amount of effort that is necessary (Meglino & Korsgaard, 2004). Finally, there is considerable evidence that emotionally stable employees have stronger capabilities for self-regulation and emotion control than neurotic employees (e.g., Gramzow et al., 2004; Morossanova, 2003; Olson, 2005; Suls & Martin, 2005). As a result, emotionally stable employees often underreact to the possibility of failure, neglecting to marshal sufficient anxiety and worry to achieve effective performance (Tamir, 2005). Other-orientation is likely to dampen these effects by optimally enhancing employees' feelings of anxiety and worry on behalf of others, encouraging them to put forth additional effort in the interest of protecting and promoting the well-being of others (Schwartz, Sagiv, & Boehnke, 2000). Thus, other-orientation is likely to enhance the performance effects of the four specific traits that indirectly indicate core self-evaluations. We therefore propose that other-orientation strengthens the relationship between core self-evaluations and performance.

Hypothesis 1: The association between core self-evaluations and job performance is moderated by other-orientation, such that the higher the employee's other-orientation, the more positive the association between core self-evaluations and job performance will become.

Mediating Mechanisms

We further propose that other-orientation protects employees against the complacency effects of high core self-evaluations by fostering two anticipatory emotions: anticipated guilt and anticipated gratitude. We base these predictions on recent theory and research on anticipated emotions (Baumeister, Vohs, DeWall, & Zhang, 2007), which suggest that the feelings that employees expect to experience in the future play a powerful role in shaping

their behaviors in the present. When employees anticipate negative emotions, they are motivated to act to prevent them, and when employees anticipate positive emotions, they are motivated to act to promote them (Baumeister et al., 2007; Grant & Ashford, 2008).

More specifically, we predict that other-oriented employees will be more likely to experience anticipatory social emotions—future feelings that focus on others—that are both prevention focused and promotion focused (Brockner & Flynn, 2001). Our central premise is that other-oriented employees are more concerned about harming others if they fail (anticipated guilt) and benefiting others if they succeed (anticipated gratitude), and that these two anticipatory social emotions encourage them to channel high core selfevaluations into effective job performance. Anticipated guilt is a prevention-focused emotional state that is typically elicited when employees think about work-related failure and motivates employees to take action to avoid feeling guilty. Anticipated gratitude is a promotion-focused emotional state that is typically elicited when employees think about work-related success and motivates employees to take action to facilitate feelings of gratitude in others. Below we elaborate on how these two anticipatory emotions may explain why other-orientation strengthens the association between core self-evaluations and job performance.

Anticipated guilt. Guilt describes a negative feeling about the adverse impact of one's actions on others: feeling personally responsible for harming others, violating justice principles, and failing to meet others' expectations (Batson, 1989; Buck, 1999; McGraw, 1987; Tangney, 1991; Weiner, 1985). Anticipated guilt refers to concerns about experiencing these feelings in the future (Baumeister et al., 2007; Fiske, 2002; Lindsey, 2005). Research suggests that other-oriented employees tend to empathize with and feel responsible for other people, tendencies that leave them prone to anticipating feeling guilty if they let others down (Einstein & Lanning, 1998; Eisenberg, 2000). Whether the other people in question are clients, customers, coworkers, or managers, other-orientation sparks concern and action toward protecting their wellbeing.

We propose that by cultivating feelings of anticipated guilt, other-orientation strengthens the association between core selfevaluations and job performance. Because other-oriented employees feel concerned about and responsible for the welfare of others, they will recognize that complacency may jeopardize the wellbeing of the managers, coworkers, customers, or clients who are depending on their effort. They will anticipate feeling guilty about causing disappointment, distress, or harm, and these feelings of anticipated guilt will threaten their self-concepts as responsible, caring, dependable individuals (Baumeister et al., 2007). As such, other-orientation will give rise to feelings of anticipated guilt that motivate employees with high core self-evaluations to expend additional effort in order to prevent the events that will give rise to guilt (Baumeister, Stillwell, & Heatherton, 1994; Fiske, 2002). To avoid failure, they will increase their effort levels (Erez & Judge, 2001), working harder to achieve higher levels of performance. This will allow them to avoid feeling guilty, while both protecting and verifying their self-concepts as responsible and dependable individuals (Steele, 1988; Swann, Polzer, Seyle, & Ko, 2004). Thus, we expect that other-orientation will lead to feelings of anticipated guilt, motivating employees with high core selfevaluations to achieve higher performance.

Importantly, other-oriented employees with low core selfevaluations are still likely to experience anticipated guilt but may lack confidence that they can succeed in meeting others' expectations. Anticipated guilt is consistent with their self-concepts as less capable individuals (Judge et al., 2002). Because they do not feel capable of preventing the events that will give rise to guilt, they will prefer to reduce their effort and disengage from their goal, having determined that their expectancy of goal attainment is low (Hollenbeck & Klein, 1987). This will enable them to verify and maintain their negative self-concepts (Swann, Pelham, & Krull, 1989), and protect them from the unpleasant realization that they could not succeed even if they tried (Ashford, Blatt, & Vande-Walle, 2003; Pyszczynski & Greenberg, 1983; Rhodewalt, Morf, Hazlett, & Fairfield, 1991; Tice, 1991). In other words, the intentional decision to expend less time and energy in their work will allow them to attribute failure to a lack of effort toward their goal (e.g., Hollenbeck & Klein, 1987), which is less emotionally aversive than attributing it to a lack of ability (Ross, Canada, & Rausch, 2002). Even if they do attempt to increase their effort levels, they are likely to experience doubts about their competence in and control over their efforts, which will result in feelings of pressure that undermine their ability to sustain effort over time (Gagné & Deci, 2005).

Employees with low levels of other-orientation, on the other hand, are less prone to anticipated guilt (Eisenberg, 2000). As such, high core self-evaluations have greater potential to cause overconfidence and complacency for employees low in other-orientation, who will be less likely to worry about letting others down or failing to fulfill their responsibilities to others. For these employees, disappointing managers and coworkers or letting down clients and customers will be less of a concern, as the attractiveness of attaining the goal of not letting others down is lower (Hollenbeck & Klein, 1987). Accordingly, high core self-evaluations may lead employees low in other-orientation to expend lower levels of task effort and thus achieve lower levels of performance. In summary, we predict that by engendering feelings of anticipated guilt, other-orientation will strengthen the association between core self-evaluations and job performance.

Hypothesis 2: The moderating effect of other-orientation on the relationship between core self-evaluations and performance is partially mediated by anticipated guilt.

Anticipated gratitude. Whereas anticipated guilt captures how employees imagine others will feel if they fail, anticipated gratitude captures how employees imagine others will feel if they succeed. When employees experience anticipated gratitude, they expect others to appreciate their efforts—to feel thankful for their contributions, help, assistance, or support (Tesser, Gatewood, & Driver, 1968; Weiner, 1985; see also Flynn & Brockner, 2003). Research has shown that expecting others to feel grateful motivates individuals to invest additional time and energy in efforts to benefit them (Grant & Gino, in press; McCullough, Kilpatrick, Emmons, & Larson, 2001). We predict that other-oriented employees will be more likely to experience anticipated gratitude. Research suggests that because other-oriented employees are concerned about helping and benefiting others, they are more likely to engage in perspective taking to imagine how others will react to their contributions (De Dreu, Weingart, & Kwon, 2000; Parker &

Axtell, 2001; see also Agle, Mitchell, & Sonnenfeld, 1999). Thus, other-oriented employees should be more likely to anticipate that supervisors, coworkers, clients, and customers will feel grateful for their efforts.

We propose that by cultivating feelings of anticipated gratitude, other-orientation strengthens the association between core selfevaluations and job performance. Because other-oriented employees place high value on creating positive outcomes for others (Agle et al., 1999; Hollenbeck & Klein, 1987; Meglino & Korsgaard, 2004), anticipated gratitude will motivate employees with high core self-evaluations to invest additional effort in order to promote the events that will result in gratitude (Baumeister et al., 2007). In the language of expectancy theory (Hollenbeck & Klein, 1987; Vroom, 1964), anticipated gratitude signifies strong valence beliefs in the attractiveness and importance of expending effort to benefit others, and high core self-evaluations confer strong expectancy beliefs in one's personal capabilities to succeed in benefiting others. Thus, we predict that other-orientation will lead to feelings of anticipated gratitude, motivating employees with high core self-evaluations to achieve higher performance.

On the other hand, other-oriented employees with low core self-evaluations will still experience anticipated gratitude but may lack the confidence to exert the effort necessary to perform effectively based on a sense that their expectancy of goal attainment is low (Hollenbeck & Klein, 1987). Furthermore, employees with low levels of other-orientation will be less likely to experience anticipated gratitude, as they will tend to focus less on other people (Meglino & Korsgaard, 2004). Consequently, high core selfevaluations may carry greater risk of causing overconfidence and complacency for employees with low other-orientation, as these employees will be less motivated to invest the time and energy that may be instrumental to earning feelings of gratitude from supervisors, coworkers, customers, or clients. Thus, we predict that by fostering feelings of anticipated gratitude, other-orientation will strengthen the association between core self-evaluations and job performance.

Hypothesis 3: The moderating effect of other-orientation on the relationship between core self-evaluations and performance is partially mediated by anticipated gratitude.

Overview of the Present Research

We tested our hypotheses, which are displayed visually in Figure 1, in three field studies of professional fundraisers, public service employees, and outbound call center employees. Across the three studies, we used different operationalizations of otherorientation because scholars have suggested that other-orientation is reflected in multiple traits (Penner, Fritzsche, Craiger, & Freifield, 1995). As such, we sought to triangulate our results (e.g., D. T. Campbell & Fiske, 1959; Sackett & Larson, 1990) across three conceptualizations and measures of other-orientation. Study 1 focused on prosocial motivation, defined as the desire to benefit others (e.g., Grant, 2007, 2008; Rioux & Penner, 2001); Study 2 focused on agreeableness, defined as the tendency to approach social interactions and relationships with a positive attitude (e.g., Graziano, Habashi, Sheese, & Tobin, 2007; Ilies, Scott, & Judge, 2006); and Study 3 focused on duty, or the tendency toward dependability and feelings of responsibility for others (e.g., Moon,

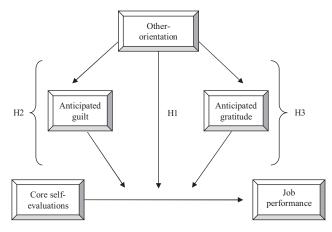


Figure 1. Visual summary of hypotheses.

2001). Across the three studies, we also used different operationalizations of job performance that were contextually relevant. We tested Hypothesis 1 in Studies 1 and 2 and tested Hypotheses 1, 2, and 3 in Study 3.

Study 1

Method

Participants and procedures. We collected data from a sample of 78 professional fundraisers at a public university in southeastern United States. We chose fundraising because it is an occupation in which levels of confidence often vary (e.g., Seligman & Schulman, 1986). Job duties included calling alumni, making personal visits, developing gift proposals, negotiating, and stewardship activities such as sending university updates and thank-you notes. The fundraisers were 67% female with average tenure in the job of 6.29 years (SD = 6.75). At a staff meeting, the vice chancellor asked the fundraisers to volunteer to fill out surveys about their personality traits. The university employed 98 regular fundraisers, 82 of whom were in attendance at the staff meeting, yielding a total response rate of 79.6% and a response rate from those approached of 95.1%. The surveys were collected directly by a member of the research team. Over the following 4 months, we collected data on the fundraisers' job performance from a statistician in the university's development office.

Measures. We obtained independent performance data and self-report measures of core self-evaluations and prosocial motivation.

Dependent variable: Job performance. We measured performance in terms of the goals set forth by the vice chancellor, which were to maximize the total number of gift-related contacts that the fundraisers make with potential alumni donors. Because it often takes multiple years to develop a relationship with each prospective donor, and several additional years to cultivate a gift, senior leaders in the development office assessed the fundraisers' performance in terms of the total number of gift-related contacts that they make with alumni donors. We obtained the number of contacts made by each fundraiser—including gift solicitations, gift proposals, and gift stewardship activities—over a 4-month period

following the fundraisers' completion of the self-report survey measures.

Self-report measures: Core self-evaluations and prosocial motivation. We measured core self-evaluations and the other-oriented trait of prosocial motivation with employee surveys using Likert-type scales anchored at $1 = disagree \ strongly$ and $7 = agree \ strongly$. We measured core self-evaluations with the 12-item scale developed and validated by Judge, Erez, Bono, and Thoresen (2003). The scale measures positive feelings about the self in terms of self-esteem, generalized self-efficacy, emotional stability, and locus of control. A sample item is "Overall, I am satisfied with myself" ($\alpha = .82$). We measured other-orientation in terms of prosocial motivation, or the desire to benefit others, with the four-item scale reported by Grant (2008). A sample item is "I want to help others through my work" ($\alpha = .95$).

Results and Discussion

Means, standard deviations, and correlations appear in Table 1. We tested Hypothesis 1 using the moderated regression procedures recommended by Aiken and West (1991; see also Cohen, Cohen, West, & Aiken, 2003). We standardized the scales for core selfevaluations and prosocial motivation, multiplied them to create an interaction term, and then predicted performance from the two independent variables and the interaction term. The results of a hierarchical regression analysis are displayed in Table 2. Neither core self-evaluations nor prosocial motivation explained significant independent variance in performance, but the partialed product term was a significant predictor of performance. To facilitate the interpretation of the form of the interaction, we plotted the simple slopes at one standard deviation above and below the mean (see Figure 2). For employees with high levels of prosocial motivation, the simple slope for the relationship between core selfevaluations and performance was positive and differed significantly from zero (b = 19.06, SE = 7.27, $\beta = .39$, t = 2.62, p = .39.01). For employees with low levels of prosocial motivation, the simple slope was negative but did not differ significantly from zero $(b = -9.58, SE = 11.02, \beta = -.20, t = -0.87, p = .39)$. Thus, in support of Hypothesis 1, the other-oriented trait of prosocial motivation strengthened the association between core selfevaluations and performance. In our next study, we sought to constructively replicate (Lykken, 1968) these results in a different organization and occupation using a different sample with different measures of both other-orientation and performance.

Table 1
Study 1 Means, Standard Deviations, and Correlations

Variable	M	SD	1	2	3	4
Performance (contacts) Core self-evaluations Prosocial motivation Core Self-Evaluations ×	48.38 5.39 6.48	47.88 0.73 0.68		(.82) 03	(.95)	
Prosocial Motivation	-0.07	0.82	.30**	.46**	.18	_

Note. Effective sample size = 76 (performance data were not available for two fundraisers).

Study 2

We conducted Study 2 in two public service organizations. We assessed other-orientation in terms of the Big Five personality trait of agreeableness and measured performance with supervisor ratings of initiative, a key dimension of extrarole performance (Bolino & Turnley, 2005; Frese & Fay, 2001; Griffin, Neal, & Parker, 2007; Podsakoff, MacKenzie, Paine, & Bachrach, 2000).

Method

Participants and procedures. We collected data from 93 employees at two public service organizations: one in the northwestern United States that focused on national security issues (n =50) and one in the midwestern United States that focused on promoting children's health (n = 43). In the national security organization, employees were responsible for monitoring for environmental threats and performing safety checks. In the children's health organization, duties included meeting with children to understand their physical and psychological health needs and coordinating care with families. The employees had a mean tenure of 5.56 years (SD = 5.18) in their organizations. The leaders of each organization sent an online link to employees inviting them to participate in a confidential study of work motivation and job performance, and the response rates were 29.1% (50/172) and 35.5% (43/121), respectively. After each employee completed a survey, a link was automatically sent to the organization's supervisor to complete ratings of initiative.

Measures. We collected supervisor performance ratings and self-report measures of core self-evaluations and agreeableness.

Dependent variable: Job performance. We measured performance in terms of supervisor ratings of initiative because both organizations operated in dynamic, uncertain environments in which supervisors depended on employees to take initiative in solving problems, voicing and implementing ideas, and expending additional time and energy at work beyond core task requirements. In such settings, initiative is a critical dimension of work performance (Frese & Fay, 2001; Griffin et al., 2007). We asked supervisors to rate their employees' initiative using the seven-item scale developed by Frese, Fay, Hilburger, Leng, and Tag (1997). Sample items are "This employee takes initiative immediately even when others don't" and "Usually does more than s/he is asked to do" ($\alpha = .84$). Each employee was rated by a unique supervisor, signifying that the ratings are not nested and thus do not need to be adjusted for dependencies.

Self-report measures: Core self-evaluations and agreeableness. We measured core self-evaluations and the other-oriented trait of agreeableness with employee surveys using Likert-type scales anchored at $1 = disagree \ strongly$ and $7 = agree \ strongly$. We measured core self-evaluations with the same Judge et al. (2003) 12-item scale as in Study 1 ($\alpha = .82$). We measured agreeableness with the four-item scale developed by Donnellan, Oswald, Baird, and Lucas (2006). A sample item is "I sympathize with others' feelings" ($\alpha = .80$).

Results and Discussion

Means, standard deviations, and correlations appear in Table 3. We tested Hypothesis 1 using the same moderated regression

^{**} p < .01.

Table 2
Study 1 Moderated Regression Analyses

		Ste	p 1		Step 2				
Variable	b	SE	β	t	b	SE	β	t	
Step 1									
Core self-evaluations	9.42	5.50	.19	1.71	4.74	5.89	.10	0.80	
Prosocial motivation	7.39	5.36	.16	1.38	5.23	5.37	.11	0.98	
Step 2									
Core Self-Evaluations × Prosocial Motivation					14.32	7.24	.24	1.98*	

Note. Statistics appearing in bold represent tests of our hypotheses. The addition of the partialed product term in the second step increased variance explained from $r^2 = .06$ to $r^2 = .11$, which was a significant increase, F(1, 73) = 3.92, p = .05. Effective sample size = 76. * p < .05.

procedures as in Study 1, and the results of our analyses are displayed in Table 4. Mirroring the pattern from the previous study, neither core self-evaluations nor agreeableness explained significant independent variance in supervisor ratings of initiative, but the partialed product term was a significant predictor of initiative. We interpreted the form of the interaction by plotting the simple slopes at one standard deviation above and below the mean (see Figure 3). For employees high in agreeableness, the simple slope for the relationship between core self-evaluations and supervisor ratings of initiative was positive and differed significantly from zero (b = 0.48, SE = 0.22, $\beta = .32$, t = 2.17, p = .03). For employees low in agreeableness, the simple slope was negative but did not differ significantly from zero (b = -0.27, SE = 0.26, $\beta =$ -.18, t = -1.01, p = .32). Accordingly, these results constructively replicated the findings from Study 1: Just as the otheroriented trait of prosocial motivation strengthened the relationship between core self-evaluations and objective performance in fundraising, the other-oriented trait of agreeableness strengthened the association between core self-evaluations and supervisor ratings of initiative in public service. However, we had yet to test our mediated moderation hypothesis that other-orientation strengthens the association between core self-evaluations and performance by cultivating feelings of anticipated guilt and gratitude. It is to this objective that we turned in our third study.

Study 3

We conducted Study 3 in an outbound call center. We measured other-orientation in terms of the trait of duty, which is the other-

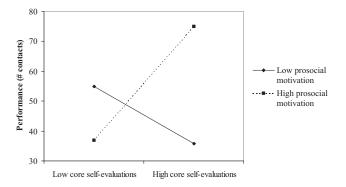


Figure 2. Study 1 regression slopes for the interaction of core self-evaluations and prosocial motivation.

centered dimension of conscientiousness (Moon et al., 2008); measured performance in terms of employees' financial productivity; and assessed employees' feelings of anticipated guilt and gratitude as potential mediating variables.

Method

Participants and procedures. We collected data from 86 employees working for an outbound for-profit call center in the midwestern United States. The employees were responsible for making calls within the organization's network to raise money for job creation. The call center was operated by a for-profit company hired by a local university to generate funds to support new jobs at the university. The employees thus performed duties typical of telemarketing positions. The sample was 55.8% female with a mean tenure of 3.20 months (SD = 5.04), which is typical for this line of work. Managers provided time for callers to complete surveys during their regular working shifts, which we collected directly to protect their confidentiality. The callers received full pay while completing the surveys, which included measures of core self-evaluations, duty, and anticipated guilt and gratitude, and the response rate was 96.7% (86/89). Managers provided objective data on the callers' financial productivity for the 3 weeks after the surveys were complete.

Measures. Unless otherwise indicated, we measured all variables using Likert-type scales anchored at $1 = disagree \ strongly$ and $7 = agree \ strongly$.

Dependent variable: Job performance. We measured performance in terms of the total financial productivity of the callers over a 3-week period. The measure was recorded by one manager and checked and verified by a second manager, and we chose this 3-week interval because it represented a period in which callers were drawing potential contacts from a common pool, indicating that they had equivalent opportunities to perform (Blumberg & Pringle, 1982; Walker & Guest, 1952).

Self-report predictors: Core self-evaluations and duty. We measured core self-evaluations and the other-oriented trait of duty with employee surveys. As in Studies 1 and 2, we measured core self-evaluations with the Judge et al. (2003) scale ($\alpha=.82$). We measured duty with a four-item scale adapted from existing measures (Donnellan et al., 2006; Goldberg, 1999; Gosling, Rentfrow, & Swann, 2003; Moon, 2001). A sample item is "I am dependable and self-disciplined" ($\alpha=.70$).

Self-report mediators: Anticipated guilt and gratitude. We measured anticipated guilt with a four-item scale adapted from

Table 3
Study 2 Means, Standard Deviations, and Correlations

Variable	M	SD	1	2	3	4	5
1. Performance (supervisor ratings of initiative)	5.97	1.42	(.84)				
2. Core self-evaluations	5.23	0.84	.11	(.82)			
3. Agreeableness	5.43	1.32	.04	.35**	(.80)		
4. Core Self-Evaluations × Agreeableness	0.35	0.98	.19	.01	42**	_	
5. Organization (0/1)	0.56	0.50	.05	22*	30**	.17	

Note. Effective sample size = 93.

existing measures of anticipated guilt (Lindsey, 2005; O'Keefe & Figgé, 1999). Following the approach to measuring anticipated emotions recommended by Bagozzi and colleagues (Perugini & Bagozzi, 2001; Verbeke & Bagozzi, 2002), we asked, "If you failed to succeed in your work, how would you react?" The four items were "I would feel guilty," "I would feel that I had let other people down," "I would feel that I had disappointed others," and "I would feel that I had not lived up to others' standards" ($\alpha = .92$). We also measured anticipated gratitude with a four-item scale designed to focus on the expectation that both insiders and outsiders would feel appreciative for one's work. On the basis of interviews with supervisors, we learned that the two groups that were most likely to benefit from callers' work were managers (internal) and customers (external). Accordingly, the items focused on anticipation of gratitude from both managers and customers: "I feel that managers will appreciate my work if I succeed," "I feel that managers will value my contributions," "I feel that customers will appreciate my work if I succeed," and "I feel that customers will value my contributions" ($\alpha = .79$).

Results and Discussion

Means, standard deviations, and correlations appear in Table 5. We tested Hypothesis 1 using the aforementioned moderated regression procedures. The results of our hierarchical regression analyses are displayed in Table 6. With respect to the role of the other-oriented trait of duty in moderating the association between core self-evaluations and performance, similar to the previous two studies, we found no significant independent associations between either core self-evaluations or duty and performance (Table 6, Step

1). However, there was a significant interaction between core self-evaluations and duty in predicting performance (Table 6, Step 2; the simple slopes are plotted in Figure 4). For employees high in duty, the simple slope for the relationship between core self-evaluations and financial productivity was positive and showed a trend toward differing from zero (b = 948.03, SE = 549.49, $\beta = .27$, t = 1.73, p = .09). For employees low in duty, the simple slope was negative and differed significantly from zero (b = -984.64, SE = 500.90, $\beta = -.29$, t = -1.97, p = .05). These results once again support Hypothesis 1, as the other-oriented trait of duty enhanced the association between core self-evaluations and the financial productivity of outbound callers.

We tested Hypotheses 2 and 3 using regression procedures for mediated moderation (see Preacher, Rucker, & Hayes, 2007). Our model differs from Edwards and Lambert's (2007) models: Instead of starting with a mediated effect that is moderated at one or two stages, we start with a moderating effect that we seek to explain (see Figure 1). This means that we are concerned with the role of the moderator (other-orientation) in causing two mediators (anticipated guilt and gratitude) that carry the moderating effect. Thus, we sought to examine whether anticipated guilt and/or anticipated gratitude accounted for the moderating effect of duty on the association between core self-evaluations and performance. For either of the anticipated emotions to mediate this moderating effect, we would need to see a direct positive association between duty and the anticipated emotion, and then a moderating effect of the anticipated emotion on the association between core selfevaluations and performance, along with a decrease in the moderating effect of duty on this association (Preacher et al., 2007). In

Table 4
Study 2 Moderated Regression Analyses

		Ste	p 1	Step 2				
Variable	b	SE	β	t	b	SE	β	t
Step 1								
Organization (0/1)	0.21	0.32	.07	0.65	0.16	0.31	.06	0.50
Core self-evaluations	0.19	0.17	.12	1.10	0.12	0.17	.08	0.69
Agreeableness	0.03	0.17	.02	0.17	0.19	0.18	.13	1.03
Step 2								
Core Self-Evaluations × Prosocial Motivation					0.35	0.17	.24	2.06*

Note. Statistics appearing in bold represent tests of our hypotheses. The addition of the partialed product term in the second step increased variance explained from $r^2 = .02$ to $r^2 = .06$, which was a significant increase, F(1, 88) = 4.22, p = .04. Effective sample size = 93. * p < .05.

^{*} p < .05. ** p < .01.

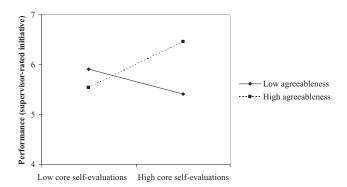


Figure 3. Study 2 regression slopes for the interaction of core self-evaluations and agreeableness.

other words, duty should strengthen the relationship between core self-evaluations and performance by fostering anticipated emotions, which then strengthen the association between core self-evaluations and performance, rendering duty redundant as a moderator, as its effects are carried by anticipated emotions.

We first examined the direct association between duty and the anticipated emotions. Duty was a significant predictor of anticipated guilt (b = 0.80, SE = 0.16, $\beta = .48$, t = 5.02, p < .01). Duty was also a significant predictor of anticipated gratitude (b = 0.52, SE = 0.13, $\beta = .40$, t = 4.04, p < .01). To examine whether anticipated guilt and/or anticipated gratitude strengthened the association between core self-evaluations and performance, we conducted a hierarchical regression analysis. We controlled for core self-evaluations, duty, and their interaction (Table 6, Steps 1 and 2) and then entered anticipated guilt, anticipated gratitude, and the partialed products of core self-evaluations with anticipated guilt and anticipated gratitude (Table 6, Step 3). The results showed that, as expected, the partialed products of core self-evaluations with anticipated guilt and anticipated gratitude significantly predicted performance. Moreover, the moderating effect of duty decreased to nonsignificance.

The forms of the interactions were very similar to those for duty. For employees who anticipated high levels of guilt, there was a significant positive association between core self-evaluations and performance (b = 1251.52, SE = 558.36, $\beta = .36$, t = 2.24, p < .05), whereas for employees who anticipated low levels of guilt, there was a significant negative association between core self-

evaluations and performance (b=-1015.21, SE=504.57, $\beta=-.29$, t=-2.01, p<.05). We found a parallel pattern for anticipated gratitude. For employees who anticipated high levels of gratitude, there was a significant positive association between core self-evaluations and performance (b=1125.51, SE=538.22, $\beta=.33$, t=2.09, p<.05), whereas for employees who anticipated low levels of gratitude, there was a significant negative association between core self-evaluations and performance (b=-1192.94, SE=524.64, $\beta=-.35$, t=-2.27, p<.05). Thus, anticipated guilt and anticipated gratitude, like duty, independently strengthened the association between core self-evaluations and performance.

We completed the test of mediation based on the advice from Edwards and Lambert (2007): We estimated the indirect effects of the interaction of core self-evaluations and duty through anticipated guilt, which involved testing the significance of the products of (a) the path from other-orientation to each mediator and (b) the paths for the interactions of each mediator with core selfevaluations in predicting performance. Using the coefficients from our previous analyses, we used bootstrapping methods to construct bias-corrected confidence intervals based on 1,000 random samples with replacement from the full sample (Stine, 1989). The 95% confidence intervals for the size of the indirect effects excluded zero for both anticipated guilt [155.10, 1014.78] and anticipated gratitude [52.83, 944.50]. Because mediation is present when the size of the indirect effect is significantly different from zero (MacKinnon, Fairchild, & Fritz, 2007; Shrout & Bolger, 2002), these findings support Hypotheses 2 and 3: Anticipated guilt and anticipated gratitude each contributed to fully mediating the moderating effect of the other-oriented trait of duty on the association between core self-evaluations and performance.

General Discussion

We found support for our hypotheses across three samples of professional fundraisers, public service employees, and outbound call center employees. The relationship between core self-evaluations and three measures of performance (contacts made, supervisor ratings of initiative, and financial productivity) was strengthened by three operationalizations of other-orientation (prosocial motivation, agreeableness, and duty). In addition to this evidence that other-orientation enhanced the association between core self-evaluations and performance, our third study showed that this moderating effect was mediated by anticipated guilt and

Table 5
Study 3 Means, Standard Deviations, and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8
1. Performance (financial productivity)	\$3,153.70	\$3,453.93	_							
2. Core self-evaluations	5.00	0.78	.00	(.82)						
3. Duty	5.11	0.89	.14	.23*	(.70)					
4. Anticipated guilt	3.97	1.47	.03	.00	.48**	(.92)				
5. Anticipated gratitude	4.29	1.13	.13	.15	.40**	.33**	(.79)			
6. Core Self-Evaluations × Duty	0.23	0.99	.27*	10	05	01	.10	_		
7. Core Self-Evaluations × Anticipated Guilt	0.00	0.95	.31**	10	01	.09	.25*	.38**	_	
8. Core Self-Evaluations × Anticipated Gratitude	0.15	0.97	.34**	.02	.10	.24*	.29**	.48**	.26*	_

Note. Effective sample size = 86.

^{*} p < .05. ** p < .01.

Table 6
Study 3 Moderated and Mediated, Moderated Regression Analyses

		Step 1				Step 2				Step 3			
Variable	b	SE	β	t	b	SE	β	t	b	SE	β	t	
Step 1													
Core self-evaluations	-108.92	385.98	03	-0.28	-18.30	374.63	01	-0.05	-52.40	368.61	02	-0.14	
Duty	507.74	385.98	.15	1.32	535.21	373.18	.15	1.43	718.75	432.63	.21	1.66	
Step 2													
Core Self-Evaluations × Duty					966.33	368.88	.28	2.62*	208.76	431.92	.06	0.48	
Step 3													
Anticipated guilt									-512.01	419.81	15	-1.22	
Core Self-Evaluations ×													
Anticipated Guilt									868.70	414.73	.24	2.09*	
Anticipated gratitude									-145.17	412.44	04	-0.35	
Core Self-Evaluations ×													
Anticipated Gratitude									973.33	44.19	.27	2.21*	

Note. Statistics appearing in bold represent tests of our hypotheses. The addition of the partialed product term in the second step increased variance explained from $r^2 = .02$ to $r^2 = .10$, which was a significant increase, F(1, 82) = 6.86, p = .01. The addition of anticipated guilt, anticipated gratitude, and their interactions with core self-evaluations in the third step increased variance explained further to $r^2 = .20$, another significant increase, F(4, 78) = 2.54, p < .05. Effective sample size = 86.

* p < .05.

anticipated gratitude. Other-oriented employees experience higher levels of anticipated guilt and gratitude, which appear to motivate them to channel high core self-evaluations toward high performance. These findings offer meaningful contributions to theory and research on personality, job performance, and other-orientation.

Theoretical Contributions

Our central contribution lies in introducing other-orientation as an important moderator of the relationship between core self-evaluations and job performance. Our three studies provide convergent evidence that individual differences in other-orientation moderate whether core self-evaluations are associated with higher or lower performance. Our results suggest that high core self-evaluations are most likely to predict effective performance when employees are also high in other-orientation. Our studies thus present a contingency perspective that helps to clarify competing predictions from different literatures about the performance benefits versus costs of high core self-evaluations (e.g., Dunning,

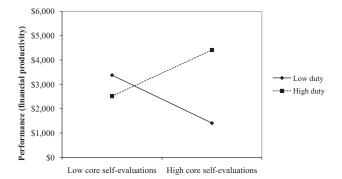


Figure 4. Study 3 regression slopes for the interaction of core self-evaluations and duty.

Heath, & Suls, 2004; Judge & Bono, 2001; Lindsley, Brass, & Thomas, 1995; Vancouver, Thompson, Tischner, & Putka, 2002). These findings respond to the call from Johnson, Rosen, and Levy (2008) to shed further light on the nature and functions of core self-evaluations. In particular, our theoretical perspective and empirical results suggest that other-oriented concerns broader than the self may operate in concert with self-evaluations to influence job performance. This focus on other-orientation contributes to a growing line of inquiry in organizational behavior and applied psychology on the relational underpinnings of motivation and the experience of work (De Dreu, 2006; Grant, 2007, 2008; Meglino & Korsgaard, 2004; Wrzesniewski, Dutton, & Debebe, 2003).

Our research also provides new insights into the social and emotional mechanisms through which employees channel high core self-evaluations into effective performance. Our third study revealed that when employees with high core self-evaluations experience anticipated guilt and gratitude, they are more likely to achieve high performance. This attention to anticipatory emotions represents a new direction for theory and research on core selfevaluations. In explaining the psychological processes that enable employees with high core self-evaluations to achieve high performance, previous research has emphasized the importance of goal setting and capitalization on opportunities and resources (Erez & Judge, 2001; Judge & Hurst, 2007). Our theoretical predictions and empirical findings complement this focus on cognitive mechanisms by showing that the social emotions that employees anticipate feeling in the future play an important role in guiding how they direct their high core self-evaluations in the present. Our research thereby accentuates that social and emotional processes, not only cognitive processes, influence the relationship between core self-evaluations and job performance.

Furthermore, our research joins with recent scholarship highlighting the value of examining the interactions of constellations of multiple personality traits, rather than focusing on the individual relationships between single traits and job performance. Recent research has identified interactions among traits such as extraversion and emotional stability (Judge & Erez, 2007) and conscientiousness with agreeableness, extraversion, and emotional stability (King, George, & Hebl, 2005) in predicting job performance and helping behavior. However, little research has considered how core self-evaluations may interact with other kinds of individual differences to predict job performance. Our research thereby extends knowledge about the potential synergy among traits focusing on the self and traits focusing on others.

Along with contributing to the literature on personality and job performance, our research takes steps toward expanding current understandings of the psychological processes through which other-orientation influences performance. Specifically, we introduce anticipatory social emotions as a new theoretical lens for explaining why other-orientation influences job performance. Whereas existing research has emphasized how other-oriented employees are more accepting of negative feedback (Meglino & Korsgaard, 2004) and more committed to others (Grant, 2008), sparse research has considered the possibility that other-orientation shapes the feelings that employees expect to experience in the future. Our research provides a conceptual and empirical base for explaining why other-oriented employees are more likely to anticipate feeling guilty if they let others down and causing grateful feelings among others if they succeed. These anticipatory social emotions represent a novel mechanism for understanding the effects of other-orientation on job performance.

In concentrating on anticipatory social emotions, our research offers new insights into the dynamics of promotion-focused and prevention-focused states. The important distinctions between these two states have been recognized by researchers specializing in regulatory focus (Brockner & Higgins, 2001), approach and avoidance motivations and temperaments (Elliot & Thrash, 2002), and behavioral activation-reward and behavioral inhibitionpunishment systems (Carver & White, 1994). Researchers have tended to assume that these promotion-focused and preventionfocused states are mutually exclusive: In pursuing their goals, employees are focused on either approaching a positive outcome or avoiding a negative outcome (Brockner & Higgins, 2001; Elliot & Thrash, 2002). Our research challenges this assumption of mutual exclusivity by showing that other-oriented employees are more likely to experience both promotion-focused (gratitude) and prevention-focused (guilt) anticipatory emotions. The findings in Study 3 are especially interesting in this regard. Because duty is often conceptualized as a prevention-focused trait (Brockner & Higgins, 2001), regulatory focus theory predicts that duty would be associated with higher anticipated guilt but not higher anticipated gratitude. Our findings raise the possibility that duty heightens both prevention-focused states that call attention to avoiding negative outcomes and promotion-focused states that call attention to promoting positive outcomes. This is consistent with recent findings that the broader trait of conscientiousness is positively associated with both prevention-focused and promotion-focused states at work (Wallace & Chen, 2006).

Limitations and Future Directions

Our studies are subject to important limitations. First, we focused on anticipated guilt and gratitude as mediating mechanisms, but there are additional processes through which other-orientation may strengthen the relationship between core self-evaluations and

performance. According to the theory of other-orientation (Meglino & Korsgaard, 2004), other-oriented employees are less rationally self-interested in how they acquire beliefs (epistemic rationality) and in how they integrate their beliefs and valences to select a course of action (instrumental rationality). This implies that other-oriented employees may be more willing to accept the belief that they should expend significant effort to help customers or coworkers and to act on this belief. This willingness, in concert with high core self-evaluations, which convey expectancies of goal attainment, may motivate other-oriented employees to achieve high performance. Employees low in other-orientation, on the other hand, may be less willing to expend effort to help others and may be more dependent on self-interested rewards, such as compensation or enjoyment of the work itself.

In addition to highlighting new mechanisms for explaining the moderating effect of other-orientation, this account may shed light on why we found negative relationships between core selfevaluations and performance for employees low in otherorientation in all three of our studies. In all three settings, employees received little performance-based compensation. The absence of personal rewards for effective performance might have curtailed the performance of employees low in other-orientation, who may have placed greater utility on social loafing or other activities that do not contribute directly to performance (e.g., Simon, 1991; see also Baumeister, Campbell, Krueger, & Vohs, 2003). Future research should investigate whether the availability of self-interested rewards reverses the relationship between core self-evaluations and performance from negative to positive for employees low in other-orientation. Moreover, in all three settings, employees held jobs that were relatively high in task significance and worked on behalf of organizations with strong social missions, including serving a university (Study 1), protecting national security and promoting health (Study 2), and making calls to support job creation (Study 3). This raises the possibility that other-orientation will strengthen the relationship between core self-evaluations and performance only in settings in which employees have the opportunity to express and fulfill other-oriented values but not in positions that may lack these qualities, such as telephone sales or independent entrepreneurial positions. Further theoretical and empirical inquiry will also be critical to adjudicating when otherorientation and rational self-interest occupy opposite poles of the same continuum (Meglino & Korsgaard, 2004, 2006) or independent continua (De Dreu, 2006; Grant & Mayer, 2009).

Second, our samples across all three studies were relatively small. The consistent forms of the interactions in different samples with different measures lend a degree of generalizability to our findings, but it will be important for future studies to replicate them with larger and more representative samples. Third, we were surprised to find nonsignificant bivariate associations between core self-evaluations and job performance in all three of our studies. This may be an artifact due to the small sample sizes or distinctive features of our samples, and this issue merits attention in future research. That said, because our focus was on explaining how the association between core self-evaluations and job performance varies as a function of other-orientation, the direction and magnitude of the average relationship across levels of the moderator are not central to our hypotheses or contributions. Fourth, our measure of core self-evaluations did not account for potential differential effects of the different indicator traits of generalized

self-efficacy, self-esteem, locus of control, and neuroticism, which have been detected in past research (e.g., Chen, Gully, & Eden, 2004). This evidence, in conjunction with findings that these four indicator traits do not contribute equally to the latent core self-evaluations factor (Johnson et al., 2008), highlights the importance of conducting future research to investigate whether other-orientation moderates the effects of each indicator trait on performance.

Fifth, our studies relied on cross-sectional observational designs, which are at best ambiguous about causal order. Although we used different operationalizations of other-orientation to triangulate our results and used multisource data to predict objective performance outcomes from survey measures, experimental and true longitudinal studies will be necessary to support the inference that other-orientation actually causes employees to channel high core self-evaluations toward effective performance. Despite the fact that our first and third studies assessed lagged performance that occurred after data collection on our independent and moderating variables, we encourage researchers to investigate the impact of other-orientation on performance over longer windows of time. Sixth, we focused on broad conceptualizations of other-orientation that are relatively agnostic about which "others" are the focus of employees' attention. Our third study tangentially addressed this issue by showing that other-oriented employees experienced greater anticipatory gratitude from both managers and customers. However, we recommend that further studies examine how employees express other-orientation toward different recipients of their efforts and investigate how the focus of other-orientation may moderate its impact on performance.

Seventh, we hope to see future research theoretically and empirically integrate anticipatory emotions and self-determination theory. According to self-determination theory, acting to avoid negative emotions such as guilt reflects an introjected regulatory style that involves relatively controlled rather than autonomous motivation (Gagné & Deci, 2005). Thus, actions based on otheroriented anticipatory emotions may result in less than optimal levels of effort and performance. In addition, research suggests that employees with high core self-evaluations may tend to experience more autonomous motivation, reflected in their tendencies to set self-concordant goals (e.g., Judge, 2009). Combining these perspectives, our research suggests that the interaction of otherorientation and core self-evaluations may reflect synergy between controlled and autonomous motivations (see also Grant, 2008; Grant & Mayer, 2009).

Finally, although triangulation of the moderating effect across three operationalizations of other-orientation is a strength of our studies, the pattern of relationships between other-orientation and core self-evaluations varied across these operationalizations. Specifically, there were positive relationships of core self-evaluations with agreeableness and duty in Studies 2 and 3, but there was not a significant relationship between core self-evaluations and prosocial motivation in Study 1. Future research will be necessary to address this issue in further depth, but from a theoretical perspective, this finding is consistent with principles of compatibility and specificity matching, which suggest that traits operating at the same level of generality will share greater variance than those operating at different levels (e.g., Ajzen, 1991). Because core self-evaluations represent a general, context-free personality trait of having a positive self-concept, this trait should be more likely to

correlate positively with other general traits than with context-specific variables. Whereas agreeableness and duty are general, context-free traits, prosocial motivation is a malleable, domain-specific expression of other-orientation in one's current job (Grant, 2007; Grant et al., 2007). Thus, the lack of shared variance between prosocial motivation and core self-evaluations may be an artifact of the greater context-specificity and malleability of prosocial motivation, compared with the generality and stability of the traits of core self-evaluations, agreeableness, and duty.

Practical Implications and Conclusion

Our research offers important implications for selecting and motivating employees. From a selection standpoint, our findings suggest that selecting employees with high core self-evaluations may not be sufficient to increase the likelihood of employing a high-performing staff. In addition, it may be important to attend to other-orientation when selecting employees, recognizing that those with tendencies toward prosocial motivation, agreeableness, and duty are likely to direct their high core self-evaluations toward effective performance. From a motivation standpoint, managers often focus their energy on building employees' self-efficacy and expectancy beliefs, which helps to ensure that they feel confident and competent to carry out their tasks effectively (e.g., Eden, 2003; Gist & Mitchell, 1992). In conjunction with these efforts, it may be valuable for managers to focus on creating opportunities to express or encourage other-orientation at work, through activities such as perspective taking (Parker & Axtell, 2001) and interactions with the beneficiaries of the work (Grant et al., 2007).

Humorist Erma Bombeck once described guilt as the "gift that keeps on giving" (Skow, 1984). Our research underscores the hidden wisdom in this quip, suggesting that for other-oriented employees, anticipated guilt may serve as a motivational resource to prevent high core self-evaluations from leading to complacency. By worrying about letting others down, they are able to prevent themselves from actually doing so. However, it is not only anticipated guilt that drives other-oriented employees with high core self-evaluations to achieve high performance; anticipated gratitude, too, helps to motivate their performance.

References

Agle, B. R., Mitchell, R. K., & Sonnenfeld, J. A. (1999). Who matters to CEOs? An investigation of stakeholder attributes and salience, corporate

¹ To substantiate the shared variance among the three measures of other-orientation used in this article, we collected data from a sample of 352 students. We conducted a confirmatory factor analysis to examine whether other-orientation could be treated as a higher order factor. The model showed good fit with the data, $\chi^2(40) = 146.13$, comparative fit index = .95, standardized root-mean-square residual = .053, and the loadings of the three measures of other-orientation on the higher order factor were statistically significant and positive (.39 for prosocial motivation, .80 for agreeableness, and .46 for duty). In a separate confirmatory factor analysis removing the higher order factor, the disattenuated correlations between the three latent factors were statistically significant and ranged from .26 to .32. These findings suggest that it is appropriate to conceptualize prosocial motivation, agreeableness, and duty as distinct measures of a higher order other-orientation construct.

- performance, and CEO values. Academy of Management Journal, 42, 507-525.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179–211.
- Ashford, S. J., Blatt, R., & VandeWalle, D. (2003). Reflections on the looking glass: A review of research on feedback-seeking behavior in organizations. *Journal of Management*, 29, 773–799.
- Batson, C. D. (1989). Personal values, moral principles, and a three-path model of prosocial motivation. In N. Eisenberg, J. Reykowski, & E. Staub (Eds.), Social and moral values: Individual and societal perspectives (pp. 213–228). Hillsdale, NJ: Erlbaum.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4, 1–44.
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1993). When ego threats lead to self-regulation failure: Negative consequences of high self-esteem. *Journal of Personality and Social Psychology*, 64, 141–156.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, 115, 243–267.
- Baumeister, R. F., Vohs, K. D., DeWall, C. N., & Zhang, L. (2007). How emotion shapes behavior: Feedback, anticipation, and reflection, rather than direct causation. *Personality and Social Psychology Review*, 11, 167–203.
- Beal, D. J., Cohen, R. R., Burke, M. R., & McLendon, C. L. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relations. *Journal of Applied Psychology*, 88, 989–1004.
- Blumberg, M., & Pringle, C. D. (1982). The missing opportunity in organizational research: Some implications for a theory of work performance. Academy of Management Review, 7, 560–569.
- Bolino, M. C., & Turnley, W. H. (2005). The personal costs of citizenship behavior: The relationship between individual initiative and role overload, job stress, and work–family conflict. *Journal of Applied Psychol*ogy, 90, 740–748.
- Brockner, J., & Higgins, E. T. (2001). Regulatory focus theory: Implications for the study of emotions in the workplace. Organizational Behavior and Human Decision Processes, 86, 35–66.
- Buck, R. (1999). The biological affects: A typology. *Psychological Review*, *106*, 301–336.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait–multimethod matrix. *Psychological Bulletin*, 56, 81–105.
- Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 1, pp. 687–732). Palo Alto, CA: Consulting Psychologists Press.
- Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS Scales. *Journal of Personality and Social Psychology*, 67, 319–333.
- Chen, G., Gully, S. M., & Eden, D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations. *Journal of Organizational Behavior*, 25, 375– 395.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.). Mahwah, NJ: Erlbaum.
- Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. Psychological Review, 108, 593–623.
- De Dreu, C. K. W. (2006). Rational self-interest and other orientation in

- organizational behavior: A critical appraisal and extension of Meglino and Korsgaard (2004). *Journal of Applied Psychology*, 91, 1245–1252.
- De Dreu, C. K. W., & Nauta, A. (2009). Self-interest and other-orientation in organizational behavior: Implications for job performance, prosocial behavior, and personal initiative. *Journal of Applied Psychology*, 94, 913–926.
- De Dreu, C. K. W., Weingart, L. R., & Kwon, S. (2000). Influence of social motives on integrative negotiation: A meta-analytic review and test of two theories. *Journal of Personality and Social Psychology*, 78, 889– 905.
- Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. (2006). The Mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, 18, 192–203.
- Dunning, D., Heath, C., & Suls, J. M. (2004). Flawed self-assessment: Implications for health, education, and the workplace. *Psychological Science in the Public Interest*, 5, 69–106.
- Eden, D. (2003). Self-fulfilling prophecies in organizations. In J. Greenberg (Ed.), Organizational behavior: The state of the science (2nd ed., pp. 91–122). Mahwah, NJ: Erlbaum.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12, 1–22.
- Einstein, D., & Lanning, K. (1998). Shame, guilt, ego development, and the Five-Factor Model of personality. *Journal of Personality*, 66, 555–582.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. *Annual Review of Psychology*, 51, 665–697.
- Elliot, A. J., & Thrash, T. M. (2002). Approach—avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal* of Personality and Social Psychology, 82, 804–818.
- Erez, A., & Judge, T. A. (2001). Relationship of core self-evaluations to goal setting, motivation, and performance. *Journal of Applied Psychol*ogy, 86, 1270–1279.
- Fiske, A. P. (2002). Socio-moral emotions motivate action to sustain relationships. Self and Identity, 1, 169–175.
- Flynn, F. J., & Brockner, J. (2003). It's different to give than to receive: Predictors of givers' and receivers' reactions to favor exchange. *Journal of Applied Psychology*, 88, 1034–1045.
- Frese, M., & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st century. In B. M. Staw & R. I. Sutton (Eds.), *Research in organizational behavior* (Vol. 23, pp. 133–187). Greenwich, CT: JAI Press.
- Frese, M., Fay, D., Hilburger, T., Leng, K., & Tag, A. (1997). The concept of personal initiative: Operationalization, reliability and validity in two German samples. *Journal of Occupational and Organizational Psychol*ogy, 70, 139–161.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331–362.
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. Academy of Management Review, 17, 183–211.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality* psychology in Europe (Vol. 7, pp. 7–28). Tilburg, the Netherlands: Tilburg University Press.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37, 504–528.
- Gramzow, R. H., Sedikides, C., Panter, A. T., Sathy, V., Harris, J. M., & Insko, C. A. (2004). Patterns of self-regulation and the Big Five. *European Journal of Personality*, 18, 367–385.
- Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. Academy of Management Review, 32, 393–417.
- Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire?

- Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, *93*, 48–58.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. In B. M. Staw & A. P. Brief (Eds.), *Research in organizational behavior* (Vol. 28, pp. 3–34). Greenwich, CT: JAI Press.
- Grant, A. M., Campbell, E. M., Chen, G., Cottone, K., Lapedis, D., & Lee, K. (2007). Impact and the art of motivation maintenance: The effects of contact with beneficiaries on persistence behavior. *Organizational Be-havior and Human Decision Processes*, 103, 53–67.
- Grant, A. M., & Gino, F. (in press). A little thanks goes a long way: Explaining why gratitude expressions motivate prosocial behavior. *Journal of Personality and Social Psychology*.
- Grant, A. M., & Mayer, D. M. (2009). Good soldiers and good actors: Prosocial and impression management motives as interactive predictors of affiliative citizenship behaviors. *Journal of Applied Psychology*, 94, 900–912.
- Graziano, W. G., Habashi, M. M., Sheese, B. E., & Tobin, R. M. (2007). Agreeableness, empathy, and helping: A Person × Situation perspective. *Journal of Personality and Social Psychology*, 93, 583–599.
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. Academy of Management Journal, 50, 327–347.
- Hiller, N., & Hambrick, D. C. (2005). Conceptualizing executive hubris: The role of (hyper-)core self-evaluations in strategic decision-making. *Strategic Management Journal*, 26, 297–319.
- Hollenbeck, J. R., & Klein, H. J. (1987). Goal commitment and the goal-setting process: Problems, prospects, and proposals for future research. *Journal of Applied Psychology*, 72, 212–220.
- Ilies, R., Scott, B. A., & Judge, T. A. (2006). The interactive effects of personal traits and experienced states on intraindividual patterns of citizenship behavior. Academy of Management Journal, 49, 561–575.
- Johns, G. (2006). The essential impact of context on organizational behavior. Academy of Management Review, 31, 386–408.
- Johnson, R. E., Rosen, C. C., & Levy, P. E. (2008). Getting to the core of core self-evaluation: A review and recommendations. *Journal of Orga*nizational Behavior, 29, 391–413.
- Judge, T. A. (2009). Core self-evaluations and work success. Current Directions in Psychological Science, 18, 58–62.
- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A metaanalysis. *Journal of Applied Psychology*, 86, 80–92.
- Judge, T. A., & Erez, A. (2007). Interaction and intersection: The constellation of emotional stability and extraversion in predicting performance. Personnel Psychology, 60, 573–596.
- Judge, T. A., Erez, A., & Bono, J. E. (1998). The power of being positive: The relation between positive self-concept and job performance. *Human Performance*, 11, 167–187.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2002). Are measures of self-esteem, neuroticism, locus of control, and generalized selfefficacy indicators of a common core construct? *Journal of Personality* and Social Psychology, 83, 693–710.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). The Core Self-Evaluations Scale: Development of a measure. *Personnel Psychology*, 56, 303–331.
- Judge, T. A., & Hurst, C. (2007). Capitalizing on one's advantages: Role of core self-evaluations. *Journal of Applied Psychology*, 92, 1212–1227.
- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. In B. M. Staw (Ed.), *Research in organizational behavior* (Vol. 19, pp. 151–188). Greenwich, CT: JAI Press.
- King, E. B., George, J. M., & Hebl, M. R. (2005). Linking personality to helping behaviors at work: An interactional perspective. *Journal of Personality*, 73, 585–607.

- 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.
- Lindsey, L. L. M. (2005). Anticipated guilt as behavioral motivation: An examination of appeals to help unknown others through bone marrow donation. *Human Communication Research*, 31, 453–481.
- Lindsley, D. H., Brass, D. J., & Thomas, J. B. (1995). Efficacy-performance spirals: A multilevel perspective. Academy of Management Review, 20, 645–678.
- Lykken, D. (1968). Statistical significance in psychological research. Psychological Bulletin, 70, 151–159.
- MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation analysis. Annual Review of Psychology, 58, 593–614.
- McCloy, R. A., Campbell, J. P., & Cudeck, R. (1994). A confirmatory test of a model of performance determinants. *Journal of Applied Psychology*, 79, 493–505.
- McCullough, M. E., Kilpatrick, S. D., Emmons, R. A., & Larson, D. B. (2001). Is gratitude a moral affect? *Psychological Bulletin*, 127, 249–266.
- McGraw, K. M. (1987). Guilt following transgression: An attribution of responsibility approach. *Journal of Personality and Social Psychology*, 53, 247–256.
- Meglino, B. M., & Korsgaard, M. A. (2004). Considering rational selfinterest as a disposition: Organizational implications of other orientation. *Journal of Applied Psychology*, 89, 946–959.
- Meglino, B. M., & Korsgaard, M. A. (2006). Considering situational and dispositional approaches to rational self-interest: An extension and response to De Dreu (2006). *Journal of Applied Psychology*, 91, 1253– 1259.
- Moon, H. (2001). The two faces of conscientiousness: Duty and achievement striving in escalation of commitment dilemmas. *Journal of Applied Psychology*, 86, 533–540.
- Moon, H., Kamdar, D., Mayer, D. M., & Takeuchi, R. (2008). Me or we? The role of personality and justice as other-centered antecedents to innovative citizenship behaviors within organizations. *Journal of Applied Psychology*, 93, 84–94.
- Morossanova, V. I. (2003). Extraversion and neuroticism: The typical profiles of self-regulation. *European Psychologist*, 8, 279–288.
- Motowidlo, S. J. (2003). Job performance. In I. B. Weiner (Series Ed.) & W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Vol. Eds.), *Handbook of Psychology: Vol. 12. Industrial and organizational psychology* (pp. 39–53). Hoboken, NJ: Wiley.
- Norem, J. K., & Cantor, N. (1986). Defensive pessimism: Harnessing anxiety as motivation. *Journal of Personality and Social Psychology*, 51, 1208–1217.
- O'Keefe, D. J., & Figgé, M. (1999). Guilt and expected guilt in the door-in-the-face technique. Communication Monographs, 66, 312–324.
- Olson, K. R. (2005). Engagement and self-control: Superordinate dimensions of Big Five traits. *Personality and Individual Differences*, 38, 1689–1700.
- Parker, S. K., & Axtell, C. M. (2001). Seeing another viewpoint: Antecedents and outcomes of employee perspective taking. Academy of Management Journal, 44, 1085–1100.
- Penner, L. A., Fritzsche, B. A., Craiger, J. P., & Freifeld, T. S. (1995). Measuring the prosocial personality. In J. N. Butcher & C. D. Spielberger (Eds.), *Advances in personality assessment* (Vol. 10, pp. 147–163). Hillsdale, NJ: Erlbaum.
- Perugini, M., & Bagozzi, R. P. (2001). The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour. *British Journal of Social Psychology*, 40, 79–98.
- 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.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185–227.
- Pyszczynski, T., & Greenberg, J. (1983). Determinants of reduction in intended effort as a strategy for coping with anticipated failure. *Journal* of Research in Personality, 17, 412–422.
- Rhodewalt, F., Morf, C., Hazlett, S., & Fairfield, M. (1991). Self-handicapping: The role of discounting and augmentation in the preservation of self-esteem. *Journal of Personality and Social Psychology*, 61, 122–131.
- Rioux, S. M., & Penner, L. A. (2001). The causes of organizational citizenship behavior: A motivational analysis. *Journal of Applied Psychology*, 86, 1306–1314.
- Ross, S. R., Canada, K. E., & Rausch, M. K. (2002). Self-handicapping and the Five Factor Model of personality: Mediation between neuroticism and conscientiousness. *Personality and Individual Differences*, 32, 1173–1184.
- Sackett, P. R., & Larson, J. R., Jr. (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., Vol. 1, pp. 419–489). Palo Alto, CA: Consulting Psychologists Press
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1–65). San Diego, CA: Academic Press.
- Schwartz, S. H., Sagiv, L., & Boehnke, K. (2000). Worries and values. *Journal of Personality*, 68, 309–346.
- Schweizer, K., & Schneider, R. (1997). Social optimism as generalized expectancy of a positive outcome. *Personality and Individual Differ*ences, 22, 317–325.
- Seligman, M. E. P., & Schulman, P. (1986). Explanatory style as a predictor of productivity and quitting among life insurance sales agents. *Journal of Personality and Social Psychology*, 50, 832–838.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and non-experimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422–445.
- Simon, H. A. (1991). Organizations and markets. *Journal of Economic Perspectives*, 5, 25–44.
- Skow, J. (1984, July 2). Erma in Bomburbia: Erma Bombeck. *Time*, 124(1). Retrieved from http://www.time.com
- Stajkovic, A. D. (2006). Development of a core confidence-higher order construct. *Journal of Applied Psychology*, 91, 1208–1224.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Advances in experimental*

- social psychology (Vol. 21, pp. 261-302). San Diego, CA: Academic Press
- Stine, R. (1989). An introduction to bootstrap methods. Sociological Methods & Research, 18, 243–291.
- Suls, J., & Martin, R. (2005). The daily life of the garden-variety neurotic: Reactivity, stressor exposure, mood spillover, and maladaptive coping. *Journal of Personality*, 73, 1485–1510.
- Swann, W. B., Jr., Pelham, B. W., & Krull, D. S. (1989). Agreeable fancy or disagreeable truth? Reconciling self-enhancement and selfverification. *Journal of Personality and Social Psychology*, 57, 782–791.
- Swann, W. B., Jr., Polzer, J. T., Seyle, D. C., & Ko, S. J. (2004). Finding value in diversity: Verification of personal and social self-views in diverse groups. Academy of Management Review, 29, 9–27.
- Tamir, M. (2005). Don't worry, be happy? Neuroticism, trait-consistent affect regulation, and performance. *Journal of Personality and Social Psychology*, 89, 449–461.
- Tangney, J. P. (1991). Moral affect: The good, the bad, and the ugly. Journal of Personality and Social Psychology, 61, 598–607.
- Tesser, A., Gatewood, R., & Driver, M. (1968). Some determinants of gratitude. *Journal of Personality and Social Psychology*, *9*, 233–236.
- Tice, D. M. (1991). Esteem protection or enhancement? Self-handicapping motives and attributions differ by trait self-esteem. *Journal of Person*ality and Social Psychology, 60, 711–725.
- Vancouver, J. B., Thompson, C. M., Tischner, E. C., & Putka, D. J. (2002).
 Two studies examining the negative effect of self-efficacy on performance. *Journal of Applied Psychology*, 87, 506–516.
- Verbeke, W., & Bagozzi, R. P. (2002). A situational analysis on how salespeople experience and cope with shame and embarrassment. *Psychology & Marketing*, 19, 713–741.
- Vroom, V. H. (1964). Work and motivation. New York, NY: Wiley.
- Walker, C. R., & Guest, R. H. (1952). The man on the assembly line. Cambridge, MA: Harvard University Press.
- Wallace, J. C., & Chen, G. (2006). A multilevel integration of personality, climate, self-regulation, and performance. *Personnel Psychology*, 59, 529–557.
- Wanberg, C. R., Glomb, T. M., Song, Z., & Sorenson, S. (2005). Jobsearch persistence during unemployment: A 10-wave longitudinal study. Journal of Applied Psychology, 90, 411–430.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548–573.
- Wrzesniewski, A., Dutton, J. E., & Debebe, G. (2003). Interpersonal sensemaking and the meaning of work. In B. M. Staw & R. M. Kramer (Eds.), Research in organizational behavior (Vol. 25, pp. 93–135). New York, NY: Elsevier.

Received March 10, 2009
Revision received August 17, 2009
Accepted August 19, 2009