A DYADIC PERSPECTIVE ON HELPING OCB: THE EFFECTS OF MOTIVES AND AFFECT

By

You Jin Kim

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Business Administration - Organizational Behavior - Human Resource Management -
Doctor of Philosophy

2013

# ABSTRACT

A DYADIC PERSPECTIVE ON HELPING OCB: THE EFFECTS OF MOTIVES AND AFFECT

By

You Jin Kim

According to Bandura's social cognitive theory (1986), human action occurs in a system of reciprocal causation of interactions involving behavior, cognitions, and the environment. Reciprocal causation places particular emphasis on dyadic exchanges between individuals (Bandura, 1986). Despite the importance of dyadic interactions between helpers and helping recipients, a significant amount of research has considered either helpers or helping recipients (Spitzmuller et al., 2008). To date, not enough attention has been given to a dyadic perspective on helping organizational citizenship behavior (OCB) involving both helpers and recipients. Thus, to close this gap, the purpose of this dissertation is to draw on social cognitive theory (Bandura, 1986) and develop a model explicating a dyadic perspective on helping OCB. Specifically, I am interested in how helpers' helping motives lead to subsequent helping via two processes: the helper's affective state of pride and the recipients' affective state of gratitude. In addition, I investigate how helper pride and recipients gratitude predict subsequent helping by the helper. I utilize an experimental design to test my predictions using a dictator game that provides an objective measure of helping OCB. Taking a dyadic perspective on helping OCB provides a more complete picture of helping OCB by shedding light on the actions and reactions of both players: the helper and the recipient. In sum, a dyadic perspective on helping is noteworthy because it provides a platform for investigating unexplored and critical aspects of helping OCB processes.

# ACKNOWLEDGEMENTS

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

## INTRODUCTION

Organ's (1988) original conceptualization of helping organizational citizenship behavior (OCB) articulated that helping OCB was positively intended and in aggregate would have positive outcomes for organizations. Research on antecedents of helping OCB has primarily focused on helpers' dispositions and attitudes (Spitzmuller, Van Dyne, & Ilies, 2008). Helpers' agreeableness, conscientiousness, and job satisfaction are predictors of helping OCB (Eatough, Chang, Miloslavic, & Johnson, 2011; Kamdar & Van Dyne, 2007; Podsakoff , MacKenzie, Paine, & Bachrach, 2000). In contrast, research on consequences of helping OCB has shifted attention to helping recipients including potential benefits for individual helping recipients, groups, organizations, and society in general (e.g., Penner, Dovidio, Piliavin, & Schroeder, 2005; Podsakoff, Ahearne, & MacKenzie, 1997). Helping OCB contributes to health and well-being of helping recipients (De Johnge et al., 2001; Medelson, Cantano & Kelloway, 2000) and organizational performance (Podsakoff & MacKenzie, 1994).

Although a significant amount of research has considered either helpers or helping recipients (Spitzmuller et al., 2008), not enough attention has been given to dyadic perspectives on helping OCB involving both helpers and helping recipients. Supporting this notion, Ferrin and colleagues (2008) pointed out that the helping literature has neglected a dyadic perspective on helping OCB that focuses on interactions between helpers and helping recipients and examines the unfolding of helping over time (Hershcovis & Barling, 2010; Venkataramani & Dalal, 2007).

Going beyond the calls for such studies, a dyadic perspective on helping OCB is theoretically important. According to Bandura's social cognitive theory (SCT; 1986), human action occurs in a system of reciprocal causation, which includes interactive operations among behavior, cognitions, and environment. Reciprocal causation emphasizes dyadic exchanges

between individuals (Bandura, 1986). For example, Bandura (1986, p.29) noted, "One person's behavior activates particular responses from the partner which, in turn, prompt reciprocal actions that mutually shape the social milieu in a predictable direction". Similarly, emphasizing a dyadic perspective on human behavior, Blau's social exchange theory (1964) highlighted the importance of how individuals influence one another. Social exchange theory articulates that individuals' interactions are typically regarded as interdependent and dependent on the actions of another person (Blau, 1964). A dyadic perspective on human behavior offers insights for better understanding helping OCB behavior and related processes. Taking a dyadic perspective on helping OCB should provide a more complete understanding of helping by shedding light on actions of both players: the helper and the helping recipient. In sum, a dyadic perspective on helping OCB is noteworthy because it provides a platform for investigating unexplored and critical aspects of helping processes.

The general dearth of attention to the dyadic perspective on helping is surprising because helping OCB has been defined as a dynamic and dyad-driven process (Muller & Kamdar, 2011; Venkataramani & Dalal, 2007). However, there is one exception that examines dyadic aspects of helping. Weinstein and Ryan (2010) investigated the effects of autonomous helping OCB for both helpers and helping recipients. They showed that autonomous motivation for helping OCB triggered benefits for both helper and recipient's well-being through greater need satisfaction. However, Weinstein and Ryan (2010) did not fully adopt a dyadic perspective on helping OCB because they did not examine how helpers can be influenced by helping recipients. Instead, they examined how helping recipients' well-being can be influenced by helpers' helping OCB. In sum, recent work by Weinstein and Ryan (2010) touches upon the dyadic perspective on helping OCB, but their approach is incomplete. In the realm of dyadic helping OCB, effects are

2

sequential, traveling not only from helper to helping recipients but also from helping recipients to helpers (Muller & Kamdar, 2011).

My dissertation contributes to the helping literature by providing a more complete model of dyadic helping OCB process in four ways. First, helping OCB has been conceptualized as an episodic behavior. Helping OCB is not merely a one-time event; rather it is a dynamic event with ongoing processes comprising multiple interactions between helpers and helping recipients (Illies, Scott, & Judge, 2006). Although Illies and colleagues (2006) investigated the within person dynamic process through which personal traits and affective and attitudinal states influence OCB over time, they are silent on the processes through which the helpers' helping OCB leads to subsequent helping for both helpers and recipients. This is an important gap because social cognitive theory (Bandura, 1986) argues that human behavior occurs as ongoing dyadic interactions. In accordance with this dynamic conceptualization of helping OCB processes, social cognitive theory offers a theoretical foundation that can guide research on the dyadic processes of helping OCB behavior over time. To address this gap, my dissertation aims to examine ongoing helping OCB processes between helpers and helping recipients; how previous helping OCB triggers subsequent helping OCB through helpers' and recipients' affective states.

Second, I take an affective perspective on helping OCB by considering the effects of helper and recipient affective states in guiding dyadic interactions over time. Bandura (2001, p.8) noted, "Actions give rise to self-reactive influence through performance comparison with personal goals and standards…They do things that give them self-satisfaction and a sense of pride and self-worth, and refrain from behaving in ways that give rise to self-dissatisfaction, self-devaluation, and self-censure." Also, Bandura (2008) argues that one person's behavior activates

3

affective responses from the partner. Despite the traditional emphasis of SCT on individuals as cognitive agents, a close examination of SCT indicates that affective states can be caused by previous social interactions as well as can generate future interactions. In fact, two parties' affective states are easily induced by social behaviors and provide rapid judgments about future behavior (Clore, 1992; Forgas, 1995; Lerner & Keltner, 2001; Schwarz, 1990).

Although Bandura and other scholars suggest that affective states pervade socially mediated human behaviors involving two parties, sparse research has theoretically or empirically focused on both parties' affective states embedded in dyadic interactions at the same time. Consistent with this notion, Lawler and Thye (1999) lamented the dearth research that brings affect into social exchanges between two parties. Given that helping is affect-driven (George, 1991; Lee & Allen, 2002; Jones & Schaubroeck, 2004), empirical evidence for helpers' affective states as predictors of helping OCB abounds (Dalal, Lam, Weiss, Welch, & Hulin, 2009; Isen, Clark, & Schwartz, 1976; Isen & Levin, 1972). The evidence from these studies demonstrates that helpers' affective states encourage or discourage helping OCB. But, these studies do not speak to the effects of recipients' affective states on helping OCB. That is, considering helpers' affect as a predictor of helping OCB does not suffice as a model of dyadic helping OCB processes because that would neglect the vital role of recipients' affective states. This is unfortunate because social exchange theory proponents (Lawler & Yoon, 1998; Lovaglia, 1995) specifically theorize that *both* individuals involved in socially mediated interactions are affective actors as well as cognitive actors. To close this gap, my dissertation seeks to investigate the effects of helpers' motives on helpers' pride and recipients' gratitude and the role of helpers' pride and recipients' gratitude as predictors of subsequent helping OCB.

Third, I also consider the underrepresented issue of the interactions of helper and recipient affective states in predicting subsequent helping OCB behavior. Given that my model focuses on dyadic interactions between two parties, it is important to investigate how the interactions between both parties' affective states influence dyadic helping OCB processes as well as how both parties' affective states independently influence dyadic helping OCB processes. Bandura (2001)'s social cognitive theory described the importance of both helpers' and helping recipients because behavior OCB is influenced by reactions from others as well as the actors' own agency. Bandura (2008) argued that one person's behavior activates responses from the partner which, in turn, influence the actors' subsequent behavior. Furthermore, Lawler's (2001) affective theory of social exchange suggests that emotional dynamics between two parities play a central role in socially mediated behavior. For example, Frith and Frith (2012) noted that agents tend to keep track of the partners they are interacting with and they note the partner's emotions and beliefs. Given that the conceptualization of helping OCB has long emphasized that helping OCB as directed toward or intended to benefit recipients (Van Dyne, Cummings, & McLean Parks, 1995), it seems reasonable that helpers will monitor recipients' reactions to ascertain the impact of their helping OCB behavior on helping recipients. Considering SCT's emphasis on both helpers' and recipients and social exchange theory's emphasis on the emotional interplay of both parties motivates me to investigate helpers' own responses to their initial helping OCB (pride) in conjunction with the recipients' response (gratitude) as predictors of subsequent helping OCB.

Fourth, social cognitive theory (Bandura, 1997) posits that dyadic exchanges start with actors' motives to serve certain purposes. Social cognitive theory (Bandura, 1977, 1997) notes that people have motives that trigger actions. Furthermore, social cognitive theory emphasizes

the effects of motives on the consequences of actor's actions. Motives that trigger actions are key aspects of personal agency because actors initiate their own behavior to satisfy their underlying motives (Bandura, 2001; Davidson, 1971). Importantly, motives that induce behavior significantly influence emotional reactions and succeeding behavior (Bandura, 1986). Specifically, Bandura (2001, p.6) noted that " it is, therefore, meaningful to speak of intentions grounded in self-motivators affecting the likelihood of actions at a future point in time. Planning agency can be used to produce different outcomes (i.e., affective reactions, future behavior, & cognitive mechanisms, etc.)." Applying this logic to dyadic helping OCB processes suggests that helpers' motives should influence affective reactions to helping OCB and subsequent helping OCB behavior.

In spite of the importance of actors' motives in dyadic helping interactions, previous research on helping motives has focused on lists of motives for helping OCB in the absence of a theoretical framework that highlights similarities and differences in motives. Highlighting this gap, Weinstein and Ryan (2010) called for studies that clarify the role of helping motives based on more specific theoretical arguments. To date, no systematic investigation has focused on actor's motives for helping OCB. This is unfortunate because theoretically-driven investigations of helping motives are necessary to better understand helpers and helping recipients' reactions to helping OCB that is based on contrasting motives (Weinstein & Ryan, 2010). Thus, drawing on self-determination theory (SDT; Deci & Ryan, 2000) and dual concern theory (Pruitt & Rubin, 1986), I identify two motives—autonomous motives and other-oriented motives—that have special relevance to helping OCB and develop hypotheses for how these motives induce helping OCB and affective states of helpers and helping recipients, as well as the subsequent helping OCB of both individuals.

In sum, the purpose of this dissertation is to draw on SCT (Bandura, 1977, 1997) and develop a model explicating a dyadic perspective on helping OCB that emphasizes both helpers and recipients in helping OCB processes. This dissertation, grounded on SCT and a dyadic perspective on helping OCB, aims to go beyond previous helping research in four ways: (a) investigating ongoing helping OCB processes between helpers and helping recipients; (b) investigating the role of helpers' pride and recipients' gratitude following previous helping OCB in predicting subsequent helping OCB; (c) investigating the interactive effect of helpers' pride and recipients' gratitude in predicting subsequent helping OCB; and (d) conducting a theoretically driven investigation of the effects of helpers' autonomous and other-oriented motives in dyadic helping OCB processes. Figure 1 illustrates my overall model.

**Figure 1.**

**The Overall Model[a]**
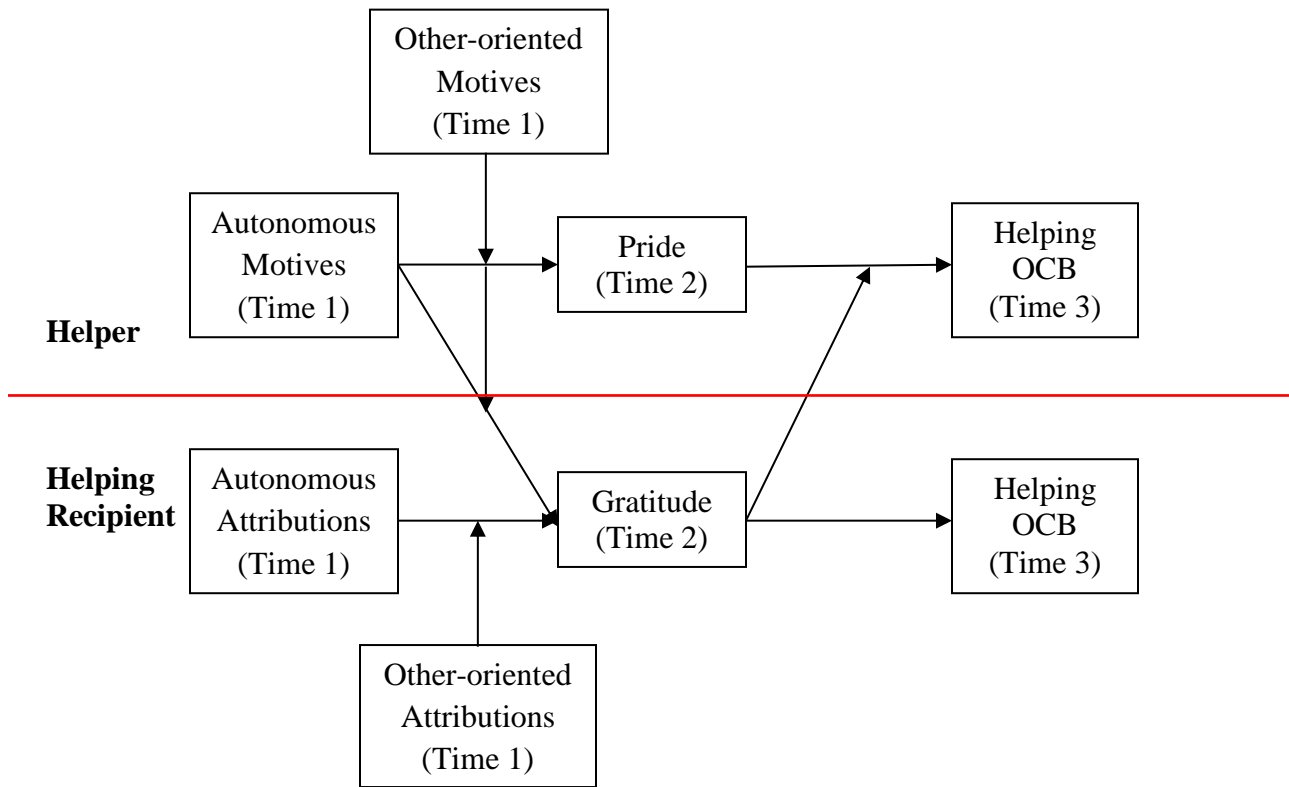


[a]Note: For interpretation of the references to color in this and all other figures, the reader is referred to the electronic version of this dissertation.

# HYPOTHESES DEVELOPMENT

**Helping Motives**

According to social cognitive theory, humans act intentionally (Bandura, 2001). In other words, actions aim to serve specific motives and influence the likelihood of actions in the future. Motives are not simply expectations or predictions of future actions but represent proactive commitment to bringing about future actions.

Individuals' motives can be classified into two basic forms- state motives and trait motives (Grant, 2008; Rioux & Penner, 2001). State motives are conceptualized as changing and momentary because they are contingent on external factors (Rioux & Penner, 2001). State motives are influenced by interpersonal relationship with significant others and daily events. For example, state other-oriented motivation could involve a momentary focus on the goal of promoting the welfare of other people, which is generally facilitated by interpersonal relationships and situational factors (Batson, 1987; Grant, 2007). Thus, state motives should be particularly relevant to the dynamics of human behavior over time.

In comparison, trait motives refer to motives that are stable across a representative sample of life situations. Trait motives are a function of inherent predispositions or temperaments, thus almost immutable (Rioux & Penner, 2001). Trait motives vary across people, and so individuals differ in their predispositions to help others (Clary et al., 1998). For example, trait other-oriented motivation is reflected by dispositional empathy (Penner et al., 2005) and concern for others (De Dreu, 2006; Meglino & Korsgaard, 2004; Schwartz, 1992). Given that state motives have special relevance to ongoing process of human behavior over time, I focus on state-like motives in my dynamic helping OCB model.

To date, previous research has demonstrated that people perform helping OCB for a variety of different motives. For example, the *functional approach* (Clary & Snyder, 1991) states that individuals engage in helping to the extent that they have motives that trigger these behaviors (such as expression of prosocial values, developing understanding, social responsibility, and career enhancement). Other research articulates other helping motives including exchange orientation (characterized by helping with the intention of deriving personal benefits) and communal orientation (characterized by concern about the well-being of others) (Clark & Mills, 1993; Schwartz, 1973; Wilson & Musick, 1997). Additionally, recent work by Weinstein and Ryan (2010) suggested that helping can be initiated by autonomous motives. Autonomous helping occurs when the helper has a sense of personal choice or volition in helping (Deci & Ryan, 2000).

Given the diversity of helping motives, it is important to adopt a conceptually-driven framework for considering helping motives to advance our understanding of why people engage in helping OCB. Among numerous motives, autonomous motives and other-oriented motives have special relevance to helping OCB (Deci & Ryan, 2000; Pruitt & Rubin, 1986), because helping OCB has traditionally been conceptualized as discretionary and interpersonal (Organ, 1988; Van Dyne et al., 1995). Supporting the importance of autonomous motives and other concern motives, Weistein and Ryan (2010) called for studies that investigate the effects of autonomous and other-oriented motives on the helper's subjective experience and helping OCB.

Self-determination theory (SDT) argues that behaviors vary with respect to how autonomous or self-motivated and volitional they are (Ryan & Deci, 2000). Specifically, human actions can be viewed along a continuum ranging from autonomous actions which are high in internal locus of control to controlled actions which are high in external locus of control (Ryan &

Connell, 1989). Autonomous motivation is defined as volitional. It emanates from the self and is consistent with personal values and interests (DeCharms, 1968; Ryan & Connell, 1989). Autonomy is high when a helper feels a sense of personal choice or volition in helping OCB. For example, some people feel empathy for those in need. Thus, they are voluntarily motivated to help others because helping OCB provides an opportunity to express their values and empathy for others (Grant & Mayer, 2009). Supporting this notion, O'Reilly and Chatman (1986) demonstrated that high autonomy was positively related to helping OCB.

By contrast, autonomy is low when helping OCB is initiated by self-imposed pressures or external contingencies and controls (Deci & Ryan, 2000; Ryan & Connell, 1989). In some situations, individuals help to meet expectations from others and fulfill social norms in organizations. For example, Piliavin, Evans, and Callero's (1984) research provides evidence of helping that is low on autonomy because some individuals donate blood due to external pressure.

Dual concern theory has classified human motives into two broad categories reflecting two ends on a continuum of other-orientation (De Dreu & Nauta, 2009; Meglino & Korsgaard, 2004). Human behaviors vary on the extent to which they focus on concerns for the welfare of others. High other-oriented helping motives occur when helping emanates from compassion or willingness to address others' needs and desires. For example, individuals with strong other-oriented motives engage in helping OCB for the benefit of other people and organizations even when these behaviors are personally costly (Bolino & Turnley, 2005; Meglino & Korsgaard, 2004; Moon, Kamdar, Mayer, & Takeuchi, 2008). Indeed, across a number of studies, research has demonstrated that helping OCB is predicted by high other-oriented motives (Rioux & Penner, 2001) and related values such as concern for others and empathy (Joireman, Kamdar,

Daniels, & Duell, 2006; Kamdar, McAllister, & Turban, 2006; McNeely & Meglino, 1994; Settoon & Mossholder, 2002).

Low other-oriented motives aim at optimal or maximum results based on personal values and risk preferences (e.g., Bazerman, 1993; De Dreu, 2006; Meglino & Korsgaard, 2004; Shafir & LeBoeuf, 2002). Low other-oriented helping motives occur when helping OCB is propelled by a desire to advance one's career, reduce ego conflicts, or learn a new skill. In some situations, individuals help others in order to create a favorable image in the eyes of others (Salamon & Deutsch, 2006). For example, studies have demonstrated that helping OCB can be predicted by impression management motives aimed at enhancing individuals' favorable image (Grant & Mayer, 2009; Finkelstein, 2006; Yun, Takeuchi, & Liu, 2007).

To date, research has demonstrated the importance of autonomous and other-oriented motives in helping OCB. Weinstein and Ryan (2010) demonstrated that autonomous motivation for helping yields benefits for both helper and recipient through greater need satisfaction on the basis of self-determination theory (Deci & Ryan, 2010). Similarly, De Dreu and Nauta (2009) demonstrated that other orientation in conjunction with justice climate predicted prosocial behavior on the basis of dual concern theory (Pruitt & Rubin, 1986). Grant, Parker and Collins (2009) demonstrated that proactive behaviors generated benefits to helpers in terms of higher supervisor performance evaluations only when individuals were high on other-concern. Despite the importance of these two motives in predicting helping behavior, researchers have not yet considered the joint effects of the two motives on helping OCB. Closing this gap, this dissertation incorporates autonomous and other-oriented motives for helping OCB based on an integration of the theoretical underpinnings of SDT and dual concern theory.

Although it is plausible that high other-oriented motives might be more autonomous than low other-oriented motives, I argue that these two motives are not isomorphic because autonomous motives are not necessarily high in other-orientation. For example, helping others to gain particular skills could be high in autonomy, but low in other-orientation. Thus, I argue that autonomous motives and other-orientation motives offer two different explanations for what motivates helping OCB. Given the importance of autonomous and other-oriented helping motives, considering the joint effects of these two motives provides a systematic approach for considering how motives influence dyadic helping OCB processes.

**The Effects of Helping Motives on Helpers' Pride**

Helping OCB has been typically defined as behavior which is discretionary and expressly directed toward benefiting others (Organ, 1988; Bolino, Turnley, & Niehoff, 2004; Van Dyne et al., 1995). Thus, helping OCB is generally depicted in a positive manner (Chang, Johnson, & Yang, 2007). This implies that helping OCB can be viewed as based on autonomous and other-oriented motives. As a result, two assumptions have generally guided research on helping OCB: (1) helping OCB stems from autonomous motives and (2) helping OCB stems from other-oriented motives (Bolino et al., 2004).

In contrast, self-determination theory (SDT; Deci & Ryan, 2000) proposes that behavior varies in the degree to which it is autonomous, with different functional outcomes based on degree of autonomy. At one extreme, some scholars have advocated the use of external controls to prompt prosocial actions. For example, non-autonomous helping has been promoted in many schools and universities (Kuh, Krehbiel & MacKay, 1988; Sobus, 1995). Some policy makers have advocated that helping is a prerequisite for loan forgiveness (Newman, Milton, & Stroud, 1985; Robb & Swearer, 1985). However, Finkelstein, Penner, and Brannick (2005) demonstrated

that extrinsic motives for helping were negatively associated with helpers' satisfaction. At the

other extreme, recent findings (Weinstein & Ryan, 2010) showed that autonomous helping OCB

yielded benefits for both helper and recipient through greater need satisfaction. The central

conjecture of Weinstein and Ryan is that more autonomous helping results in more positive

outcomes for both helpers and help recipients.

With respect to the second assumption, dual concern theory describes human behavior as

driven by the degree of concern about others' needs and well-being. Applying this logic to

helping OCB, scholars have demonstrated that helping can be triggered by the extent to which

helpers are other-oriented. Research shows that helping is viewed more favorably by when it is

high in other-orientation, rather than low in other-orientation (Allen & Rush, 1998; Eastman,

1994; Johnson, Erez, Kiker, & Motowidlo, 2002). For example, other-oriented helpers are

viewed as more helpful and likable (Peterson & Gelfand, 1984). To date, empirical investigations

of other-oriented helping suggest that it is associated with better life adjustment (Crandall &

Lehman, 1977), perceived meaningfulness of life (Crandall, 1984), and less hopelessness and

depression (Miller, Denton, & Tobacyk, 1986). Other-oriented helping OCB may have

psychological benefits because it allows people to disengage from previous patterns of self-

reference and it facilitates openness to changing internal standards and values (Schwartz,

Meisenhelder, Yusheng, & Reed, 2003; Schwartz & Sendor, 1999). In addition, when helping

OCB is perceived as other-oriented, it increases the well-being of recipients (Fisher & Nadler,

1976). This line of research suggests that other-oriented helping OCB is socially desirable

(Cialdini et al., 1987) because it triggers positive outcomes for both helpers and help recipients.

Given the abundant evidence of the benefits of autonomous and other-oriented helping

OCB, I expect that autonomous and other-oriented helping OCB will predict helper pride. This is

consistent with SCT because volitional acts that aim to benefit others lead to a sense of self-satisfaction and pride when these actions fulfill social or personal standards (Bandura, 2001).

Although helpers may experience any number of emotions following their helping OCB (e.g., happiness, sadness), I focus specifically on pride for two reasons. First, pride is a self-focused positive emotion, which occurs when actors evaluate their own behavior positively (Weistein, DeHaan, & Ryan, 2010). This fits with my focus on helpers' affective reasons towards their own helping OCB. Second, pride includes inherent action tendencies that influence repeated acts of the same behavior in the future (Levenson, 2003; Scott, Colquitt, & Paddock, 2009). Therefore, considering the effects of pride on future helping OCB is consistent with my focus on ongoing helping OCB processes over time (Lewis, 2000). Congruent with this focus, Weistein, DeHaan, and Ryan (2010) emphasized the role of pride that occurs when helping someone in need and the effects of pride on future helping.

Thus far, I have referred to pride in general. Tracey and Robin (2007b), however, differentiated two types of pride- *authentic pride*, which focuses on what a person has done, and *hubristic pride*, which focuses on a person's self-concept. Authentic pride is based on positive behaviors and hubristic pride is based on positive views of the self (Tracey & Robin, 2004). For example, people feel authentic pride when they help others, but they experience hubristic pride when they view themselves positively as a helper.

Empirical researcher supports the existence of these the two types of pride. For example, Tracy and Robins (2007b) demonstrated that people consistently generate two different categories of concepts, which empirically form two separate clusters of semantic meaning when asked to think about and list words relevant to pride. The first cluster (authentic pride) includes words such as "accomplished" and "confident," and fits a pro-social, achievement-oriented

conceptualization. The second cluster (hubristic pride) includes words such as "arrogant" and "conceited," and fits a more self-aggrandizing and narcissistic conceptualization (Lewis, 2000). In addition, participants' ratings consistently form two relatively independent factors, which closely parallel these two semantic clusters when asked to rate their subjective feelings when experiencing pride. Finally, participants' ratings of their general dispositional tendency to feel pride-related emotional states (i.e., trait pride), again represent the same two factors (Tracey, Shariff, & Cheng, 2010).

Scholars articulate different appraisal processes that induce authentic and hubristic pride (Hart & Matsuba, 2007; Tracey & Robin, 2007a). Authentic pride derives from self-appraisals associated with specific actions or accomplishments that include changeable or unstable causes (*I am proud of winning because I practiced*). However, hubristic pride derives from self-appraisals associated with the global self that include stable, unchangeable, and desirable traits (*I am proud of being a winner because I am always great*). Given that I include state-like changeable autonomous and other-oriented motives in my model, I predict that helping motives are more likely to influence authentic pride than hubristic pride. Thus, I focus on helping motives as predictors of authentic pride, rather than hubristic pride.

According to Lewis (2000), individuals appraise specific actions against the standards of society or their own personal goals. Authentic pride occurs when actions exceed standards or goals. As noted earlier, conceptualizations of helping OCB reflect two prevailing positive standards: volitional and discretionary behavior that aims to benefit others (Bolino et al., 2004; Organ, 1988). Thus, authentic pride should be high when motives for helping meet both these standards. First, I describe the role of autonomy and then I describe the role of other-orientation.

16

More specifically, people experience authentic pride when they take credit for a useful event (Lewis, 2000). In other words, authentic pride derives from a composite of autonomous and useful actions. As noted above, proponents of SDT have emphasized autonomous motives as one of basic human motives that guide human actions. Like all intentional actions, helping OCB can vary with respect to level of autonomy. Autonomously motivated helpers engage in helping OCB because it is inherently enjoyable or it reflects a personal value (Ryan & Deci, 2000). Given that autonomous helping OCB stems from personal values and initiatives, autonomously motivated helpers feel that they own the helping (DeCharms, 1968; Deci & Ryan, 1985). This sense of ownership makes them experience more psychological benefits by engaging in helping OCB (Weinstein & Ryan, 2010).

Consistent with SDT, helping OCB that is freely done provides opportunities to experience pride by fulfilling the autonomy condition of feeling authentic pride (Deci & Ryan, 2000). When individuals are autonomously motivated, they experience a desire to help others and pursue their interests in helping others. Autonomous motives are likely to channel individuals' attention to opportunities to engage in helping OCB voluntarily. Thus, autonomous motivation promotes individuals' engagement in helping OCB originated from their volition, which makes them take credit for this helping OCB event, but is not necessarily associated with the meaningfulness or usefulness of the helping OCB event.

According to dual concern theory (Pruitt & Rubin, 1986; De Dreu, 2006), people's behaviors can be driven by other-oriented motives. In support of this notion, research has shown that helping OCB can be driven by other-oriented motives with a focus on the needs and well-being of others. Other-oriented helping motives include empathic concern for these in need or a sense of responsibility to improve well-being of others by helping them. For example, other-

17

oriented helpers are more attentive to recipient needs (Clark, Ouellette, Powell, & Milberg, 1987).

Thus, other-orientation causes autonomously motivated individuals to help in ways that are simultaneously valued by others and also useful to others. When individuals are other-oriented, they are wired to have a positive impact on other people's lives (Caprara & Steca, 2005; De Dreu, 2006; Grant, 2007). In the context of helping OCB, other-oriented individuals will be driven to helping OCB that is meaningful or useful to others. Therefore, other-oriented motives may enable individuals to drive their autonomous helping motives toward helping OCB that is meaningful to others as well as volitional.

Combining these arguments based on self-determination theory and dual concern theory, I propose an interaction where the relationship between autonomous motives and authentic pride is positive and stronger when other-oriented motives are high (See Figure 2). In other words, the higher the other-oriented helping motives, the stronger the positive association between autonomous motives and authentic pride.

*Hypothesis 1:* Helper other-oriented helping motives will interact with autonomous helping motives in predicting authentic pride, such that the relationship will be stronger when helper other-oriented helping motives are high.

**Figure 2.**

**The Effects of Helpers' Helping Motives on Helpers' Authentic Pride[a]**
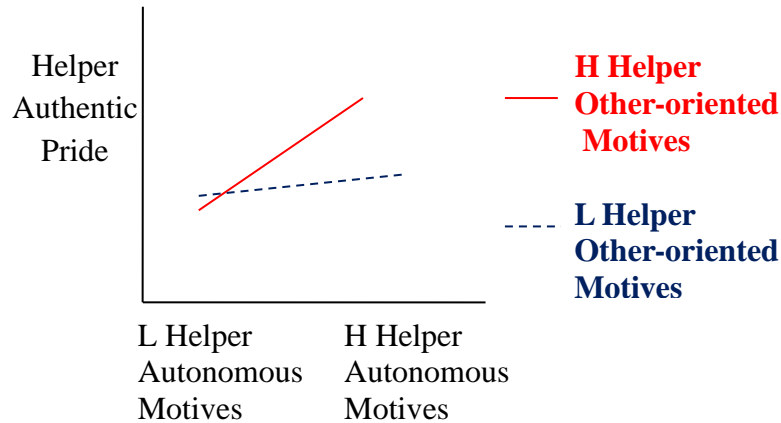


[a]Note: L indicates low and H indicates high.

## The Effects of Helping Motives on Recipients' Gratitude

SCT (Bandura, 1986) suggests that within reciprocal relationships between two parties, one party's behavior triggers successive responses by the other party. Applying this notion to helping situations, I expect that helpers' helping OCB should induce responses by helping recipients.

Even though helping recipients might experience various reactions to helping OCB, I am interested in feelings of gratitude in response to helping OCB because gratitude is influenced by the personal meaning that people attach to the experience of giving-receiving (Lazarus & Lazarus 1994). Gratitude is a positive emotion, but it is distinct from a general sense of positive affect in two ways. First, gratitude stems from other people's behavior towards us; it is not based on our own behavior. Gratitude is derived from others' behavior in interpersonal relationships (McCullough, Kimeldorf, & Cohen, 2008). For example, the emotions of gratitude and happiness are positive in valence, but they differ with respect to the appraisal of control. Gratitude is

19

characterized by high other-person control but happiness by weak control appraisals. That is, when assessing positive interactions, people typically feel grateful if they perceive another person's behavior as responsible for inducing positive interactions. However, happiness might be caused by oneself, another person, or the situation (Dunn & Schweitzer, 2005). Second, gratitude has important implications for dyadic helping OCB because it reinforces helping OCB for helpers and motivates future helping OCB for recipients (McCullough et al., 2008). Given that people consider others' reactions to their behavior when considering future behavior, helpers' subsequent helping OCB should be influenced by recipients' gratitude (O'Leary-Kelly, Paetzold, & Griffin, 2000). Recipients' gratitude encourages helpers to help more in the future. Also, recipients feeling gratitude should feel the need to reciprocate by helping their original helpers (McCullough, Emmons, & Tsang, 2002).

Although helping has typically been depicted positively (Bolino et al., 2004; Organ, Podsakoff, & MacKenzie, 2006), recipients do not always appreciate helping. For example, recipients may see helping as a threat to their self-esteem (Fisher, 1983; Frese & Fay, 2001), an ingratiation attempt (Bolino, 1999), or an ill-timed distraction (Chan, 2006). Thus, rather than assuming that helping OCB is always appreciated by recipients, it is important to examine the conditions under which recipients experience higher gratitude to helpers. I propose that helpers' motives will play an important role in shaping recipients' reactions to helping OCB. Accordingly, considering helper motives should enrich our understanding of recipients' reactions to helping OCB.

A key assumption of my perspective is that helping recipients are aware of helpers' motives. Consistent with this, research shows that individuals assess the motives of others with reasonable accuracy (Maierhofer, Griffin, & Sheehan, 2000). Motives are discernible through

20

verbal statements and behavior patterns. Helping recipients have access to at least two sources of information about helpers' motives. First, recipients can observe helpers' patterns of behavior, which increases helping recipients' accuracy of inferring motives for helping OCB (Kenrick & Funder, 1988). Second, helpers' motives should influence the manner in which they display the behavior and recipients can observe and use these cues to make inferences about helper motives. Applying this notion to my model, I now develop specific hypotheses about how helpers' motives influence helping recipients' gratitude.

I expect that helpers' autonomy will be positively related to recipients' gratitude. This is because those who have a sense of autonomy while helping OCB experience a sense of personal volition and have personally meaningful reasons for engaging in helping OCB. Thus, they should be enthusiastic in their helping OCB and personally engaged (Weinstein & Ryan, 2010). As a result, recipients should respond favorably when helping OCB is autonomously motivated. Consistent with this reasoning, recent research demonstrated that recipients of autonomous helping felt closer to the helper and had more positive affect than did recipients of controlled helping (Weinstein & Ryan, 2010).

I also expect that helpers' high other-orientation will be positively related to recipients' gratitude. Helpers with high other-orientation have a desire to serve others' needs and should show genuine care about recipients. Lazarus and Lazarus (1994) described gratitude as one of the "empathic emotions" that are grounded in the human capacity of concern about others' needs. Helpers with high other-orientation are sensitive towards recipients and empathize with them (McCullough et al., 2002). The helpers' desire to understand and reduce the distress of recipients in need should facilitate recipients' gratitude (Betancourt, 1990). For example, Peterson and Gelfand (1984) demonstrated that helpers are viewed as more helpful and likable when they aim

to increase the other's welfare. Thus, other-oriented helping OCB should be positively related to helping recipients' feelings of gratitude towards helpers.

Gratitude is the positive emotion individuals experience when another person has voluntarily given them something of value (McCullough, Kilpatrick, Emmons, & Larson, 2001; McCullough & Tsang, 2004). In other words, recipients should feel high levels of gratitude when helping given to them is volitional *and* useful. Autonomously motivated individuals help voluntarily and are personally engaged in helping OCB, so recipients should experience gratitude (Weinstein & Ryan, 2010). However, autonomously given helping OCB may not seem useful to recipients. This is because helpers' autonomous motives focus on the helper's decision to help, and do not necessarily involve meaningfulness or usefulness of helping OCB to recipients. In contrast, other-oriented motives focus on genuine concern for recipients. Thus, other-oriented motives that draw helpers' attention to meaningfulness or usefulness from the recipient's perspective should enable autonomous helpers to engage in helping OCB that is meaningful or useful to recipients as well as volitional. Combining these arguments, I predict that the relationship between autonomous motives and recipients' gratitude will be positive and stronger when other-oriented motives are high (see Figure 3).

*Hypothesis 2:* Helper other-oriented helping motives will interact with autonomous helping motives in predicting recipient gratitude, such that the relationship will be stronger when helper other-oriented motives are high.

**Figure 3.**

**The Effects of Helpers' Helping Motives on Recipients' Gratitude[a]**
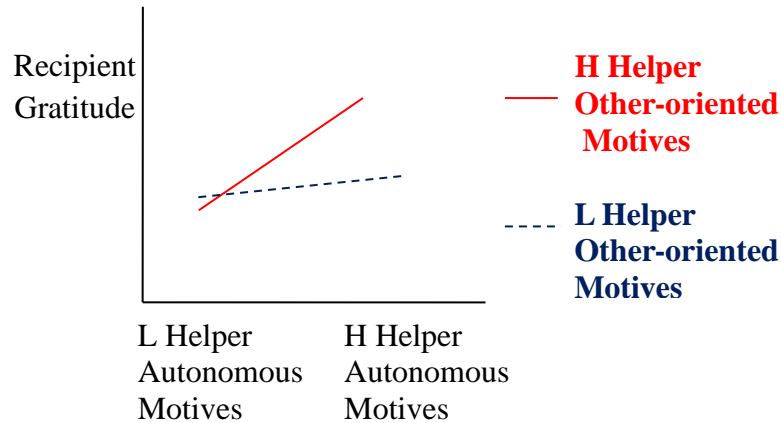


[a]Note: L indicates low and H indicates high.

According to SCT (Bandura, 1986), perceptions are not identical to actual social events because cognitive processes cause perceptions to differ from reality in two ways. First, people selectively attend to different types of information, and most people selectively perceive what they expect and hope to see (Plous, 1993). Second, once information is selectively perceived, people use cognitive heuristics to integrate and simplify the information. Thus, cognitive processes and perceptions of reality are idiosyncratic (Bandura, 1986). Applying this logic to helping situations, it is important to acknowledge that recipients may not accurately perceive helping motives of helpers. Thus, going beyond H2 which focused on the relationship between helping motives and recipient gratitude, I also consider the relationship between recipient attributions of helper motives and recipient gratitude.

According to attribution theory (Jones & Davis, 1965; Jones & MacGills, 1976; Kelley, 1967), people actively attempt to make sense of interactions. I argue that this is specifically applicable to helping OCB. Fisher, Nadler, and Whitcher-Alagna (1982) suggest that attributions

of helpers' motives as well as actual helpers' motives influence recipients' reactions. There are many different ways to react to being helped and recipients want to understand why someone is helping them. Thus, individuals generate explanations for the reason why helpers help: why did the helper help me? (What were the helper's motives?). Importantly, recipients' reactions toward helpers can be more or less favorable as a result of their attributions of helpers' motives (Murray & Holmes, 1993).

I propose that recipients' gratitude will be influenced by the attributions they make regarding helpers' motives (Fisher, 1983). This is because feelings of gratitude are strongly affected by recipients' meaning given to the helping OCB, which stems from their attributions of helpers' motives (Lazarus & Lazarus 1994). According to McCullough and colleagues (2001), gratitude is responsive to two attributions -- (a) the perceived extent to which the behavior was given voluntarily and (b) the perceived benevolent intentionality of the helper. These two motivational attributions should predict recipients' gratitude because gratitude occurs when recipients feel that helpers have voluntarily provided useful helping OCB (van Overwalle, Mervielde, & De Schuyter, 1995).

Research provides indirect support for this prediction. Autonomy attributions contribute to the gratitude of helping recipients. Helping recipients should be grateful when they make autonomous attributions for helping OCB. For example, Weinstein and colleagues (2010) confirmed that autonomously attributed helping OCB predicted helping recipients' gratitude even when controlling for other important attributions including perceived helper empathy, cost to helper, valuing of help, and perceived similarity. Swap (1991) argued that helper's other-orientation is important for helping recipients' attributions and that it is positively related to recipient receptivity to helping OCB and gratitude. Additionally, Tsang (2006) provides

24

evidence that recipient other-oriented attributions for helping shape their gratitude. Recipients experienced greater gratitude when helping OCB was attributed to high other-orientation as opposed to low other-orientation.

Even though there is evidence that recipients' autonomous and other-oriented attributions each predict gratitude, research has not integrated these notions and has not considered interactions between attributions as predictors of gratitude. This is unfortunate because joint consideration of the two attributions should provide a more complete understanding of the helping motives-recipient gratitude relationship.

Going back to attribution theory (Kelley, 1967), gratitude derives from attributions that others are positively motivated (Lawler & Thye, 1999; McCullough et al., 2001). When helping OCB is perceived as volitional, the act of helping becomes attached to the helper rather than to the situation or third parties. However, making attributions that helping OCB is autonomous does not necessarily indicate that helping OCB is perceived as positive or valuable by recipients. However, if autonomous attributions are combined with other-oriented attributions, recipients should believe that helpers intended to benefit them. Accordingly, this should cause recipients to view the helping OCB more valuable and meaningful. Thus, other-oriented attributions combined with autonomous attributions for helping OCB should result in higher recipients' gratitude. Integrating these arguments, recipient other-oriented attributions should interact with recipient autonomy attributions in predicting gratitude. For H3, I predict that the higher the recipient other-oriented attributions, the stronger the association between recipient autonomy attributions and gratitude.

*Hypothesis 3:* Recipient other-oriented attributions will interact with recipient autonomy attributions in predicting gratitude, such that the relationship will be stronger when other-oriented attributions are high.

**Figure 4.**

**The Effects of Recipients' Attributions for Helping Motives on Recipients' Gratitude[a]**
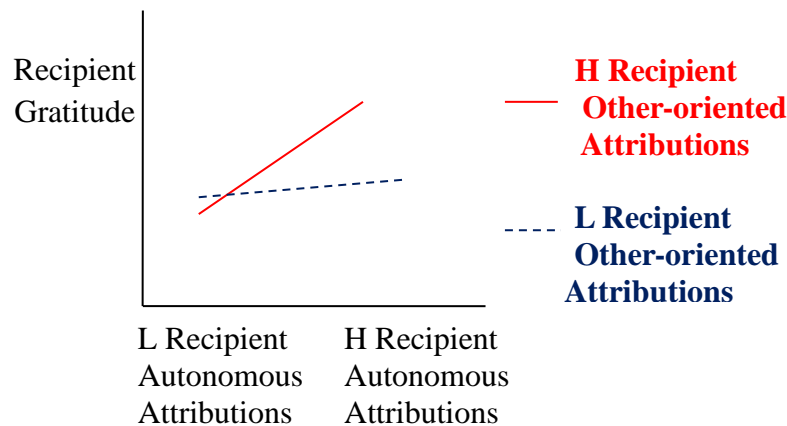


[a]Note: L indicates low and H indicates high.

**The Effect of Gratitude on Recipients' Subsequent Helping OCB**

McCullough and colleagues (2008) theorized that gratitude motivates helping. Two different mechanisms can explain this relationship. First, Gouldner's (1960) norm of reciprocity argues that people think they should reciprocate when they have been helped. Socialization norms dictate that people return help for help received. Gratitude informs people being helped that they should comply with the norm of reciprocity in a given situation. In other words, people feeling gratitude are more likely to follow the norm of reciprocity and engage in subsequent helping OCB (Tsang, 2006). Confirming this notion, participants who felt grateful toward a benefactor provided more help on a boring, cognitively taxing survey than nongrateful

participants (Bartlett & DeSteno, 2006). Likewise, Tsang (2006) demonstrated that people who felt grateful were more likely to behave generously toward their partner in response.

Second, the relationship between recipients' gratitude and subsequent helping OCB can be explained by priming processes. Gratitude is a positive emotion, and thus research on positive emotions is relevant (Fredrickson, 2004). SCT posits that when people are in a positive mood, they take a more favorable view of matters and recall positive experiences easily whereas when in a negative mood, they interpret things negatively and recall unpleasant experiences easily (Bandura, 1986; Clark & Isen, 1982). Similarly, affect evaluation theory (Schwarz & Clore, 1983) proposes that current affective states make congruent concepts more accessible in memory (Bower 1981; Isen, Shalker, Clark, & Karp, 1978). Thus, when people experience the positive emotion of gratitude, they think positively about helping OCB and are more likely to engage in subsequent helping OCB.

Prior research demonstrates that positive affect is positively related to helping (Manucia, Baumann, & Cialdini, 1984). More specifically, gratitude is a positive emotion that motivates recipients to help others. Grateful recipients were more likely to help others than were nongrateful participants (Bartlett & DeSteno, 2006). In addition, Emmons and McCullough (2003) demonstrated that when people described things for which they were grateful for two weeks, they also reported that they offered more emotional support and tangible help to others than did participants who wrote about their daily hassles or how they were more fortunate than others. Integrating these conceptual arguments from reciprocity and priming with prior related research, I predict

*Hypothesis 4:* Recipient gratitude will be positively related to recipients' subsequent helping OCB.

27

**Direct Social Exchange versus Indirect Social Exchange**

Blau (1964) distinguished direct social exchange and indirect social exchange. Direct social exchange is governed by the norm of reciprocity (Gouldner, 1960), such that if A helps B, B has an obligation to repay the helping by helping A sometime in the future (Blau, 1964; Deckop, Cirka, & Andersson, 2003; Lyons & Scott, 2012). However, Blau also noted that exchange does not necessarily have to be direct between the same two parties. Individuals may also generate "indirect chains of exchange" (Blau, 1964, p. 259). For example, A may help B, and B may help C. For my next hypothesis, I develop a contrasting prediction for direct and indirect social exchange.

Specifically, I argue that recipient's helping OCB towards the helper and recipient's helping OCB toward strangers are governed by the two different mechanisms I identified in the prior section: the norm of reciprocity and priming processes. First, as argued by Blau (1964) and SCT (Bandura, 1986), recipient's helping OCB toward the helper represents direct social exchange, such that in a dyadic relationship, helping OCB by one member elicits subsequent helping OCB by the other member directed back at the helper as a function of the recipient's gratitude. In contrast, priming processes trigger indirect reciprocity and cause recipients to "pay it forward" and help strangers. Thus, when people react positively to receiving help, such as when they feel gratitude, (Bandura, 1986) this induces positive perceptions of the environment and they are more likely to help strangers.

Going beyond these two paths that predict direct and indirect reciprocity and subsequent helping, application of SCT (Bandura, 1986) also supports differences in the strength of these relationships. According to SCT, personal factors (e.g, personal emotion, personality, value, and beliefs) predict human behavior, but social factors (e.g, reciprocity norms, other's actions,

28

socially conferred roles, and regulations) have stronger effects on human behavior in social relationships. For example, Bandura (1986, p.205, 206) noted that "social cues play an especially significant role in the regulation of human conduct when actions are socially mediated. Of the numerous predictive cues that influence behavior at any given moment, none is more informative than the actions of other." This is because social factors are stronger predictors of human behaviors than personal factors in most social exchanges. Given that the norm of reciprocity is a strong social cue that allows people to predict future actions, the direct relationship between two parties should be more strongly influenced by social cues and direct reciprocity processes than indirect priming processes based on personal momentary emotion. Thus, I predict that the relationship between gratitude and recipients' subsequent helping OCB towards helpers under the norm of reciprocity will be stronger than the relationship between gratitude and recipients' subsequent helping OCB towards strangers under emotional priming processes.

> *Hypothesis 5:* The positive relationship between recipient gratitude and recipients' subsequent helping OCB towards helpers will be stronger than the relationship between gratitude and recipients' subsequent helping OCB towards strangers.

**The Interactive Effects of Pride and Gratitude on Helper's Subsequent Helping OCB**

According to Tracey and colleges (2010), pride evolved to serve the distal function of enhancing social status by motivating individuals to strive for achievements. Feelings of pride are positive and self-reinforcing. Through socialization, children come to experience pride in response to being praised for their achievements by their parents, teachers and peers. Eventually, individuals experience self-generated pride for achievements regardless of others' feedback. The reinforcing nature of pride accordingly motivates individuals to seek future achievements which can lead to increased social status (Tracey et al., 2010).

I propose that the extent to which individuals feel authentic pride and hubristic pride following helping OCB should influence future helping OCB. Research demonstrates that pride predicts both prosocial and antisocial outcomes (Tracey & Robin, 2007a). On the one hand, authentic pride promotes prosocial behaviors (Herrald & Tomaka, 2002), whereas hubristic pride is often associated with narcissism (Lewis, 2000) and predicts aggression, hostility, interpersonal problems, relationship conflict, and other antisocial behaviors (Bushman & Baumeister, 1998; Campbell, 1999; Morf & Rhodewalt, 2001; Paulhus, Robins, Trzesniewski, & Tracy, 2004).

The two types of pride suggest two different paths for pursuing social status: prestige and dominance. According to Henrich and Gil-White (2001), authentic pride may have evolved to motivate the attainment of social status based on prestige. Thus, people who feel authentic pride should be motivated to engage in prosocial actions such as helping others as a way to gain social status based on prestige and respect. In contrast, hubristic pride may have evolved to motivate the attainment of social status based on dominance. Accordingly, those who feel hubristic pride should be motivated to engage in antisocial actions such as being aggressive and intimidating others as a way to be viewed as having dominance and social status. I propose that authentic pride should encourage prosocial behaviors and hubristic pride should discourage prosocial behaviors (Henrich & Gil-White, 2001). Thus, the two different types of pride should have different implications for future helping OCB.

Individuals high in authentic pride tend to be low in aggression and hostility; and high in relationship satisfaction, dyadic adjustment, and social support (Tracy et al., 2010). Thus, authentic pride should predict positive behaviors (Williams & DeSteno, 2008) and contribute to prosocial investments (Herrald & Tomaka, 2002; Lazarus, 1991; Verbeke, Belschak, & Bagozzi, 2004). In contrast, individuals high in hubristic pride tend to be aggressive and hostile; they

30

engage in a range of anti-social misbehaviors including drug use and petty crimes. Overall, they are low in dyadic adjustment and social support. Thus, hubristic pride should lead to narcissistic aggression, hostility, interpersonal problems, and other destructive behaviors (Baumeister, Smart, & Boden, 1996; Bushman & Baumeister, 1998; Campbell, 1999; Morf & Rhodewalt, 2001).

Given these differences in authentic and hubristic pride, I predict that authentic pride will be positively related to subsequent helping OCB and that hubristic pride will be negatively related to subsequent helping OCB. This is because authentic pride is more pro-social whereas hubristic pride is less pro-social. Accordingly, authentic (or hubristic) pride should have positive (or negative) implications for subsequent helping OCB.

As noted above, Bandura (2001)'s social cognitive theory emphasized the importance of both helpers and recipients because behavior is influenced by reactions of others as well as the actors' own agency. Thus, it is important to acknowledge the role that helping recipients' gratitude plays in the relationship between helpers' pride and subsequent helping OCB. McCullough and colleagues (2001) proposed that gratitude reinforces helping, accordingly recipients' gratitude should increase the likelihood that helpers will help again in the future. This is because gratitude represents the recipients' positive attitude towards the helpers' actions (McCullough et al., 2008). As a result, helpers' pride and helping recipients' gratitude should jointly influence subsequent helping OCB. Therefore, recognizing both parties in the dyadic relationship, I predict that the positive relationship between helper authentic pride and subsequent helping OCB will be stronger when recipient gratitude is high (see Figure 5) and the negative relationship between helper hubristic pride and subsequent helping OCB will be stronger when recipient gratitude is low (see Figure 6).

*Hypothesis 6:* Recipients' gratitude will interact with helpers' authentic pride in predicting subsequent helping OCB, such that the relationship will positive and strong when recipients' gratitude is high.

*Hypothesis 7:* Recipients' gratitude will interact with helpers' hubristic pride in predicting subsequent helping OCB, such that the relationship will strong and negative when helping recipients' gratitude is low.

**Figure 5.**

**The Interactive Effects of Authentic Pride and Gratitude on Helper's Subsequent Helping OCB[a]**
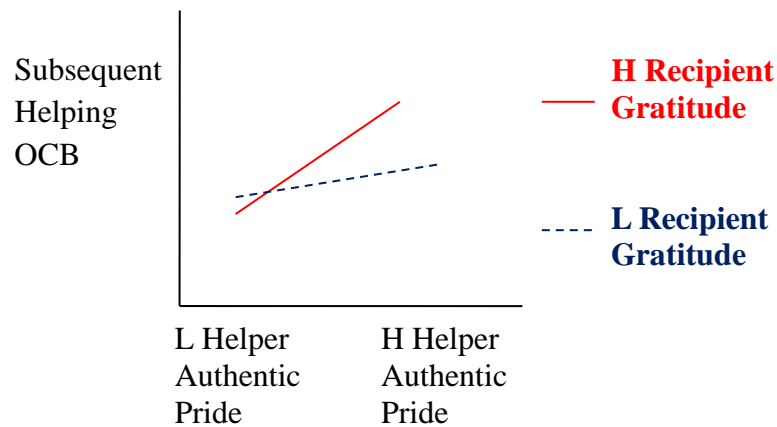


[a]Note: L indicates low and H indicates high.

**Figure 6.**

**The Interactive Effects of Hubristic Pride and Gratitude on Helper's Subsequent Helping**

**OCB[a]**
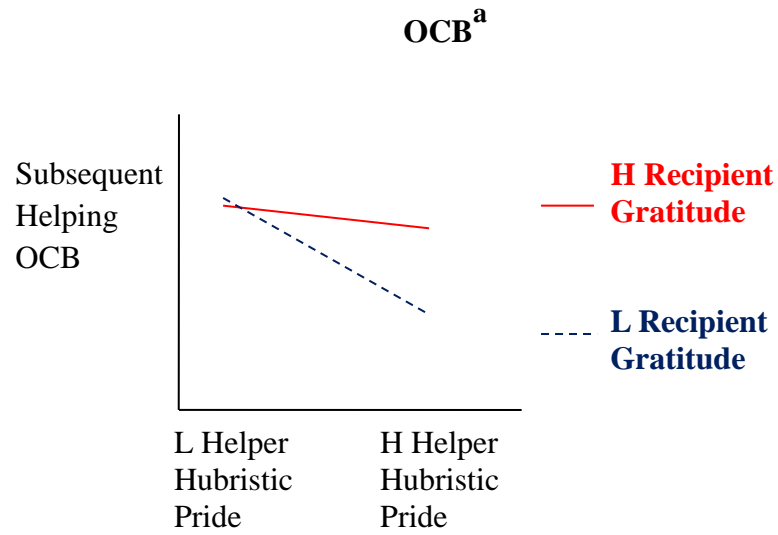
**METHOD**

**Helping Task**

I utilized an experimental design to test my predictions using a dictator task (an economics task with an objective measure of helping in which one individual is in charge of distributing funds to self and to a partner, while the partner can only accept the money given). In this task, the act of giving funds to another is inherently a helping behavior, whereas keeping funds is a self-serving behavior (Shariff & Norenzayan, 2007; Weinstein & Ryan, 2010).

Furthermore, the dictator task is well suited for manipulating autonomous motives and other oriented motives. In the low autonomous motives condition, I had helpers distribute prespecified amounts of money to their partners but in the high autonomous motives condition, helpers freely decided the amount of money they gave to their partner. In the high other-oriented motives condition, I encouraged helpers to have genuine concern for recipients' needs and feelings throughout the task because the money could help their partner make ends meet and enhance their well-being. In the low other-oriented motives condition, I encouraged helpers to focus on personal benefit to themselves throughout the task.

In sum, this 2×2 design allowed me to follow Weinstein and Ryan's recommendation: "The use of 2×2 designs in which both autonomy and, for example, altruism (high other-oriented) situations are manipulated would be particularly interesting" (p. 239).

**Participants**

126 university students participated in the study in exchange for extra course credit.

**Procedure**

Participants completed a pre-survey on demographics before they came to the lab. In the lab, they completed informed consent forms and then were randomly assigned to a partner by the

computer when they started to perform the task. Dyads were randomly assigned to one of the four conditions; 1) high autonomous motives and high other-oriented motives, 2) high autonomous motives and low other-oriented motives, 3) low autonomous motives and high other-oriented motives, or 4) low autonomous motives and low other-oriented motives. Within each dyad, participants were randomly assigned to the role of helper or recipient by the computer.

Then, I described the task and told participants to practice making decisions in three rounds of virtual (non-face to face) relationships because long distance working relationships are increasingly common. Thus, this experience was valuable for participants because they had the opportunity to estimate cost-benefit outcomes and make decisions during online interactions with their partners. I told participants they would switch roles in future rounds so they could experience both sides of the decision making interactions. Participants then took a quiz on the task to make sure they understood the instructions and the task. If participants did not pass the quiz, I repeated the description of the task. Then, helpers answered manipulation check questions on their helping motives and recipients answered manipulation check questions on the helpers' motives.

Next, they completed 5 rounds of the task and helpers completed questionnaires on pride while recipients completed questionnaires on their attributions for helpers' autonomous and other-oriented motives and their own gratitude toward their helpers. I gave recipients detailed instructions to help them express their level of gratitude to their partners in a structured manner. Specifically, I had recipients report the extent to which they felt they had much to be thankful for as a result of their interactions with their partners using a scale of 1 (to a very little extent) to 5 (to a very large extent). They then selected one of four statements to describe their level of

35

gratitude: 1) As a result of my interaction with my partner, I am <u>feeling a very large amount</u> of gratitude right now, 2) As a result of my interaction with my partner, I am feeling <u>a large amount</u> of gratitude right now, 3) As a result of my interaction with my partner, I am feeling <u>a small amount</u> of gratitude right now, or 4) As a result of my interaction with my partner, I am feeling <u>a very small amount</u> of gratitude right now. Students wrote out this statement indicating their current level of gratitude to their partner (see Appendix A) and lab facilitators delivered these messages to helpers.

Then, I switched the instructions and told all helpers to freely choose the amount of money they gave to their partners. Dyads then performed the task another 5 rounds without switching their roles because I was interested in the extent to which helpers' level of pride and recipients' level of gratitude influenced helpers' subsequent helping OCB.

Then, I had players switch their roles (from helpers to recipients or from recipients to helpers) and they completed the final 5 rounds of the task. Again, helpers could freely choose the amount of money given to their partners. This allowed me to assess the extent to which recipients reciprocated the previous helping OCB they received from their partners.

Lastly, I left the room and another experimenter came in and asked participants whether they were willing to complete an additional survey, which was above and beyond the requirements. This design feature allowed assessment of indirect social exchange processes and the extent to which participants helped a stranger. By leaving the room, I reduced demand effects and pressure to fill out the additional survey.

**Manipulations**

To manipulate autonomous helping motives, the computer instructed those in the high autonomous motive condition that they had complete freedom to decide how much money, if

any, to give to their partners. The computer told those in the low autonomous motive condition that they had no choice and had to send a prespecified amount of money to their partners. It is important to note that recipients got the same amount of money from their partners regardless of their autonomous motive conditions. All recipients in both high and low autonomous motive conditions got $3, $4, $2, $3, and $3 across the five rounds. In other words, recipients in the high autonomous motive condition got the same prespecified amount of money as those in the low autonomous motive condition even though they believed the money came from their helpers' own choice and their helpers freely made their own decision. This is important to avoid confounds so that the amount money given to recipients did not influence their level of gratitude to their partners. For example, research demonstrates that recipients' reactions depend on the amount of money given to them (Brandts & Solà, 2001; Falk, Band, & McLaughlin, 2003).

To manipulate other-oriented helping motives, I utilized a priming manipulation (Korsgaard, Meglino, Lester, & Jeong, 2010; Nelson & Norton, 2005). Helpers read a scenario that was either a high other-oriented motive prime (a friend does a favor for you) or a low other-oriented motive prime (a friend does a favor for himself/herself) (Tsang, 2006). Helpers were asked to imagine themselves in the scenario situation. And then they recalled and wrote about a similar experience either high other-oriented where they did a favor for another's benefit or low other-oriented where they did a favor for their own benefit. While helpers worked on the priming scenario and wrote their stories, recipients completed a filler task where they prioritized items for survival in a relatively unfamiliar environment. In addition, participants in the high other-oriented motive condition were told to focus on genuine concern for their partner's needs and feelings during the task and participants in the low other-oriented motive condition were told to focus on their own personal benefits during the task. In sum, each of the four conditions provided

separate instructions to participants via computer to manipulate autonomous and other-oriented

helping motives. This standardized delivery avoided possible experimenter effects. Appendix B

specifically provides the wordings of each manipulation for the eight conditions. Below is a flow

chart that summarizes procedures in the lab.

**Table 1**

**Flow Chart**

|  | Procedures |
|---|---|
| **Time 1** | Pre-survey |
| **Time 2** | Priming scenario (other-oriented helping motives) |
| **Time 3** | Writing up their own stories describing a specific time they did a favor for their own benefit (low other-oriented motives) or for their friends' benefit (high other-oriented motives). |
| **Time 4** | Decision making task instructions (including manipulations) |
| **Time 5** | 3 practice rounds |
| **Time 6** | Manipulation checks for helpers (instructions given to them) |
|  | Manipulation checks for recipients (instructions given to their partners) |
| **Time 7** | Quiz on the task |
| **Time 8** | 5 Rounds ($1^{st}$ set) |
| **Time 9** | Helper Q on pride |
|  | Recipient Q on attributions for helpers' autonomous and other-oriented helping motives and gratitude |
|  | Recipients express their gratitude to helpers |
| **Time 10** | New task instructions (all helpers told to freely choose the amount of money to send to their partners) |
| **Time 11** | 5 rounds ($2^{nd}$ set-measurement of helper helping OCB to recipient) |
| **Time 12** | Switching their roles |
| **Time 13** | 5 rounds ($3^{rd}$ set-measurement of recipient helping OCB to helper) |
| **Time 14** | I will leave the room |
| **Time 15** | Additional survey (measurement of helping stranger) |

**Measures**

*Manipulation checks:* I used two items to check whether the manipulations for

autonomous and other-oriented motives were successful. I asked helpers the extent to which they

were autonomous and other-oriented in the decision making task they just finished. I asked

38

recipients the extent to which they thought their partners were autonomous and other-oriented in the decision making task (see Appendix A).

*Attributions for helping motives:* I used five items to measure recipients' attributions for autonomous helping motives adapted from items on autonomous helping motives (Weinstein & Ryan, 2010) and used three items to measure recipients' attributions for other-oriented helping motives adapted from items on other-oriented helping motives (De Dreu & Nauta, 2009) to reflect recipients' perception about the reasons why helpers helped them. To reflect attributions, I added the phrase "I think…" to each item. For example, one item from the De Dreu and Nauta (2009) other-oriented helping motive scale was "I am concerned about the needs and interests of others" I adapted this item to "I think my partner is concerned about my needs and interests." Participants were asked the extent to which they agreed with each item on a 1 (To a very little extent) to 5 (To a very large extent) scale. The alpha coefficients were .85 for recipients' autonomous attributions and .93 for recipients' other-oriented attributions.

*Pride:* I used ten items from Tracey and Robin (2007b) to measure helper's authentic and hubristic pride. I chose items that were relevant to the lab and the task and excluded items that were not relevant. For example, I excluded " I feel I am snobbish" from the hubristic pride scale because helpers would not tend to feel snobbish following helping behavior. Helpers were asked the extent to which they were feeling each item right after they finished the task on a 1 (To a very little extent) to 5 (To a very large extent) scale. The alpha coefficients were .95 for authentic pride and .93 for hubristic pride.

*Gratitude:* I measured recipient's feelings of gratitude with four items (McCullough et al. 2002). Example items are ''As a result of my interaction with my partner, I feel I have so much to be thankful for'' and ''As a result of my interaction with my partner, I am feeling grateful

right now.'' Recipients reported the extent to which they agreed with each statement right after they finished the task using a scale of 1 (To a very little extent) to 5 (To a very large extent). The alpha coefficient was .65.

*Helping OCB:* Subsequent helping OCB toward partners was measured by the total amount of money given to partners across five rounds. For helpers, I measured subsequent helping OCB toward recipients with the total amount of money they gave to recipients during the second set of rounds of the task before they switched roles with recipients. For recipients, I measured subsequent helping OCB toward helpers with the total amount of money they gave to helpers during the third set of rounds of the task after they switched roles with helpers. I assessed subsequent helping OCB toward strangers based on the number of questions they actually completed when answering an additional and optional survey at the end.

**Analyses**

All of the hypotheses are at the individual level; however, using longitudinal data from the helpers and recipients in each dyad violates the assumption of independence in two ways. First is dyadic nonindependence because ratings from the two members of the dyad are likely to be correlated. For example, the estimates of a slope or an intercept might be correlated across the helper and recipient. Second is autocorrelation, which is the association between a measure at one point in time and the same measure at another time. Given that the best predictor of future behavior is past behavior, autocorrelation is highly positive (Kenny, Kashy, & Cook, 2006). Given the combined presence of dyadic dependence and autocorrelation, I analyzed relationships with the Actor–Partner Interdependence Model over time (APIM; Kenny et al., 2006). This approach allowed me to analyze the longitudinal dyadic data without concerns for lack of independence.

Given the dyadic longitudinal data, I accounted for three factors: time, person, and dyad. Although researchers sometimes consider this sort of data as a three-level nested model in which time points are nested within persons and persons are nested within dyads, that it can be problematic because time and person are usually crossed and not nested. For a given dyad, time is the same for the two persons at each time point. If a three-level nested model is estimated, the correlation between the two parties' intercepts is constrained to be positive (because it is a variance), and the correlation between the two parties' errors at each time is constrained to be zero (Kenny et al., 2006). Longitudinal APIM analysis allows correlated intercepts and errors between ratings from helper and ratings from recipient. More importantly, these correlated intercepts and errors across the two members in the dyad deal with concerns about dyadic nonindependence. In other words, it allows for examination of the data at the individual level without violating assumptions of independence and without the loss of precision that occurs when individual data are aggregated to the dyad level.

In my model, I did not focus on or predict a relationship between helping OCB at time 2 and helping OCB at time 3 because it has long been acknowledged that previous behavior leads to future behavior. Instead, I focused on pride and gratitude at time 2 as predictors of helping OCB at time 3. However, given that helping at time 2 might be closely related to helping OCB at time 3, this raises issues about autocorrelation. It is possible that people who helped at time 2 habitually engage in helping OCB at time 3 regardless of their feeling of pride at time 2. The longitudinal APIM design accounts for this by allowing the errors to be autocorrelated.

Lastly, and more important to my research question, the longitudinal APIM models provide separate effects for each party's contribution to their own outcome. This separated the effects of the independent variables on each person's outcomes from the effects on their partner's

outcomes (Overbeck, Neale, & Govan, 2010). Put differently, the analysis includes the direct path to helpers' helping OCB outcomes from their manipulations for helping motives and also includes the direct path to recipients' helping OCB outcomes from their manipulations for helping motives.

As shown in Figure 8, both manipulations for helping motives and attributions for helping motives are allowed to covary (indicated by a arrow). Also the error for helpers (e2) and the error for recipients (e4) are allowed to correlated (indicated by b arrow). These paths account for dependence in the data due to the dyad. In addition, the error for helping OCB measured at time 2 and the error for helping OCB measured at time 3 are allowed to correlate to account for autocorrelation (indicated by c arrow). I used this basic model and then modified it to test direct and indirect effects and examine sequential processes and interactive processes. Thus, I examined a model in which helping motives affected subsequent helping OCB indirectly via pride, and I examined a model in which autonomous helping motives and other-oriented helping motives affected pride directly as well as interacted to affect pride. I used such modified models to test specific hypotheses using M-plus (Muthén, & Muthén, 2007).

Lastly, it is important to note that APIM analyses do not aim to generate fit indexes in order to evaluate the whole model established in the SEM literature. This is because APIM is often the saturated model which corresponds to completely related variables with the zero degrees of freedom. Given that some fit indexes such as RMSEA estimates fit in a model compared to a saturated model, these fit indexes cannot be used to tell whether APIM models explain the data reasonably well or not. For example, Krasikova and LeBreton (2012, p.746) noted, " Because the basic APIM is a saturated model (Cook & Kenny, 2005), we obtained perfect fit, $\chi^2 (0) = 0$, $p = 1.00$".  In fact, two recent papers using APIM in the management

42

context did not report any fit index (Bakker & Xanthopoulou, 2009; Overbeck, Neale, & Govan, 2010).

**Figure 7**

**Basic Longitudinal APIM**
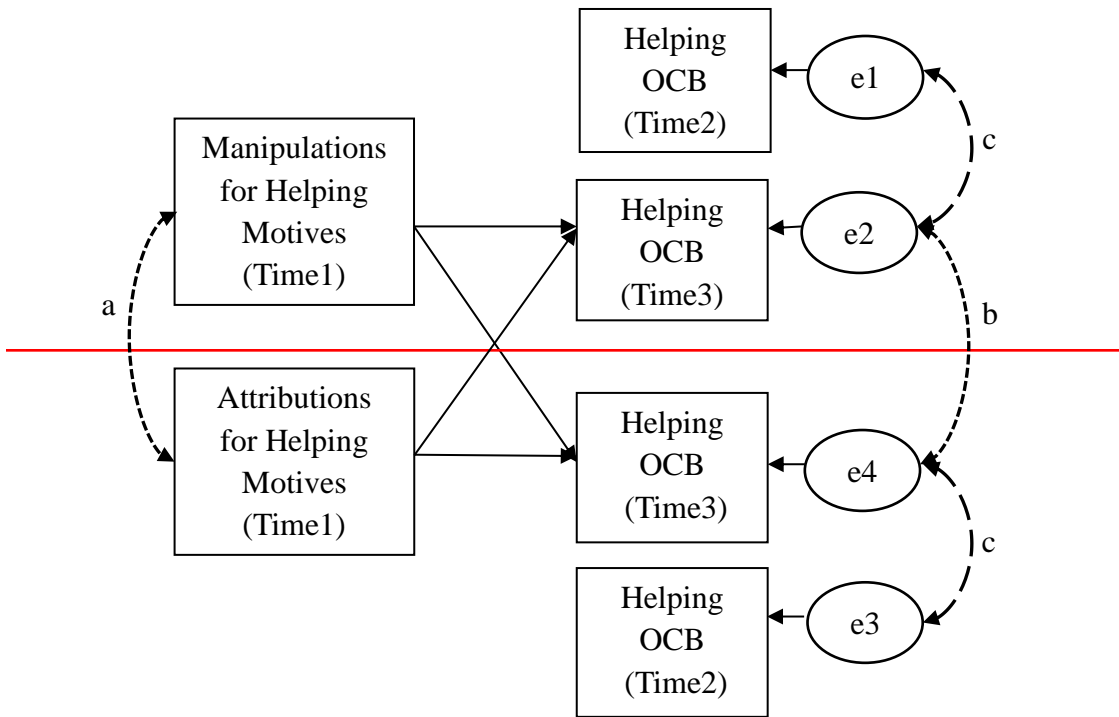
## RESULTS

**Manipulation Checks**

For autonomous motives, the two item scale adapted from Weinstein and Ryan (2010) showed that autonomous motives were significantly higher in the high autonomous motive condition as opposed to the low autonomous motive condition, $t(119)=13.52$, $p < .05$, d $=2.50$ ($M_{high} = 4.35$; $M_{low} = 1.85$). For other-oriented motives, the two item scale adapted from De Dreu and Nauta (2009) showed that other-oriented motives were significantly higher in the high other-oriented motive condition as opposed to the low other-oriented motive condition, $t(119)=2.08$, $p < .05$, d $=0.44$ ($M_{high} =3.13$; $M_{low} = 2.68$).

**Confirmatory Factor Analysis**

I examined the factor structure of the focal variables by conducting a confirmatory factor analysis (CFA) shown in Table 2. The expected 6-factor solution (authentic pride, hubristic pride, attributions for autonomous helping motives, attributions for other-oriented helping motives, gratitude, and helping OCB) displayed good fit with the data ($\chi^2$ [115] $= 160.26$, CFI $= .97$, TLI $= .96$, RMSEA $= .05$, SRMR $= .07$) and all factor loadings were significant. I tested plausible alternative nested models to examine whether a more parsimonious model achieved equivalent fit. Comparison with a 5-factor model (pride, attributions for autonomous helping motives, attributions for other-oriented helping motives, gratitude, and helping OCB) produced significantly worse fit to the data ($\Delta\chi^2 = 296.93$, $\Delta df = 10$, $p < .01$). Comparison with a 4-factor model (pride, attributions for helping motives, gratitude, and helping OCB) also demonstrated significantly worse fit ($\Delta\chi^2 = 335.88$, $\Delta df = 14$, $p < .01$) as did comparisons with a 3-factor model (emotions, attributions for helping motives, and helping OCB; $\Delta\chi^2 =497.88$, $\Delta df = 17$, $p <$

.01), a 2-factor model (all other measures vs. helping OCB; $\Delta\chi^2 = 698.22$, $\Delta df = 19$, $p < .01$) and

a 1-factor model ($\Delta\chi^2 = 782.92$, $\Delta df = 20$, $p < .01$). Chi-square difference tests showed that the

expected 6-factor model achieved significantly better fit.

**Table 2**

**CFA Results for Plausible Models[a]**

|  | 6-Factor Model | 5-Factor Model | 4-Factor Model | 3-Factor Model | 2-Factor Model | 1-Factor Model |
|---|---|---|---|---|---|---|
| Chi-square | 160.25** | 457.19** | 496.14** | 658.14** | 858.48** | 943.18** |
| Δ Chi-square | - | 296.94** | 335.89** | 497.89** | 698.23** | 782.93** |
| CFI | .97 | .76 | .73 | .62 | .48 | .42 |
| TLI | .96 | .71 | .69 | .56 | .40 | .34 |
| RMSEA | .05 | .14 | .15 | .18 | .21 | .22 |
| SRMR | .07 | .13 | .13 | .16 | .16 | .17 |

[a] * p < .05, ** p < .01.

**Tests of the Hypotheses using APIM**

Table 3 summarizes means, standard deviation, and correlations, and Figure 8

summarizes tests of the hypotheses using APIM.

**Table 3**

**Means, Standard Deviations, and Correlations[a]**

| | Variables | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Helper's Autonomous motives[b] | 1.49 | .50 | - | | | | | | | |
| 2 | Helper's Other-oriented motives[b] | 1.52 | .50 | .05 | - | | | | | | |
| 3 | Recipient's Autonomous attributions | 3.19 | .47 | .51** | -.04 | (.85) | | | | | |
| 4 | Recipient's Other-oriented attributions | 2.89 | 1.00 | .49** | .11 | .64** | (.93) | | | | |
| 5 | Helper's Authentic pride | 3.30 | .91 | .18 | .03 | .05 | -.04 | (.95) | | | |
| 6 | Helper's Hubristic pride | 2.12 | .88 | .08 | -.15 | -.08 | .06 | .07 | (.93) | | |
| 7 | Recipient's Gratitude | 2.97 | .78 | .36** | .20 | .58** | .63** | -.18 | -.13 | (.65) | |
| 8 | Helper's helping toward recipients | 4.08 | 1.42 | -.14 | .36** | .08 | -.01 | .12 | -.04 | .11 | - |
| 9 | Helper's helping toward strangers | .13 | .33 | -.17 | -.02 | -.12 | -.10 | .03 | .00 | -.03 | .22 |
| 10 | Recipient's helping toward helpers | 4.26 | .90 | .00 | -.01 | .04 | .08 | .05 | .26** | .07 | -.14 |
| 11 | Recipient's helping toward strangers | .18 | .38 | .05 | -.07 | .02 | -.22 | .00 | .04 | -.21 | -.04 |

**Table 3 (cont'd)**

| | Variables | Mean | SD | 9 | 10 | 11 |
|---|---|---|---|---|---|---|
| 9 | Helper's helping toward strangers | .13 | .33 | - | | |
| 10 | Recipient's helping toward helpers | 4.26 | .90 | .05 | - | |
| 11 | Recipient's helping toward strangers | .18 | .38 | .10 | .16 | - |

[a]N = 126.  Cronbach's alphas are presented in parentheses along the diagonal. * $p <.05$,  ** $p < .01$.

[b]Manipulated conditions coded as 1=low 2=high.

Figure 8

**Overall APIM Results[a]**
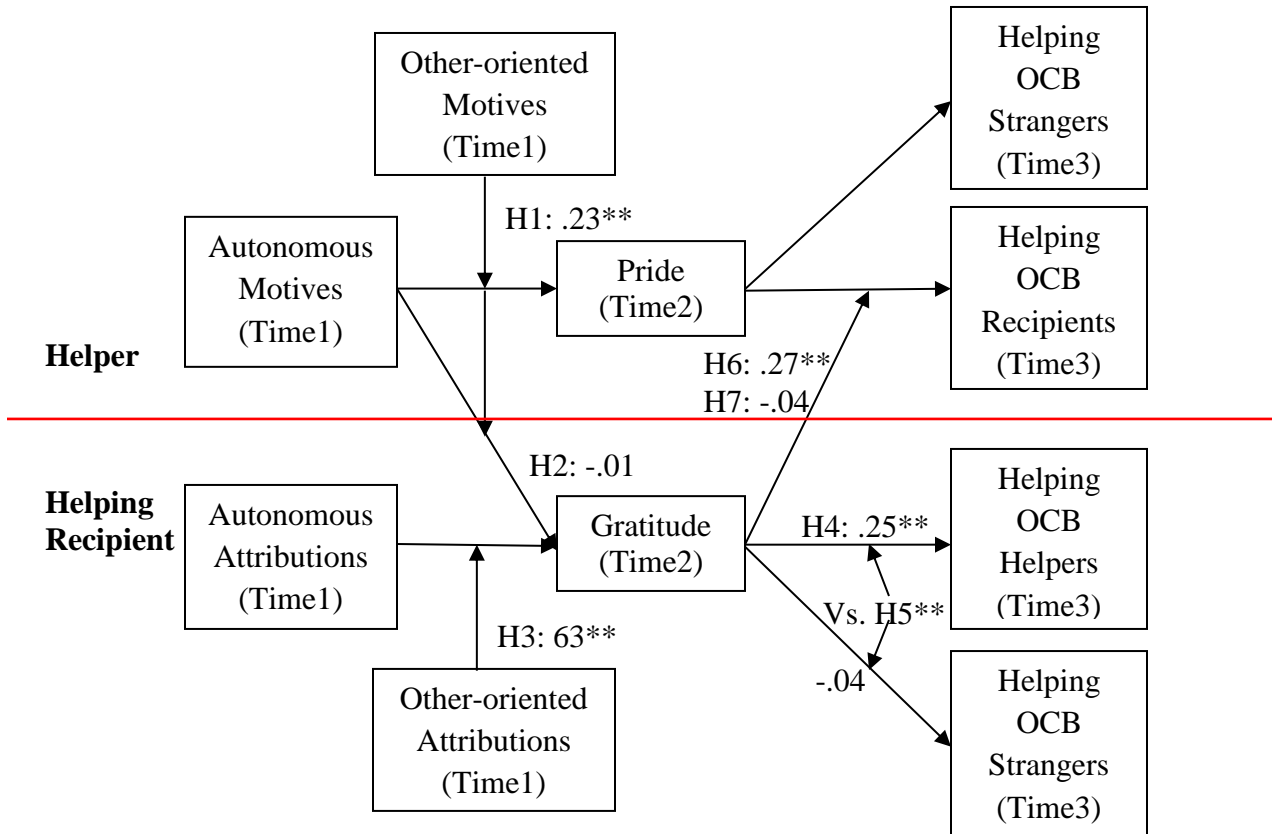
[a]* p <.05,  ** p < .01.

Given the dyadic nature of my data, I assessed dyadic nonindependence by correlating helpers' and recipients' scores on outcome variables. Consequently, I proceeded with APIM analyses to test the hypotheses. Inspection of dyadic nonindependence revealed that helpers' helping OCB was significantly correlated with recipients' helping OCB ($r$ (63) = .37, $p < .01$).

Overall, five out of seven hypotheses were supported by APIM analyses. Hypothesis 1 proposed that helper other-oriented helping motives (manipulated) would moderate the relationship between helper autonomous helping motives (manipulated) and helper authentic

pride such that the relationship would be stronger when other-oriented helping motives were high. The autonomous helping motives by other-oriented helping motives interaction (see Table 4 and Figure 9) was significant in predicting authentic pride (b = .23, CR[1] = 5.63, $p < .01$). To further investigate and graph Hypothesis 1, I utilized ANOVA. I did not use simple slope analysis because the two independent variables were manipulated and categorical, not continuous. ANOVA showed a significant interaction between helper autonomous and other-oriented helping motive manipulations in predicting helper authentic pride ($F[1, 57] = 7.99$, $p <.01$). Helper autonomous helping motives was significantly related to helper authentic pride when helper other-oriented helping motives were high ($F[1, 57] = 12.23$, $p <.01$), but not when helper other-oriented helping motives were low ($F[1, 57] = 2.05$, $ns$). Overall, Hypothesis 1 was supported.

---

[1] The Critical Ratio (CR) consists of the parameter estimate divided by its standard error. This inferential statistic is normally distributed and comparable to a Z-test, such that values more extreme than ±1.96 are significant at p < .05. I report Critical Ratios for all significance tests to distinguish these tests clearly from standard ANOVA or regression (Overbeck et al., 2010).

**Figure 9**

**The Interactive Effects of Helpers' Helping Motives on Helpers' Authentic Pride (ANOVA)**
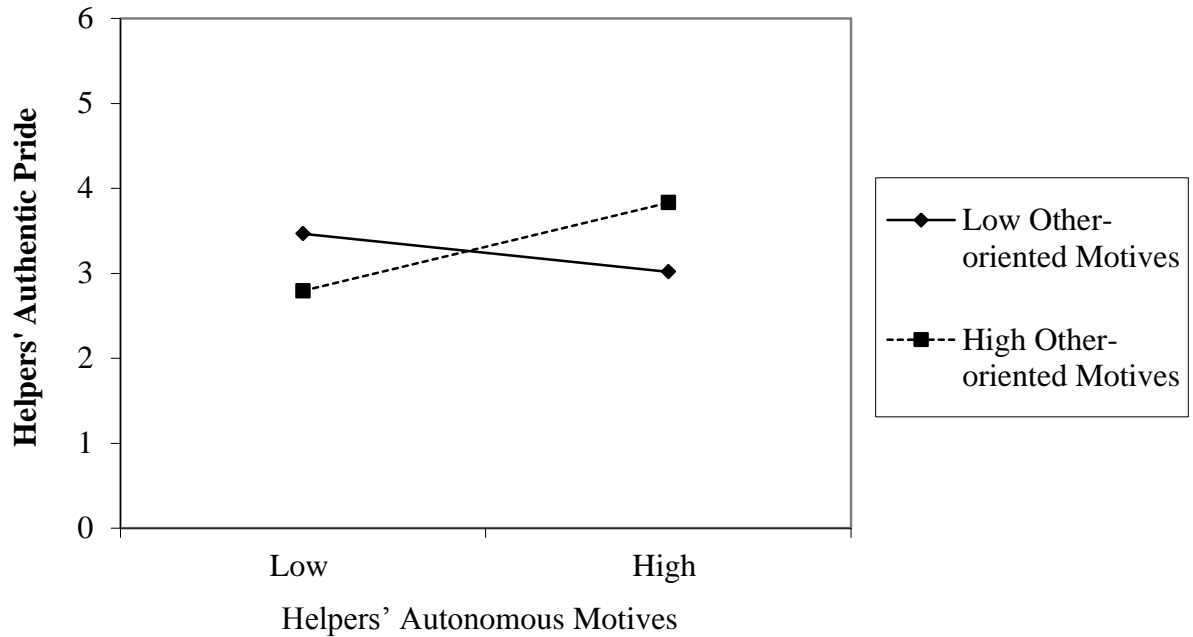


Hypothesis 2 predicted that helper other-oriented helping motives (manipulated) would moderate the relationship between helper autonomous helping motives (manipulated) and recipient gratitude, such that the relationship would be stronger when other-oriented helping motives were high. This interaction, however, (see Table 4) was not significant in predicting gratitude (b = -.01, CR= -.22, *ns*). Thus, Hypothesis 2 was not supported.

Hypothesis 3 proposed that recipient attributions for other-oriented helping motives would moderate the relationship between recipient attributions for autonomous helping motives and recipient gratitude, such that the relationship would be stronger when recipient other-oriented helping motives attributions were high. This interaction (see Table 4 and Figure 10) was significantly related to gratitude (b = .63, CR= 4.39, *p* < .01). Simple slope analysis showed a

positive relation of recipient autonomy attributions with gratitude when recipient other-oriented attributions were high (b = .51, $p < .01$), and a negative relation of recipient autonomy attributions with gratitude when other-oriented attributions were low (b = -.90, $p < .01$). Thus, Hypothesis 3 was supported.

**Figure 10**

**The Interactive Effects of Recipients' Attributions for Helping Motives on Recipients' Gratitude (APIM)**
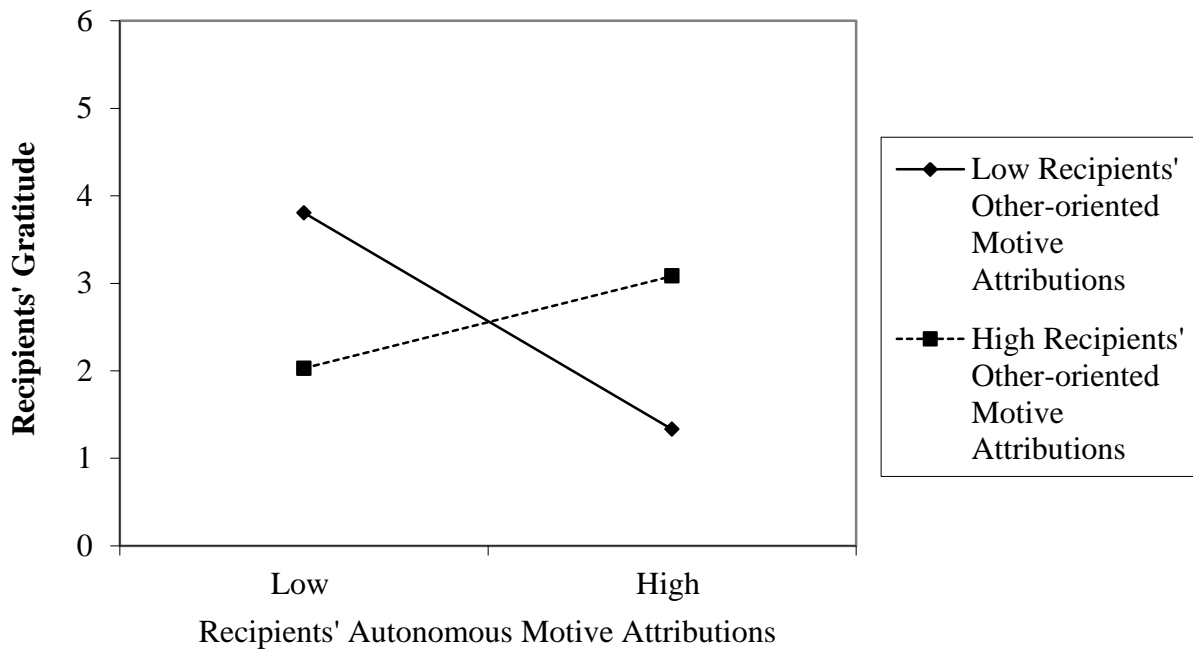


Hypothesis 4 proposed that recipient gratitude would be positively related to recipients' subsequent helping OCB. Consistent with Hypothesis 4 (see Table 4), there was a positive relationship between recipient gratitude and recipients' subsequent helping OCB toward helpers (b = .25, CR= 6.48, $p < .01$). Thus, results supported Hypothesis 4.

Hypothesis 5 predicted that the relationship between recipient gratitude and recipients' subsequent helping OCB toward helpers would be stronger than the relationship between

51

recipient gratitude and subsequent helping OCB toward strangers. Consistent with Hypothesis 5 (see Table 4), there was a positive relationship between recipient gratitude and subsequent helping OCB towards helpers (b = .25, CR= 6.48, *p* < .01), but no significant relationship between recipient gratitude and subsequent helping OCB towards strangers (b = -.04, CR= -.38, *ns*). In addition, the 95% confidence interval for gratitude-recipients' subsequent helping OCB toward helpers relationship (.18, .33) did not overlap with the 95% confidence interval for gratitude-recipients' subsequent helping OCB toward strangers relationship (-.25, .16), providing further evidence that the relationship is stronger for helping helpers than helping strangers. Accordingly, results supported Hypothesis 5.

Hypothesis 6 proposed that recipients' gratitude would moderate the relationship between helpers' authentic pride and helpers' subsequent helping OCB towards recipients, such that the relationship would be stronger when recipients' gratitude was high. This interaction (see Table 4 Figure 11) was significantly related to helpers' subsequent helping OCB (b = .27, CR= 2.68, *p* < .01). Simple slope analysis showed a positive relation between helpers' authentic pride and helpers' subsequent helping OCB when recipients' gratitude was high (b = .65, *p* < .01), but not when it is low (b = .09, *ns*). Overall, Hypothesis 6 was supported.

**Figure 11**

**The Interactive Effects of Helpers' Authentic Pride and Gratitude on Helpers' Subsequent**

**Helping OCB to Recipients (APIM)**
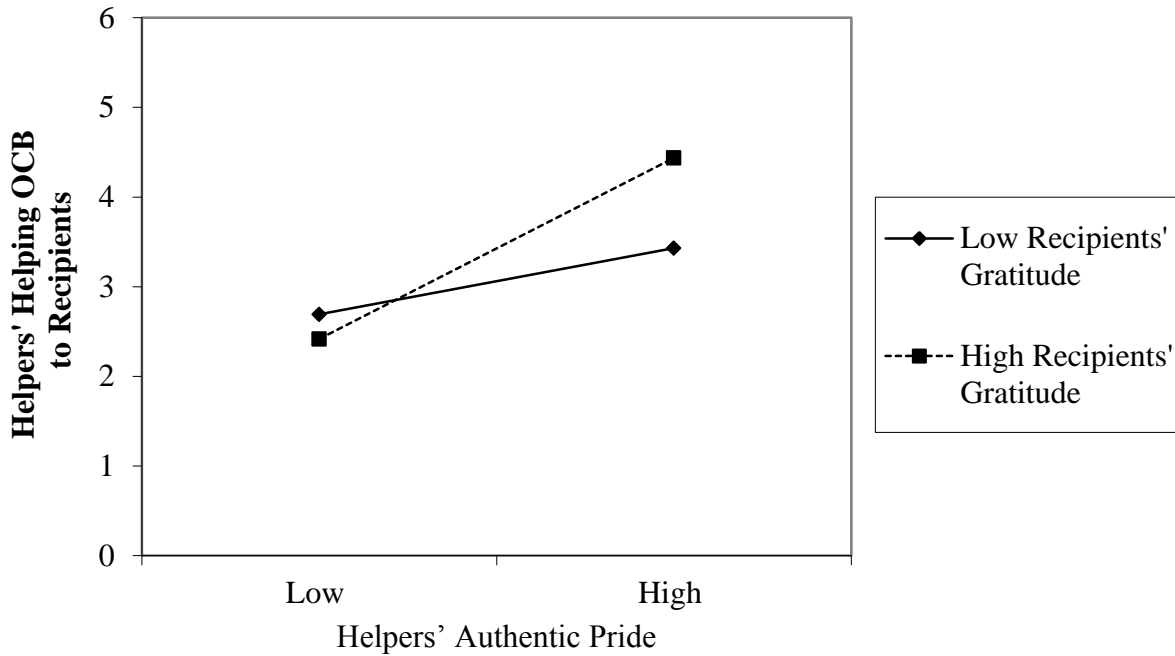


Hypothesis 7 predicted that recipients' gratitude would moderate the relationship between helpers' hubristic pride and helpers' subsequent helping OCB towards recipients, such that the relationship would be negative and stronger when recipients' gratitude is low. This interaction (see Table 4) was not significantly related to helpers' subsequent helping OCB (b = -.04, CR= -.51, *ns*). Thus, Hypothesis 7 was not supported.

**Table 4**

**APIM Analysis for Dyadic Helping OCB**[a]

| | Hypotheses 1-3 | |
| --- | --- | --- |
| | **B** | **CR** |
| Autonomous motives→Authentic Pride | -.20 | -1.93 |
| Other-oriented motives→Authentic Pride | .14 | .99 |
| Autonomous × Other-oriented motives→Authentic Pride (H1) | .23** | 5.63 |
| Autonomous motives→Hubristic Pride | -.27 | -1.14 |
| Other-oriented motives→Hubristic Pride | .33 | 1.03 |
| Autonomous × Other-oriented motives→Hubristic Pride | .01 | .87 |
| Autonomous motives→Gratitude | -.04 | -.20 |
| Other-oriented motives→Gratitude | -.21 | -1.20 |
| Autonomous × Other-oriented motives→Gratitude (H2) | -.01 | -.22 |
| Autonomous attributions→Gratitude | -1.73** | -5.72 |
| Other-oriented attributions→Gratitude | -1.64** | -3.56 |
| Autonomous × Other-oriented attributions→ Gratitude (H3) | .63** | 4.39** |

| | Hypothesis 4 | |
| --- | --- | --- |
| | **B** | **CR** |
| Gratitude→Recipient's helping OCB toward helpers (H4) | .25** | 6.48 |

| | Hypothesis 5 | |
| --- | --- | --- |
| | **B** | **CR** |
| Gratitude→Recipient's helping OCB toward strangers (H5) | -.04 | -.38 |

| | Hypotheses 6-7 | |
| --- | --- | --- |
| | **B** | **CR** |
| Authentic Pride→Helper's helping OCB toward recipient | -.40 | -1.49 |
| Gratitude→Helper's helping OCB toward recipient | -.53 | -1.66 |
| Authentic Pride × Gratitude→Helper's helping OCB toward recipient (H6) | .27** | 2.68 |
| Hubristic Pride→Helper's helping OCB toward recipient | -.01 | -.08 |
| Hubristic Pride × Gratitude→Helper's helping OCB toward recipient (H7) | -.04 | -.51 |

[a]B parameter estimates should be interpreted as unstandardized regression coefficients. The CR

should be interpreted as B parameter estimate divided by its standard error. * p <.05, ** p < .01.

**Supplementary Analyses using APIM**

Table 5 summarizes means, standard deviation, and correlations for these supplementary analyses. Scholars have argued that the distinction between authentic pride (focusing on positive aspects of one's behavior) and hubristic pride (focusing on positive aspects of one's self) parallels the distinction between guilt (focusing on negative aspects of one's behavior) and shame (focusing on negative aspects of one's self). Likewise, gratitude parallels anger because it focuses on positive (or negative) aspects of others' actions towards the self (Lewis, 2000; Tangney & Dearing, 2002). Accordingly, I also included measures of these constructs in my design. Measures are helper guilt (Harder, 1990), helper shame (Harder, 1990), and recipient anger (Lerner & Kelter, 2000).

I conducted post hoc tests to see if the hypotheses for pride and gratitude were applicable to guilt, shame, and anger by conducting parallel analyses for guilt, shame, and anger. None of these analyses produced significant results (see Table 6). The autonomous helping motives (manipulated) by other-oriented helping motives (manipulated) interactions were not significant in predicting helper guilt (b = .10, CR= 1.04, *ns*) or helper shame (b = .16, CR= 1.22, *ns*).

# Table 5

**Means, Standard Deviations, and Correlations (Including Variables in Supplementary Analyses)[a]**

| | Variables | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Helper's Autonomous motives[b] | 1.49 | .50 | - | | | | | | | |
| 2 | Helper's Other-oriented motives[b] | 1.52 | .50 | .05 | - | | | | | | |
| 3 | Recipient's Autonomous attributions | 3.19 | .47 | .51** | -.04 | (.85) | | | | | |
| 4 | Recipient's Other-oriented attributions | 2.89 | 1.00 | .49** | .11 | .64** | (.93) | | | | |
| 5 | Helper's Authentic pride | 3.30 | .91 | .18 | .03 | .05 | -.04 | (.95) | | | |
| 6 | Helper's Hubristic pride | 2.12 | .88 | .08 | -.15 | -.08 | .06 | .07 | (.93) | | |
| 7 | Recipient's Gratitude | 2.97 | .78 | .36** | .20 | .58** | .63** | -.18 | -.13 | (.65) | |
| 8 | Helper's helping toward recipients | 4.08 | 1.42 | -.14 | .36** | .08 | -.01 | .12 | -.04 | .11 | - |
| 9 | Helper's helping toward strangers | .13 | .33 | -.17 | -.02 | -.12 | -.10 | .03 | .00 | -.03 | .22 |
| 10 | Recipient's helping toward helpers | 4.26 | .90 | .00 | -.01 | .04 | .08 | .05 | .26** | .07 | -.14 |
| 11 | Recipient's helping toward strangers | .18 | .38 | .05 | -.07 | .02 | -.22 | .00 | .04 | -.21 | -.04 |
| 12 | Helper's Guilt | 1.63 | .82 | .02 | .02 | -.02 | .11 | -.07 | .51** | -.11 | -.01 |
| 13 | Helper's Shame | 1.47 | .58 | .14 | -.05 | .06 | .21 | .16 | .54** | -.24 | -.05 |
| 14 | Recipient's Anger | 1.26 | .49 | -.08 | -.16 | .02 | .12 | .09 | -.07 | -.13 | .04 |
| 15 | Helper's Positive Affect | 2.20 | 1.04 | .12 | .18 | -.07 | .05 | .73** | .10 | -.11 | .04 |
| 16 | Recipient's Positive Affect | 2.22 | .97 | .24 | .11 | .42** | .52** | .12 | .15 | .53** | .30* |
| 17 | Helper's Negative Affect | 1.33 | .48 | .02 | -.08 | .04 | .20 | .17 | .57** | -.03 | -.06 |
| 18 | Recipient's Negative Affect | 1.28 | .53 | -.04 | -.12 | .08 | .20 | .11 | .08 | -.01 | .30* |
| 19 | Helper's Relatedness | 2.89 | .75 | .01 | .37** | -.10 | .07 | .54** | -.14 | -.08 | .10 |
| 20 | Helpers' Competence | 3.59 | .77 | .17 | .10 | .11 | .03 | .64** | -.22 | -.06 | -.01 |

# Table 5 (cont'd)

| | Variables | Mean | SD | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | Helper's helping toward strangers | .13 | .33 | - | | | | | | | |
| 10 | Recipient's helping toward helpers | 4.26 | .90 | .05 | - | | | | | | |
| 11 | Recipient's helping toward strangers | .18 | .38 | .10 | .16 | - | | | | | |
| 12 | Helper's Guilt | 1.63 | .82 | .02 | .17 | .04 | (.95) | | | | |
| 13 | Helper's Shame | 1.47 | .58 | -.12 | .26* | .07 | .62** | (.94) | | | |
| 14 | Recipient's Anger | 1.26 | .49 | .02 | -.25 | .01 | -.19 | -.13 | (.95) | | |
| 15 | Helper's Positive Affect | 2.20 | 1.04 | .04 | .02 | -.13 | .01 | .21 | .10 | (.96) | |
| 16 | Recipient's Positive Affect | 2.22 | .97 | .07 | -.01 | -.06 | .07 | .03 | .10 | .06 | (.89) |
| 17 | Helper's Negative Affect | 1.33 | .48 | .04 | .27* | -.00 | .64** | .75** | -.08 | .33** | -.01 |
| 18 | Recipient's Negative Affect | 1.28 | .53 | .09 | -.30* | -.13 | -.07 | .06 | .60** | .09 | .45** |
| 19 | Helper's Relatedness | 2.89 | .75 | .09 | -.06 | -.07 | -.14 | -.02 | .11 | .57** | .04 |
| 20 | Helpers' Competence | 3.59 | .77 | -.03 | -.02 | -.15 | -.22 | -.02 | .04 | .65** | .00 |

**Table 5 (cont'd)**

| Variables | Mean | SD | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|
| 17 Helper's Negative Affect | 1.33 | .48 | (.95) | | | |
| 18 Recipient's Negative Affect | 1.28 | .53 | -.01 | (.94) | | |
| 19 Helper's Relatedness | 2.89 | .75 | -.05 | .16 | (.65) | |
| 20 Helpers' Competence | 3.59 | .77 | -.11 | .05 | .53** | (.61) |

[a]N = 126.  Cronbach's alphas are presented in parentheses along the diagonal. * p <.05,  ** p < .01.

[b]Manipulated conditions coded as 1=low 2=high.

Likewise, the autonomous helping motives (manipulated) by other-oriented helping motives (manipulated) interaction was not significant in predicting recipient anger (b = -.17, CR= -1.35, *ns*). The recipient autonomy attributions by recipient other-oriented attribution interaction was not significantly related to recipient anger (b = .05, CR= .31, *ns*).

Recipient anger was not significantly related to recipients' subsequent helping OCB towards helpers (b = 1.06, CR= .86, *ns*). Similarly, there was no significant relationship between recipient anger and subsequent helping OCB towards strangers (b = -1.36, CR= -.97, *ns*).

The helpers' guilt by recipients' anger interaction was not significantly related to helpers' subsequent helping OCB (b = .06, CR= .24, *ns*). The helpers' shame by recipients' anger interaction was not significantly related to helpers' subsequent helping OCB (b = -.15, CR= -1.04, *ns*). These results bolster the strength of my findings showing that the hypotheses have unique relevance to pride and gratitude, but not to guilt, shame, or anger.

# Table 6

## Supplementary APIM Analysis for Guilt, Shame, & Anger[a]

| | Alternative Explanations for Hypotheses 1-3 | |
|---|---|---|
| | **B** | **CR** |
| Autonomous motives→Guilt | .36 | 1.30 |
| Other-oriented motives→Guilt | .02 | .07 |
| Autonomous × Other-oriented motives→Guilt (H1) | .10 | 1.04 |
| Autonomous motives→Shame | .45 | 1.17 |
| Other-oriented motives→Shame | .36 | 1.02 |
| Autonomous × Other-oriented motives→Shame (H1) | .16 | 1.22 |
| Autonomous motives→Anger | -.64 | -1.64 |
| Other-oriented motives→Anger | .91* | 2.56 |
| Autonomous × Other-oriented motives→Anger (H2) | -.17 | -1.35 |
| Autonomous attributions→Anger | .18 | .55 |
| Other-oriented attributions→Anger | .23 | .46 |
| Autonomous × Other-oriented attributions→Anger (H3) | .05 | .31 |

| | Alternative Explanation for Hypothesis 4 | |
|---|---|---|
| | **B** | **CR** |
| Anger→Recipient's helping OCB toward helpers (H4) | 1.03 | .79 |

| | Alternative Explanation for Hypothesis 5 | |
|---|---|---|
| | **B** | **CR** |
| Anger→Recipient's helping OCB toward strangers (H5) | -1.50 | -.93 |

| | Alternative Explanations for Hypotheses 6-7 | |
|---|---|---|
| | **B** | **CR** |
| Guilt→Helper's helping OCB toward recipient | -.25 | -.30 |
| Anger→Helper's helping OCB toward recipient | .22 | .35 |
| Guilt × Anger→Helper's helping OCB toward recipient (H6) | .06 | .24 |
| Shame→Helper's helping OCB toward recipient | .39 | .90 |
| Shame × Anger→Helper's helping OCB toward recipient (H7) | -.15 | -1.04 |

[a]B parameter estimates should be interpreted as unstandardized regression coefficients. The CR

should be interpreted as B parameter estimate divided by its standard error. * p <.05,  ** p < .01.

A large body of research shows that overall positive affect influences helping (Isen et al., 1976; Isen & Levin, 1972). Additionally, pride and gratitude are specific forms of overall positive affect. Thus, it is possible that the effects of overall positive affect could substitute for the specific effects of pride and gratitude. To assess whether my results were due to positive affect, I tested whether the hypotheses including specific positive affective states (pride and gratitude) were applicable to overall positive affect by conducting parallel analyses for overall positive affect. I used Watson, Clark, and Tellegan (1988) items to measure overall positive affect. None of these analyses were significant (see Table 7). The autonomous helping motives (manipulated) by other-oriented helping motives (manipulated) interaction was not significant in predicting helper positive affect (b = .03, CR= .62, *ns*). Likewise, the autonomous helping motives (manipulated) by other-oriented helping motives (manipulated) interaction was not significant in predicting recipient positive affect (b = -.06, CR= -.93, *ns*). The recipient autonomy attribution by recipient other-oriented attribution interaction was not significantly related to recipient positive affect (b = -.02, CR= -.15, *ns*).

Recipient positive affect was not significantly related to recipients' subsequent helping OCB towards helpers (b = -.70, CR= -.54, *ns*). Similarly, there was no significant relationship between recipient positive affect and subsequent helping OCB towards strangers (b = .13, CR= .06, *ns*). The helpers' positive affect by recipients' positive affect interaction was not significantly related to helpers' subsequent helping OCB (b = -.11, CR= -.73, *ns*). These results further support the strength of my findings and show that the hypotheses have unique relevance to the specific positive affective states of pride and gratitude, but not to overall positive affect.

**Table 7**

**Supplementary APIM Analysis for Overall Positive Affect[a]**

| | Alternative Explanations for Hypotheses 1-3 | |
| --- | --- | --- |
| | B | CR |
| Autonomous motives→Helper positive affect | .24 | 1.50 |
| Other-oriented motives→Helper positive affect | -.04 | -.18 |
| Autonomous × Other-oriented motives→Helper positive affect (H1) | .03 | .62 |
| Autonomous motives→Recipient positive affect | -.01 | -.11 |
| Other-oriented motives→Recipient positive affect | -.15 | -1.74 |
| Autonomous × Other-oriented motives→Recipient positive affect (H2) | -.06 | -.93 |
| Autonomous attributions→Recipient positive affect | .23 | .71 |
| Other-oriented attributions→Recipient positive affect | .54 | 1.32 |
| Autonomous × Other-oriented attributions→Recipient positive affect (H3) | -.02 | -.15 |

| | Alternative Explanation for Hypothesis 4 | |
| --- | --- | --- |
| | B | CR |
| Recipient positive affect→ Recipient's helping OCB toward helpers (H4) | -.70 | -.54 |

| | Alternative Explanation for Hypothesis 5 | |
| --- | --- | --- |
| | B | CR |
| Recipient positive affect → Recipient's helping OCB toward strangers (H5) | .13 | .06 |

| | Alternative Explanations for Hypotheses 6-7 | |
| --- | --- | --- |
| | B | CR |
| Helper positive affect →Helper's helping OCB toward recipient | .33 | .87 |
| Recipient positive affect→Helper's helping OCB toward recipient | .33 | .80 |
| Helper positive affect × Recipient positive affect →Helper's helping OCB toward recipient (H6,7) | -.11 | -.73 |

[a]B parameter estimates should be interpreted as unstandardized regression coefficients. The CR

should be interpreted as B parameter estimate divided by its standard error. * $p < .05$,  ** $p < .01$.

Some research shows a relationship between overall negative affect and helping (Cialdini, Darby, & Vincent, 1973; Cunningham, Steinberg, & Grev, 1980; Manucia et al., 1984). Thus, overall negative affect might be a possible predictor of helping OCB, instead of pride and gratitude. To rule out this possibility, I tested whether the hypotheses about specific positive affective states (pride and gratitude) were applicable to overall negative affect by conducting parallel analyses for overall negative affect (See Table 8). I used Watson, Clark, and Tellegan (1988) items to measure overall negative affect. The autonomous helping motives (manipulated) by other-oriented helping motives (manipulated) interaction was not significant in predicting helper negative affect (b = .23, CR= 1.95, *ns*).

The autonomous helping motives (manipulated) by other-oriented helping motives (manipulated) interaction was not significant in predicting recipient negative affect (b = -.16, CR= -1.06, *ns*). The recipient autonomy attribution by recipient other-oriented attribution interaction was not significantly related to recipient negative affect (b = -.04, CR= -.21, *ns*). Recipient negative affect was significantly related to recipients' subsequent helping OCB towards helpers (b = 3.24, CR= 2.48, *p* < .05). However, there was no significant relationship between recipient negative affect and subsequent helping OCB towards strangers (b = -1.05, CR= -.50, *ns*). The helpers' negative affect by recipients' negative affect interaction was not significantly related to helpers' subsequent helping OCB (b = .06, CR= .49, *ns*). Given that most of hypotheses including overall negative affect were not supported, results suggest the model has greater relevance specifically to pride and gratitude than overall negative affect.

**Table 8**

**Supplementary APIM Analysis for Overall Negative Affect[a]**

| | **Alternative Explanations for Hypotheses 1-3** | |
| --- | --- | --- |
| | **B** | **CR** |
| Autonomous motives→Helper negative affect | .41** | 3.30 |
| Other-oriented motives→Helper negative affect | -.63** | -3.24 |
| Autonomous × Other-oriented motives→Helper negative affect (H1) | .23 | 1.95 |
| Autonomous motives→Recipient negative affect | .21 | 1.25 |
| Other-oriented motives→Recipient negative affect | .35 | 1.06 |
| Autonomous × Other-oriented motives→Recipient negative affect (H2) | -.16 | -1.06 |
| Autonomous attributions→Recipient negative affect | -.23 | -.54 |
| Other-oriented attributions→Recipient negative affect | .44 | .72 |
| Autonomous × Other-oriented attributions→Recipient negative affect (H3) | -.04 | -.21 |

| | **Alternative Explanation for Hypothesis 4** | |
| --- | --- | --- |
| | **B** | **CR** |
| Recipient negative affect→Recipient's helping OCB toward helpers (H4) | 3.24* | 2.48 |

| | **Alternative Explanation for Hypothesis 5** | |
| --- | --- | --- |
| | **B** | **CR** |
| Recipient negative affect → Recipient's helping OCB toward strangers (H5) | -1.05 | -.50 |

| | **Alternative Explanations for Hypotheses 6-7** | |
| --- | --- | --- |
| | **B** | **CR** |
| Helper negative affect →Helper's helping OCB toward recipient | -.49 | -1.04 |
| Recipient negative affect→Helper's helping OCB toward recipient | -.06 | -.19 |
| Helper negative affect × Recipient negative affect →Helper's helping OCB toward recipient (H6,7) | .06 | .49 |

[a]B parameter estimates should be interpreted as unstandardized regression coefficients. The CR

should be interpreted as B parameter estimate divided by its standard error. * $p < .05$, ** $p < .01$.

64

Self-determination theory (Deci & Ryan, 2000) posits that relatedness and competence as well as autonomy are basic psychological needs that guide human behaviors. Thus, I also assessed whether relatedness and competence would substitute for autonomous motives. To exclude this alternative explanation and bolster the strength of original findings, I tested whether either relatedness or competence in conjunction with other-oriented motives predict authentic pride and gratitude (See Table 9 & 10). I used La Guardia and colleagues' (2000) items to measure relatedness and competency.

As shown in Table 8, the other-oriented motives by relatedness interaction was not significant in predicting helper authentic pride (b = -.20, CR= -.84, *ns*). Likewise, the other-oriented motives by relatedness interaction was not significant in predicting recipient gratitude (b = -.77, CR= -1.87, *ns*). The recipient other-oriented attribution by recipient relatedness attribution interaction was not significantly related to recipient gratitude (b = .13, CR= .68, *ns*).

**Table 9**

**Supplementary APIM Analysis for Relatedness**[a]

| | Alternative Explanations for Hypotheses 1-3 | |
|---|---|---|
| | **B** | **CR** |
| Other-oriented Motives→Authentic Pride | 1.23 | 1.59 |
| Relatedness→Authentic Pride | .47 | .49 |
| Other-oriented Motives × Relatedness →Authentic Pride (H1) | -.20 | -.84 |
| Other-oriented Motives→Hubristic Pride | .26 | .16 |
| Relatedness→Hubristic Pride | -.49 | -.34 |
| Other-oriented Motives × Relatedness →Hubristic Pride | -.08 | -.18 |
| Other-oriented Motives→Gratitude | 2.28 | 1.53 |
| Relatedness→Gratitude | 3.22* | 2.20 |
| Other-oriented Motives × Relatedness→Gratitude (H2) | -.77 | -1.87 |
| Other-oriented attributions→Gratitude | -.67 | -1.01 |
| Relatedness attributions→Gratitude | .12 | .18 |
| Other-oriented × Relatedness attributions→ Gratitude (H3) | .13 | .68 |

| | Alternative Explanation for Hypothesis 4 | |
|---|---|---|
| | **B** | **CR** |
| Gratitude→Recipient's helping OCB toward helpers (H4) | .35* | 2.51 |

| | Alternative Explanation for Hypothesis 5 | |
|---|---|---|
| | **B** | **CR** |
| Gratitude→Recipient's helping OCB toward strangers (H5) | .36 | .21 |

| | Alternative Explanations for Hypotheses 6-7 | |
|---|---|---|
| | **B** | **CR** |
| Authentic Pride→Helper's helping OCB toward recipient | -.38 | -.64 |
| Gratitude→Helper's helping OCB toward recipient | -1.03 | -.90 |
| Authentic Pride × Gratitude→Helper's helping OCB toward recipient (H6) | .29 | .20 |
| Hubristic Pride→Helper's helping OCB toward recipient | -1.29 | -.51 |
| Hubristic Pride × Gratitude→Helper's helping OCB toward recipient  (H7) | .48 | .64 |

[a]B parameter estimates should be interpreted as unstandardized regression coefficients. The CR

should be interpreted as B parameter estimate divided by its standard error. * p <.05,  ** p < .01.

As shown in Table 10, the other-oriented motives by competence interaction was not significant in predicting helper authentic pride (b = -.03, CR= -.47, *ns*). Likewise, the other-oriented motives by competence interaction was not significant in predicting recipient gratitude (b = .03, CR= .35, *ns*). The recipient other-oriented attribution by recipient competence attribution interaction was not significantly related to recipient gratitude (b = .08, CR= .94, *ns*). In sum, these supplementary analysis results rule out alternative models involving guilt, shame, anger, overall positive affect, overall negative affect, relatedness, and competence.

# Table 10

## Supplementary APIM Analysis for Competence[a]

| | Alternative Explanations for Hypotheses 1-3 | |
|---|---|---|
| | **B** | **CR** |
| Other-oriented Motives→Authentic Pride | .02 | .10 |
| Competence→Authentic Pride | .31 | 1.31 |
| Other-oriented Motives × Competence→Authentic Pride (H1) | -.03 | -.47 |
| Other-oriented Motives→Hubristic Pride | .47* | 1.99 |
| Competence→Hubristic Pride | .22 | 1.13 |
| Other-oriented Motives × Competence→Hubristic Pride | -.09 | -1.12 |
| Other-oriented Motives→Gratitude | .11 | .54 |
| Competence→Gratitude | -.24 | -.91 |
| Other-oriented Motives × Competence→Gratitude (H2) | .03 | .35 |
| Other-oriented attributions→Gratitude | -.01 | -.03 |
| Competence attributions→Gratitude | -.01 | -.03 |
| Other-oriented × Competence attributions→Gratitude (H3) | .08 | .94 |

| | Alternative Explanation for Hypothesis 4 | |
|---|---|---|
| | **B** | **CR** |
| Gratitude→Recipient's helping OCB toward helpers (H4) | .32** | 2.98 |

| | Alternative Explanation for Hypothesis 5 | |
|---|---|---|
| | **B** | **CR** |
| Gratitude→Recipient's helping OCB toward strangers (H5) | .59 | .29 |

| | Alternative Explanations for Hypotheses 6-7 | |
|---|---|---|
| | **B** | **CR** |
| Authentic Pride→Helper's helping OCB toward recipient | -.49 | -1.28 |
| Gratitude→Helper's helping OCB toward recipient | -1.03 | -.90 |
| Authentic Pride × Gratitude→Helper's helping OCB toward recipient (H6) | .32* | 2.27 |
| Hubristic Pride→Helper's helping OCB toward recipient | -1.55 | -1.38 |
| Hubristic Pride × Gratitude→Helper's helping OCB toward recipient (H7) | .55 | 1.84 |

[a]B parameter estimates should be interpreted as unstandardized regression coefficients. The CR

should be interpreted as B parameter estimate divided by its standard error. * p <.05,  ** p < .01.

**Tests of the Hypotheses using OLS**

Although APIM enables scholars to answer questions which cannot be addressed by using traditional analytical approaches, APIM does not negate the utility of such analytical approaches. Instead, APIM provides a more complete understanding of dyadic relationships when it is used as a complement to traditional analytical approaches (Krasikova & LeBreton, 2012). Therefore, I also tested all hypotheses with Ordinary Least Square (OLS) regression analyses shown in Table 11, 12, and 13 in addition to the above APIM results. Figure 12 summarizes all tests of the hypotheses by OLS.

**Figure 12**

**Overall OLS Results[a]**
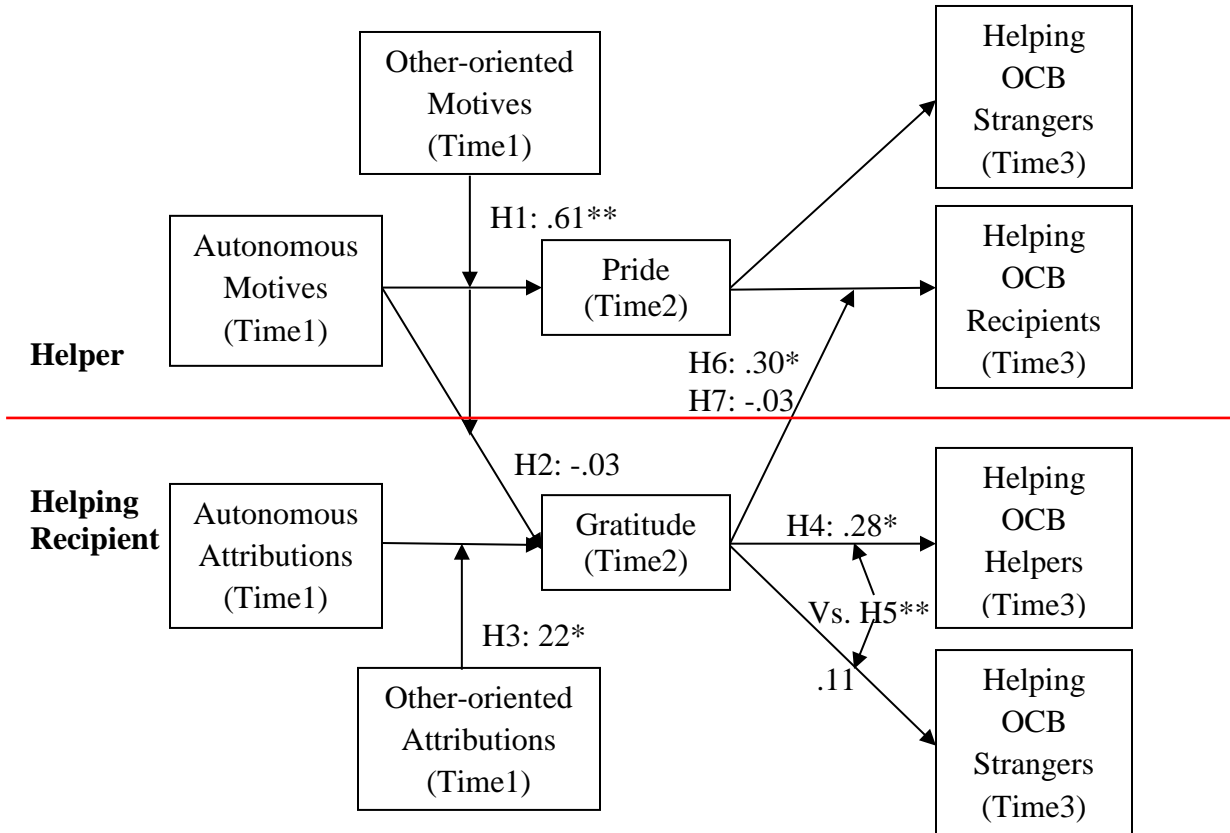
The autonomous helping motives (manipulated) by other-oriented helping motives

(manipulated) interaction (see Figure 9) was significant in predicting authentic pride ($\beta$ = .61, $p$ <

.01; F = 3.45, $\Delta$F = 7.60). Therefore, Hypothesis 1 was supported.

However, the autonomous helping motives (manipulated) by other-oriented helping

motives (manipulated) interaction was not significant in predicting gratitude ($\beta$ = -.03, $ns;$ F =

3.65, $\Delta$F = .10). Thus, Hypothesis 2 was not supported.

The recipient autonomy attributions by recipient other-oriented attribution interaction

(see Figure 13) was significantly related to gratitude ($\beta$ = .22, $p$ < .05; F = 13.26, $\Delta$F = 4.07).

Simple slope analysis showed a positive relation of recipient autonomy attributions with

gratitude when recipient other-oriented attributions are high ($\beta$ = .59, $p$ < .01), but no relation of

recipient autonomy attributions with gratitude when other-oriented attributions are low ($\beta$ =.13, $p$

> .05). Thus, Hypothesis 3 was supported.

**Figure 13**

**The Interactive Effects of Recipients' Attributions for Helping Motives on Recipients'**

**Gratitude (OLS)**
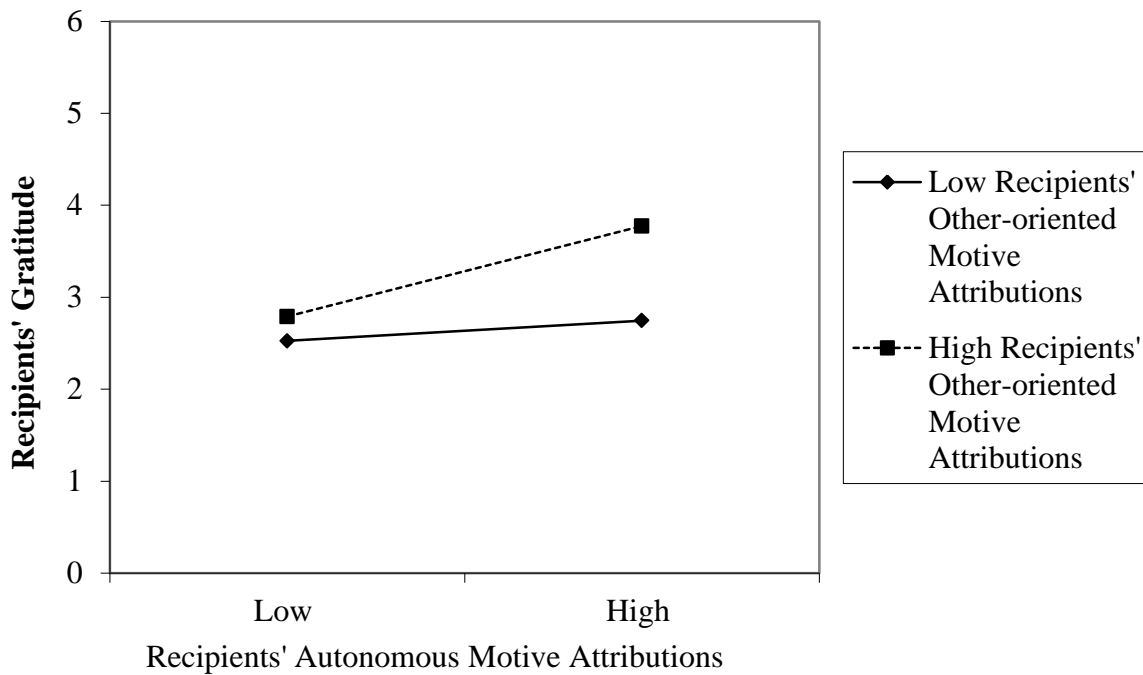


Consistent with Hypothesis 4, there was a positive relationship between recipient

gratitude and recipients' subsequent helping OCB towards helpers ($\beta$ = .28, $p$ < .05; F = 4.86, $\Delta$F

= 4.86). Accordingly, results supported Hypothesis 4.

71

Consistent with Hypothesis 5, there was a positive relationship between recipient gratitude and subsequent helping OCB towards helpers ($\beta = .28$, $p < .05$; F = 4.86, $\Delta$F = 4.86), but no significant relationship between recipient gratitude and subsequent helping OCB towards strangers ($\beta = .11$, *ns;* F = .73, $\Delta$F = .73). Accordingly, results supported Hypothesis 5.

The helpers' authentic pride by recipients' gratitude interaction (see Figure 14) was significantly related to helpers' subsequent helping OCB ($\beta = .30$, $p < .05$; F = 2.67, $\Delta$F = 4.88). Simple slope analysis showed a positive relation between helpers' authentic pride and helpers' subsequent helping OCB when recipients' gratitude is high ($\beta = .37$, $p < .05$), but not when it is low ($\beta = -.24$, *ns*). Overall, Hypothesis 6 was supported.

**Figure 14**

**The Interactive Effects of Helpers' Authentic Pride and Recipients' Gratitude on Helpers' Subsequent Helping OCB to Recipients (OLS)**
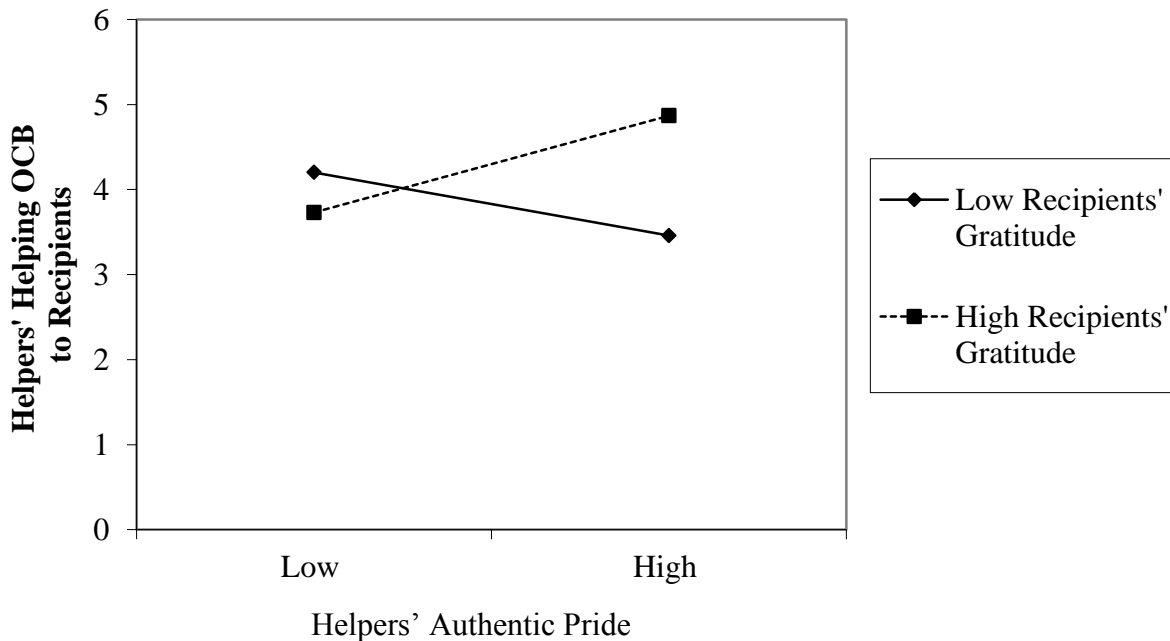
The helpers' hubristic pride by recipients' gratitude interaction was not significantly related to helpers' subsequent helping OCB ($\beta = -.03$, *ns;* F = .48, $\Delta$F = .04). Thus, Hypothesis 7 was not supported.

**Table 11**

**Supplementary OLS Analysis for Dyadic Helping Process (Hypothesis 1, 2, 3)[a]**

| Predictors | Helper's Authentic Pride | | Recipient's Gratitude | | | |
|---|---|---|---|---|---|---|
| | Step 1 ($\beta$) | Step2 ($\beta$) | Step 1 ($\beta$) | Step2 ($\beta$) | Step 1 ($\beta$) | Step2 ($\beta$) |
| Helper's Autonomous motives [b] | .18 | -.18 | .34** | .36* | - | - |
| Helper's Other-oriented motives [b] | .02 | -.41* | .18 | .19 | - | - |
| Recipient's Autonomous attributions | | - | | - | .36* | .36** |
| Recipient's Other-oriented attributions | | - | | - | .31* | .38** |
| HAM × HOM | | .61**(H1) | | -.03(H2) | | - |
| RAM × ROM | | | | | | .22*(H3) |
| $R^2$ | .03 | .19 | .16 | .16 | .37 | .41 |
| $\Delta R^2$ | | .16 | | .00 | | .04 |
| F | .99 | 4.57* | 5.56** | 3.65* | 16.97** | 13.26** |
| $\Delta F$ | | 11.39** | | .01 | | 4.07* |

[a]Note: HAM indicates Helper's Autonomous motives, HOM indicates Helper's Other-oriented

motives, RAM indicates Recipient's Autonomous attributions, and ROM indicates Recipient's

Other-oriented attributions. * p <.05,  ** p < .01.

[b]Manipulated conditions coded as 1=low 2=high.

**Table 12**

**Supplementary OLS Analysis for Dyadic Helping Process (Hypothesis 4, 5)[a]**

|  | Recipient's Helping OCB toward Helpers | Recipient's Helping OCB toward Strangers |
|---|---|---|
| **Predictors** | **Step 1** ($\beta$) | **Step 1** ($\beta$) |
| Recipient's Gratitude | .27*(H4) | .11(H5) |
| $R^2$ | .07 | .01 |
| F | 4.86* | .73 |

[a]* $p < .05$,  ** $p < .01$.

**Table 13**

**Supplementary OLS Analysis for Dyadic Helping Process (Hypothesis 6, 7)[a]**

|  | Helper's Helping OCB | | | |
|---|---|---|---|---|
| **Predictors** | **Step 1** ($\beta$) | **Step2** ($\beta$) | **Step 1** ($\beta$) | **Step 2** ($\beta$) |
| Helper's Authentic pride | .16 | .06 | - | - |
| Helper's Hubristic pride | - | - | -.01 | -.01 |
| Recipient's Gratitude | .18 | .15 | .15 | .15 |
| HAP × RG |  | .29*(H6) |  | - |
| HHP × RG |  |  |  | -.03(H7) |
| $R^2$ | .05 | .13 | .02 | .03 |
| $\Delta R^2$ |  | .08 |  | .01 |
| F | 1.47 | 2.67* | .71 | .48 |
| $\Delta F$ |  | 4.88* |  | .04 |

[a]Note: HAP indicates Helper's Authentic pride, HHP indicates Helper's Hubristic pride, and RG

indicates Recipient's Gratitude. * $p < .05$,  ** $p < .01$.

**DISCUSSION**

This research drew on SCT (Bandura, 1977, 1997) to propose a dyadic helping OCB process model. This approach has four key strengths. First, I emphasized the importance of investigating ongoing helping OCB processes between helpers and helping recipients. Applying Bandura's arguments about dyadic processes of human actions to helping OCB, I proposed that previous helping OCB influences subsequent helping OCB through helpers' and recipients' affective states.

Second, I took an affective perspective on helping OCB (Dalal, et al., 2009; Lawler & Thye, 1999) and simultaneously considered helpers' affective states and recipients' affective states during dyadic helping OCB interactions. I proposed that pride and gratitude were respectively well suited for helpers' and recipients' roles within dyadic helping processes. In particular, I posited that helpers' motives would predict helpers' pride and recipients' gratitude, and then helpers' pride and recipients' gratitude would influence subsequent helping OCB.

Going beyond the independent effects of helpers' pride and recipients' gratitude on subsequent helping OCB, I was also considered the joint effects of helpers' pride and recipients' gratitude on subsequent helping OCB because this recognizes both participants in the dyadic interaction. Further, given that helping OCB has been conceptualized as intended to benefit recipients (Van Dyne et al., 1995), I proposed that helpers would pay attention to recipients' affective reactions (gratitude) as well as their own affective reactions (pride) when ascertaining the outcomes of their helping OCB. I specifically argued that helpers' own responses to their initial helping OCB (pride) in conjunction with the recipients' response (gratitude) would predict helpers' subsequent helping OCB.

Finally, I took a systematic approach and identified two motives that drive helping OCB. Previous research on motives for helping OCB has generated lists of motives in the absence of a systematic framework that articulates similarities and differences in motives. Drawing on SCT's emphasis on motives for human actions, I argued that combining self-determination theory (SDT; Deci & Ryan, 2000) and dual concern theory (Pruitt & Rubin, 1986) provides a conceptual framework for thinking about helping OCB motives. The integration of self-determination theory and dual concern theory suggested two important helping motives—autonomous helping motives and other-oriented helping motives that should influence helper pride and recipient gratitude, but also influence the subsequent helping OCB of both individuals in the dyad.

To test these hypotheses, I conducted a lab experiment using random assignments and manipulations for the two helping motives. In the following section, I provide a brief summary of findings and then discuss the strengths, theoretical and practical implications, and limitations of this study.

**Summary of Findings**

Table 14 summarizes my findings using both APIM and OLS. Overall, results are the same. Given the rigor of APIM, I will focus primarily on the APIM results.

**Table 14**

**A Summary of Tests of Hypotheses using APIM and OLS**

|  | APIM | OLS |
|---|---|---|
| **Hypothesis 1** | Supported | Supported |
| **Hypothesis 2** | Not supported | Not supported |
| **Hypothesis 3** | Supported | Supported |
| **Hypothesis 4** | Supported | Supported |
| **Hypothesis 5** | Supported | Supported |
| **Hypothesis 6** | Supported | Supported |
| **Hypothesis 7** | Not supported | Not supported |

First, results indicated that other-oriented motives (manipulated) significantly interacted with autonomous motives (manipulated) on helper's authentic pride. Consistent with the prediction, autonomous motives were positively related to authentic pride only when other-oriented motives were high. This finding suggests that autonomous motives alone are not sufficient to induce authentic pride. Instead, helpers experience authentic pride about their helping OCB when they have a sense of volition to choose to help and they also care about the recipients' well-being. Both APIM and OLS interactions showed a positive relationship between autonomous motives and authentic pride when other-oriented motives were high and this strengthens my confidence in the relationship, suggesting useful insights into the joint effects of motives on helper authentic pride.

In particular, research on helping OCB motives has triggered debate about impression management helping versus other-oriented helping (Bolino et al., 2004). To date, most research has focused on main effects of different motives. For example, Rioux and Penner (2001) argued that prosocial values, impression management, and organizational concern motives independently predict OCB. Likewise, Weinstein and Ryan (2011) showed that well-being was higher for helpers high in autonomous motives than helpers high in controlled motives. These

studies imply that some employees engage in OCB to serve one set of motives, but others engage in OCB to serve another set of motives. Accordingly, these designs considered outcomes of helping OCB (i.e., helpers' well-being) as influenced by only one set of motives or the other, but not both. One exception is the work of Grant and Mayer (2009). They demonstrated that helping OCB was influenced by both prosocial values motives and impression management motives, such that impression management motives strengthened the positive relationship between prosocial values motives and helping OCB. Complementing their work, my findings demonstrate that people engage in helping OCB to simultaneously serve their autonomous and other-oriented motives and that these two motives jointly lead to helpers' authentic pride. Additionally, given that I manipulated the two helping OCB motives, my findings allow strong causal inferences regarding the relationship between the two motives and authentic pride.

Second, the interactive effects of autonomous motives and other-oriented motives did not influence recipients' gratitude. This is consistent with Kanfer's distal-proximal motivation framework (1990), which makes a distinction between distal and proximal individual differences and argues that proximal predictors have more impact on outcomes. Given that actual helper motives are more distal to recipients than the attributions they make about motives, this may help explain why my analyses supported Hypothesis 3 but did not support Hypothesis 2. In sum, recipients' gratitude was more strongly influenced by their attributions than by helpers' actual motives.

Third, although results demonstrated the expected positive relationship between recipient autonomy attributions and recipient gratitude when recipient other-oriented attributions were high, the negative relationship when other-oriented attributions were low suggests the following possibilities as material for future research. Specifically, recipients seem to react more negatively

when they view helpers as having autonomy but low concern for the recipients' welfare. From recipients' point of view, helpers with low autonomy may seem less responsible for their low concern for the recipients' welfare compared to helpers with high autonomy. This is because helpers perceived as low in autonomy have no choice to help recipients and this may reduce the salience of other-oriented motive attributions. Alternatively, the negative relationship could be due to unique characteristics of this sample or the relatively high correlation between attributions for the two motives ($r = .64$, $p < .01$). This highlights the importance of future research that attempts to replicate the findings on different samples with different designs.

It is important to note that the OLS results for Hypothesis 3 showed the different pattern of interaction, such that there was the positive relationship between recipients' autonomous attributions and recipients' gratitude when recipients' other-oriented attributions were high, but no significant relationship between autonomous attributions and recipients' gratitude when recipients' other-oriented attributions were low. This difference between the APIM and OLS results could be due to statistical differences in the software algorithm. Specifically, analyzing dyadic data using OLS regression might create model misspecification and biased parameter estimates (Kline, 2005). Thus, I place primary emphasis on the APIM results and highlight the consistent positive relationship between autonomous attributions and gratitude when other-oriented attributions were high.

Next, the interactive effects of helper authentic pride and recipients' gratitude in predicting subsequent helping suggest important insights about the role of pride. Authentic pride alone was not sufficient to facilitate subsequent helping OCB. Instead, the relationship is more complex and contingent on reactions of the partner, because helpers engage in subsequent helping only when recipients show gratitude for previously received help. Again, this reinforces

80

the value of taking a dyadic approach to helping OCB and considering both helper and recipient affective states such as authentic pride and gratitude.

I note that the null relationship between authentic pride and helping OCB is consistent with previous mixed findings on pride-prosocial behaviors. More importantly, my findings reveal that the prior conflicting results could be due to a focus on main effects and insufficient consideration of boundary conditions that qualify pride-prosocial behavior relationships. In sum, the interaction shows that subsequent helping OCB is shaped by both partners: helpers' authentic pride and recipients' gratitude.

In contrast, helper hubristic pride and recipient gratitude did not interact to predict helper subsequent helping to recipients. Perhaps, conceptual differences between authentic and hubristic pride account for this difference. For example, authentic pride and hubristic pride have two distinctive nomological networks. Authentic pride is positively related to positive traits including extraversion, agreeableness, conscientiousness, and genuine self-esteem and prosocial behaviors. In contrast, hubristic pride is positively related to self-aggrandizing narcissism, shame-proneness, and antisocial behaviors including aggression and intimidation (Lewis, 2000; Tracy & Robins, 2007a, b). In sum, the different results for the two types of pride provide further empirical evidence of conceptual distinctions between the two constructs. The importance of being precise in defining and measuring different types of pride suggests the value of continued theorizing and empirical research on similarities and differences in the two types of pride. Table 15 provides a summary of hypotheses and findings.

**Table 15**

**A Summary of Hypotheses and Findings**
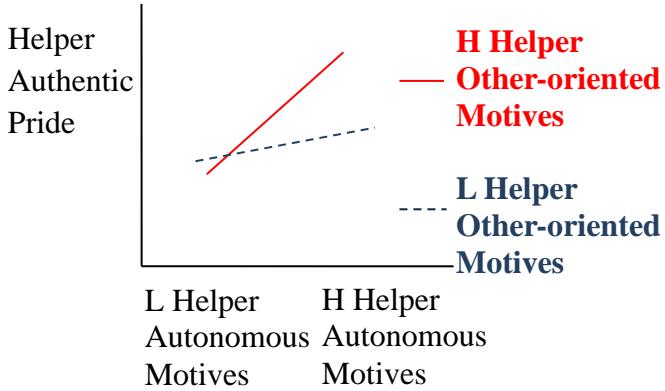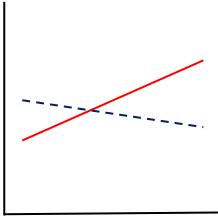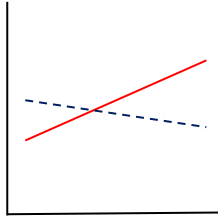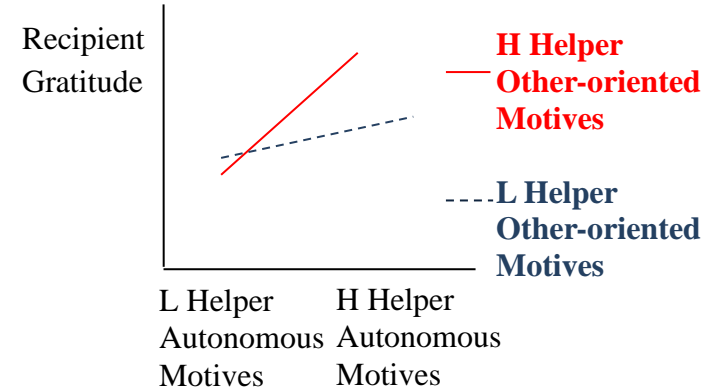
| Hypothesized Relationships | APIM Findings | OLS Findings |
|---|---|---|
| H1: Autonomous × Other-oriented Motives → Authentic Pride | Significant Interaction (Supported) | Significant Interaction (Supported) |

Helper Authentic Pride

**H Helper Other-oriented Motives** (red line)

**L Helper Other-oriented Motives** (dashed line)

L Helper Autonomous Motives    H Helper Autonomous Motives

| | APIM Findings | OLS Findings |
|---|---|---|
| H2: Autonomous × Other-oriented Motives → Gratitude | No Interaction (*NS*) | No Interaction (*NS*) |

Recipient Gratitude

**H Helper Other-oriented Motives** (red line)

**L Helper Other-oriented Motives** (dashed line)

L Helper Autonomous Motives    H Helper Autonomous Motives

**Table 15 (cont'd)**

| | | |
|---|---|---|
| H3: Autonomous × Other-oriented Attributions → Gratitude | Significant Interaction (Supported) | Significant Interaction (Supported) |



Recipient Gratitude

**Recipient Other-oriented Attributions**

**L Recipient Other-oriented Attributions**

L Helper Autonomous Attributions    H Helper Autonomous Attributions
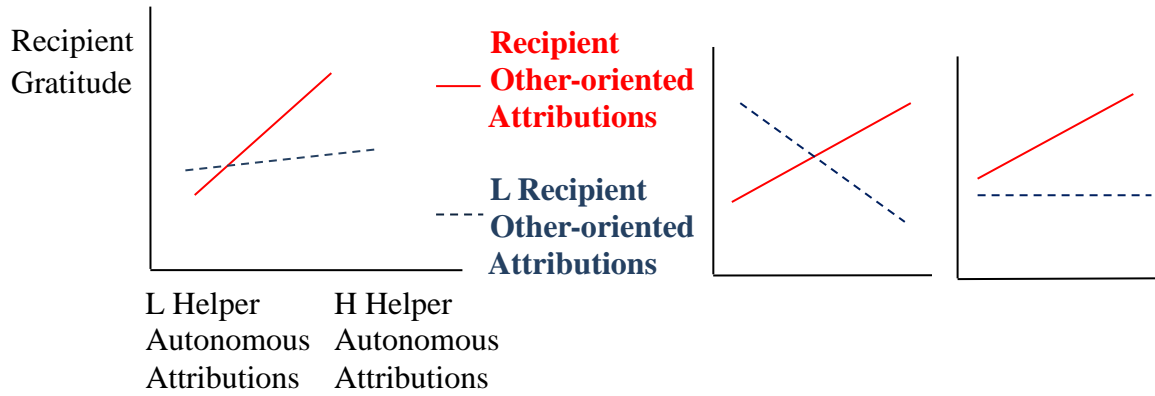
| | | |
|---|---|---|
| H4: Gratitude → Recipients' Helping OCB | Significant Relationship (Supported) | Significant Relationship (Supported) |
| H5: Gratitude → Recipients' Helping OCB to Helpers vs. Gratitude → Recipients' Helping OCB to Strangers | Gratitude → Recipients' Helping OCB to Helpers **Stronger than** Gratitude → Recipients' Helping OCB to Strangers | Gratitude →Recipients' Helping OCB to Helpers **Stronger than** Gratitude →Recipients' Helping OCB to Strangers |
| H6: Authentic Pride × Gratitude → Helpers' Helping OCB to Recipients | Significant Interaction (Supported) | Significant Interaction (Supported) |



Subsequent Helping OCB

**H Recipient Gratitude**

**L Recipient Gratitude**

L Helper Authentic Pride    H Helper Authentic Pride

**Table 15 (cont'd)**

| H7: Hubristic Pride × Gratitude → Helpers' Helping OCB to Recipients | No Interaction (*NS*) | No Interaction (*NS*) |
|---|---|---|



Subsequent Helping OCB

— H Recipient Gratitude

---- L Recipient Gratitude

L Helper Hubristic Pride     H Helper Hubristic Pride
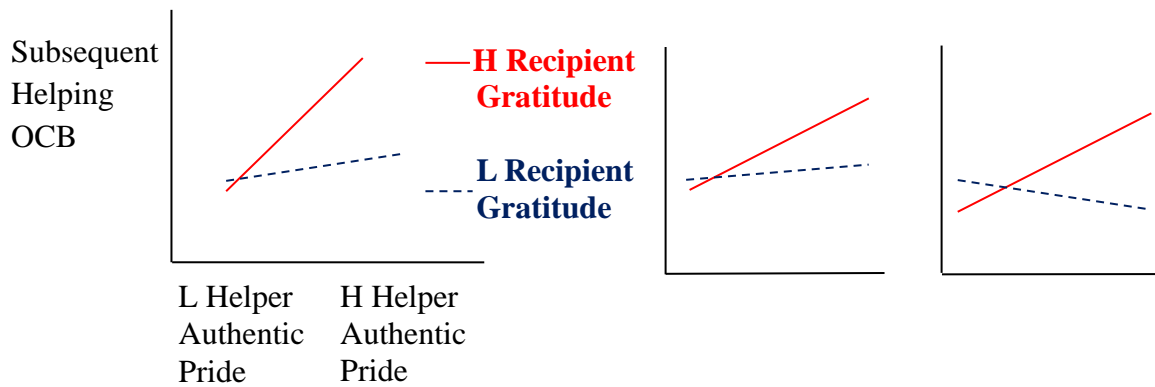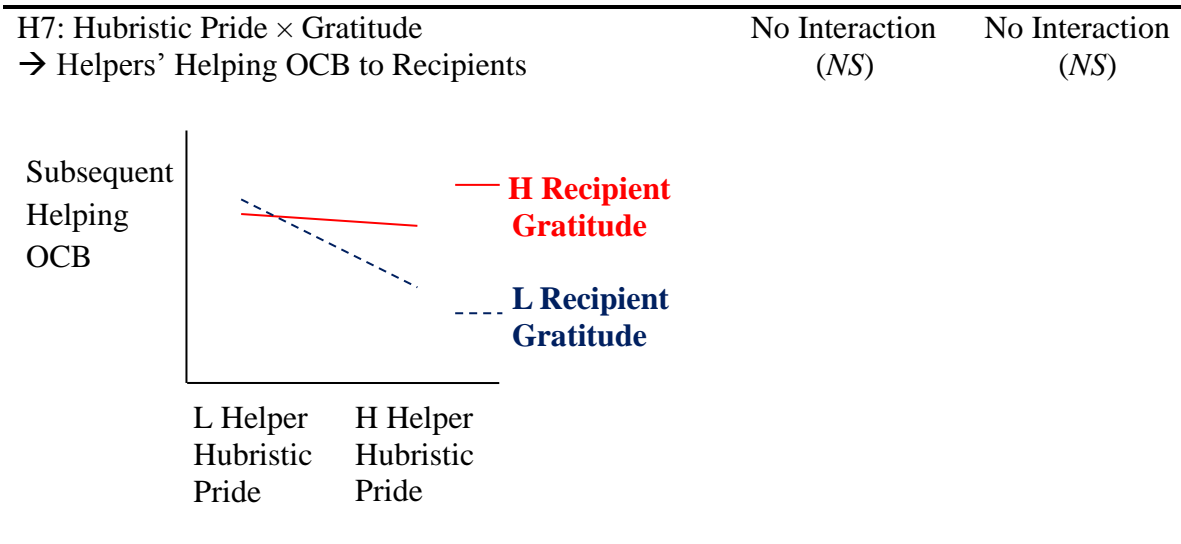
Finally, I note the generally null results of the supplemental analyses because this allows me to rule out alternative explanations for dyadic helping OCB processes. Although guilt, shame, anger, overall positive affect, overall negative affect, relatedness, and competence could be conceptually relevant to ongoing helping OCB, the post hoc results fail to support these rival constructs. There was, however, one exception, because recipient negative affect was significantly related to recipients' subsequent helping towards helpers. This is consistent with the negative relief model that emphasizes the mood-lifting consequences of helping (Cialdini et al., 1973). According to the negative relief model, people experiencing negative affect often help to reduce their negative affect (Zillmann, 1988). Still, the overall null results of the supplementary analyses reinforce the importance of autonomous motives, other-oriented motives, pride, and gratitude for dyadic helping OCB processes.

**Theoretical Implications**

My research has important implications for the helping OCB literature. First, this current

study provides a more complete picture of helping OCB by introducing a dyadic perspective on helping OCB. This is important because even though helping OCB has been conceptualized as a dyadic construct involving ongoing interactions between helper and recipient (Hershcovis & Barling, 2010; Venkataramani & Dalal, 2007), most research has investigated helping OCB from either the helper or recipient perspective, rather than taking a dyadic perspective that accounts for both individuals. My findings generally demonstrate a value of taking a dyadic perspective involving both partners. In particular, recipients' motive attributions influenced recipient's gratitude and the interaction of helper's authentic pride and recipient's gratitude influenced helper's subsequent helping OCB. In other words, the affective states of helpers and recipients interact to produce subsequent helping OCB. These findings confirm the benefits of simultaneously focusing on both helpers and recipients. Thus prior research that has focused on either helpers or recipients is most likely misspecified and provides an incomplete understanding of helping OCB. In addition, failing to consider both helpers and recipients can lead to fragmented research and prevents a more comprehensive view of helping OCB.

Second, this research presents a novel perspective on the effects of affective states in predicting helping OCB. By incorporating two affective states- helpers' pride and recipients' gratitude- into a dyadic perspective on helping OCB, I offer insights into the dynamics of dyadic helping OCB processes. Although prior research has demonstrated independent relationships for pride and gratitude with helping, my research challenges and complements these findings by demonstrating that the interaction of helpers' authentic pride and recipients' gratitude influences helpers' subsequent helping OCB. This is important because it is a first step toward a more nuanced model of helping OCB and results demonstrate the importance of affective states of both members of the dyad. Not only do these findings expand the current understanding of

affective states and helping OCB, the dyadic model can also serve as a foundation for future research on the role of affect in dyadic helping OCB.

Third, my study sheds light on the controversy about the relationship between pride and prosocial behavior in two ways. For example, some research demonstrates that pride is positively related to prosocial behavior (Hart & Matsuba, 2007; Herrald & Tomaka, 2002), but other studies demonstrate negative relationships (Bushman & Baumeister, 1998; Campbell, 1999; Morf & Rhodewalt, 2001; Paulhus et al., 2004). My results provide insights by differentiating two types of pride and showing that the pride and helping OCB relationship is contingent on recipient gratitude. Specifically, authentic pride is positively related to helping OCB when recipients' gratitude is high. Thus, the results help to reconcile previous inconsistent findings for pride-prosocial behavior relationships. For example, prior conflicting findings may be due to deficient conceptualization and measurement of the two types of pride or incomplete models that focus on main effects and omit boundary conditions.

Although this research has major implications for the helping OCB literature, results also deepen our knowledge about helping OCB motives in three ways. First, my study joins with recent studies emphasizing a multiple motivation perspective (Grant, 2008; Grant & Mayer, 2009) on work behaviors by examining the interaction of autonomous and other-oriented motives as predictors of helping OCB. However, my study goes beyond previous research by merging a multiple motivation perspective with a dyadic perspective. Specifically, the interaction of autonomous and other-oriented motives has implications for recipients as well as helpers.

Second, the integration of self-determination theory and dual concern theory provides a conceptual framework for articulating specific reasons why people engage in helping OCB. To the best of my knowledge, my dyadic helping OCB process model is the first to offer a

86

conceptual foundation for focusing on specific motives. This conceptually-based approach

provides a more rigorous lens for understanding helping OCB motives.

Third, my findings provide an important insight into the difference between autonomous

and other-oriented helping motives. Perhaps the most interesting contrast of these two motives is

differences in correlations with other study variables (see Table 3). Interestingly, the overall

pattern of correlations (see Table 3) shows stronger effects for autonomous motives than for

other-oriented motives. For example, autonomous motives (manipulated) were positively

correlated with recipients' gratitude ($r = .51$, $p < .01$), but other-oriented motives (manipulated)

were not ($r = .20$, $ns$). Additionally, autonomous motives were positively correlated with

recipients' autonomous attributions ($r = .36$, $p < .01$), but other-oriented motives were not

positively correlated with recipients' other-oriented attributions ($r = .11$, $ns$). It is possible that

autonomous motives are more strongly related to recipients' reactions to helping OCB than

other-oriented motives because recipients are more aware of autonomous motives. Alternatively,

it is possible that the laboratory manipulation of other-oriented motives was not particularly

effective. Still yet, perhaps autonomy is generally emphasized because the experiment was

conducted in a Western setting which is characterized by individualism and individual

accountability. Perhaps, results would be different in a more collectivistic setting where more

emphasis is generally placed on relationships and concern for others.

Lastly, my study offers support for social cognitive theory (Bandura, 1986). Although

SCT emphasizes the importance of a dyadic perspective on individuals' behaviors, previous

helping studies have not incorporated the core tenants of SCT into the research on helping OCB.

My results are consistent with SCT and demonstrate that both helpers and recipients matter in

predicting subsequent helping OCB.

Additionally, my study extends SCT by integrating Lawler's (2001) affective theory of social exchange with SCT. Even though SCT touches on the effects of affective states on individuals' behavior, the primary focus of SCT has been the effects of cognitions (such as self-efficacy) on individuals' behavior. For example, SCT positions cognitions (i.e., intentionality, forethought, self-reactiveness, and self-reflectiveness) as core determinants of individuals' actions (Bandura, 2008). This stream of research is useful and provides meaningful insights. An exclusive focus on cognitions, however, as determinants of behaviors is problematic because research also demonstrates the importance of affective states in guiding individuals' actions (Weiss & Cropanzano, 1996). More importantly, prior research has documented that helping OCB is influenced by both cognitions and affective states. Little prior research considers both cognitions and affective states as predictors of helping OCB, and how they can be incorporated into a more integrative perspective on helping OCB. An exception is the work of Lee and Allen (2002) who demonstrated significant effects of job affect and job cognitions on OCB. My study joins with Lee and Allen (2002) by incorporating Lawler's (2001) affective theory of social exchange into SCT. The results demonstrate that cognitions such as helping motives lead to affective states such as pride and gratitude. In turn, these affective states jointly predict subsequent helping OCB. In sum, the integration Lawler's (2001) affective theory of social exchange and SCT refines SCT by acknowledging that helping OCB is a function of both cognitive and affective factors.

**Practical Implications**

This study has implications for managers and employees. For managers, the interaction of autonomous and other-oriented motives suggests that managers should reinforce authentic pride by cultivating a culture that emphasizes both autonomous and other-oriented helping motives.

Given that authentic pride in conjunction with gratitude predicts helping OCB, it is important for managers to create an organizational context that highlights the importance of personal autonomy and concern for others. For example, this could involve giving positive feedback publicly to employees who voluntarily help others and show that they genuinely care about the recipients' well-being. Given that my findings show that recipients' helping motive attributions influence their gratitude toward helpers, managers should encourage employees to reflect on why others help them. This should make attributions more salient and it should make recipients more aware that their attributions might differ from helpers' actual motives. Accordingly, managers should sensitize both members of the dyad to the importance of autonomous and other-oriented helping OCB.

For employees, the significant interaction between helper authentic pride and recipient gratitude demonstrates the value of being proactive in expressing gratitude toward helpers. Although everyone is busy and many are overcommitted, recipients should make the time to write thank you notes to their helpers. This will reinforce high quality dyadic relationships and also facilitate future helping OCB. Importantly, expressing gratitude should also enhance employees' own well-being and psychological health because research demonstrates that thinking about specific events that trigger gratitude promotes well-being and makes people less vulnerable to stress (Barusch, 1997; Coffman, 1996). Given that expressing gratitude provides another opportunity to reflect on positive events, it should have positive implications for well-being and coping with stress.

**Strengths, Limitations, and Future Research**

This research offers strengths and limitations that should be noted. My study has several design strengths. First, my use of a laboratory experiment with random assignment allows

89

inferences about causality. Specifically, measurement of study variables was separated in time to clarify the causal direction of relationships, and I manipulated the two helping OCB motives to provide insights into the causality between helping OCB motives and helpers' and recipients' affective states. Second, random assignment controls for individual differences (i.e., personality or previous experience), which could possibly confound relationships among the focal study variables. Lastly, I used behavioral measures of helping OCB. For example, I measured helping OCB toward partners with the amount of money helpers and recipients gave to their partners. Likewise, I measure helping OCB toward strangers with the total number of questions participants completed when answering the optional survey. Observer ratings have been used extensively to assess helping OCB, but these ratings have been criticized as highly influenced by social desirability and rater effects such as halo, leniency, and stereotyping (Ford, Kraiger, & Schechtman, 1986). My use of two behavioral measures of helping OCB overcomes this weakness of subjective ratings.

Despite the strengths of this study, this study also has several limitations that provide productive directions for future research. First, my study relies on student participants. Although most of students have worked in business settings, I do not know if findings would generalize to working employees. Therefore, future research in field settings is needed.

Second, I focused on affective states as mechanisms through which helping motives influence subsequent helping OCB but other processes are possible. According to SCT, when people believe they have capabilities to succeed in their actions, they are motivated to act or to persevere in the face of difficulties. In other words, self-efficacy fundamentally influences individuals' behaviors (Bandura, 1986). This implies that self-efficacy to engage in helping OCB could be another mechanism which translates helping OCB motives into subsequent helping

OCB. Within this context, Parker (1998) demonstrates that role breadth self-efficacy defined as employees' perceived capability of carrying out a broader and more proactive set of work tasks that extend beyond prescribed technical requirements has important implications for helping OCB.

Likewise, situated identity theory (Farmer & Van Dyne, 2010; Stryker, 1980) proposes that the content of people's ideal self including distal traits, motives, and values influences the role cognitions that they take on in a given situation. In turn, role cognitions predict behavioral outcomes. In support of core tenants of situated identity theory, research demonstrates that helping OCB role cognitions defined as people's felt obligation to perform helping OCB as part of a specific role or in a specific situation (Morrison, 1994), function as mechanisms which translate motives into helping OCB (Kim, Van Dyne, Kamdar, & Johnson, in press; Parker, Williams, & Turner, 2006). Therefore, future research should investigate the effects of role breadth self-efficacy and helping OCB role cognitions on the helping motives-helping OCB relationships.

Third, I have not sought to identify boundary conditions to the helping OCB motives-affective state relationships. According to trait activation theory (Tett & Burnett, 2003), the likelihood that distal traits or motives will affect outcomes depends on the extent to which situations are relevant to expressions of traits or motives. This raises the possibility that the interaction of autonomous and other-oriented motives influences authentic pride and gratitude in situations where people have the opportunity to express and satisfy their helping motives, but not in situations that lack this opportunity. It is also possible that the interaction of helping motives is more strongly related to authentic pride and gratitude when helping OCB is encouraged by supervisors or recipients are explicitly aware of the tangible benefits associated with helping

OCB. Perhaps, the lab setting did not provide a strong enough context to trigger significant interactions between the two helping motives as predictors of recipients' gratitude. For example, participants might have been constrained in the lab and may not have freely displayed their assigned helping motives. Additionally, it is possible that a three hour lab session does not provide enough time for more long-term benefits associated with helping OCB to become salient. Therefore, future research should develop theoretical arguments for the role of the situation as a possible boundary condition that qualifies the proposed relationships in the model -- with special attention to situational cues that may moderate the relationship between helping motives and affective states.

Although focusing on dyadic interactions is a strength of the design, it will be important to consider helping OCB in group settings with more than two partners. Most likely helping OCB interactions are more complicated in groups with multiple actors. For instance, a helper might help several coworkers at the same time and this might reduce the sense of obligation to reciprocate or some recipients might respond more positively than others and this would most likely influence future helping OCB by the original helper. This suggests the value of taking a network approach (i.e., numbers of direct and indirect ties within the network, density of each tie, and centrality etc.) to the study on ongoing helping OCB interactions (Ahuja, 2000). This is consistent with recent research (Lyons & Scott, 2011) that argues that rigorous investigation of helping OCB in the workplace requires the use of social network methodology.

Fifth, I was not able to assess whether dyadic helping OCB interactions early in the relationship were different from those later in the relationship. For example, it is possible that motives and affective states are important in influencing initial levels of dyadic helping OCB, but other factors (i.e., trust between two individuals or commitment to the relationship) are more

important in influencing the dyadic helping OCB interactions in more established relationships that develop over a longer period of time, with multiple interaction episodes. Although I used a longitudinal study design, a three-hour long lab session might not be sufficient to capture maturity effects on dyadic helping OCB over time. Therefore, future research should investigate temporal aspects of dyadic helping OCB interactions across weeks or months.

Sixth, although I assessed gratitude with the previously used, psychometrically sound five-item measure of McCullough and colleagues' (2002), the alpha coefficient was relatively low, .65 in this study. The last reverse-worded item (As a result of my interaction with my partner, when I look at the things right now, I don't see much to be grateful for) lowered the alpha coefficient. After excluding the last item, the alpha coefficient was .78. Thus, future studies should include only positively worded items to measure gratitude.

Lastly, my sample size was relatively small. Given that statistical significance is a function of sample size, statistical significance with a small sample size indicates stronger relationships among study variables (Cohen, Cohen, West, & Aiken 2003). However, the non-significant results for some hypotheses may be due to the small sample size. Thus, future studies should examine these relationships in larger samples.

**Conclusion**

Overall, my dyadic helping OCB model sheds light on two research questions embedded in the conceptualization of helping OCB that previously have not been theoretically incorporated and empirically tested: (a) helping OCB occurs in dyadic relationships involving helpers and recipients and (b) helping OCB is a longitudinal phenomenon over time, not a one-time event. My study expands our understanding of helping OCB dynamics by focusing on these two research questions. Consistent with SCT, the interaction of helper autonomous and other-

93

oriented motives matters as a predictor of helper authentic pride, and recipient attributions for helper autonomous and other-oriented motives predicts recipients' gratitude. In addition, the significant interaction of helper authentic pride and recipient gratitude demonstrates that the affective states of helpers and recipients jointly influence subsequent helping OCB. In sum, dyadic helping OCB processes are more complex and warrant ongoing future research. I hope my findings facilitate future theorizing and empirical studies that continue to advance our knowledge of the helping OCB process dynamics.

**APPENDICES**

# APPENDIX A

**Measures for Helpers**

*Manipulation checks for autonomous helping motives:* Indicate the extent to which you agree with the following statements based on interactions that you just had with your partner during the decision making task.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| | | | | | |
|---|---|---|---|---|---|
| I had complete freedom to determine the amount of money to give to my partner. | 1 | 2 | 3 | 4 | 5 |
| The decision of how much money to give my partner was totally up to me. | 1 | 2 | 3 | 4 | 5 |

*Manipulation checks for other-oriented helping motives:* Indicate the extent to which you agree with the following statements based on interactions that you just had with your partner during the decision making task.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| | | | | | |
|---|---|---|---|---|---|
| I cared about my partner's needs during this task. | 1 | 2 | 3 | 4 | 5 |
| I cared about my partner's personal feelings during this task. | 1 | 2 | 3 | 4 | 5 |

*Authentic pride*: Indicate the extent you are experiencing each of the following feelings and moods *right now* based on interactions that you just had with your partner during the decision making task.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| | | | | | |
|---|---|---|---|---|---|
| As a result of my interaction with my partner, I am feeling a high sense of self-worth right now. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I am feeling successful right now. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I am feeling confident right now. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I am feeling fulfilled right now. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I am feeling productive right now. | 1 | 2 | 3 | 4 | 5 |

*Hubristic pride:* Indicate the extent you are experiencing each of the following feelings and moods *right now* based on interactions that you just had with your partner during the decision making task.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| | | | | | |
|---|---|---|---|---|---|
| As a result of my interaction with my partner, I am feeling smug right now. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I am feeling egotistical right now. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I am feeling arrogant right now. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I am feeling conceited right now. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I am feeling stuck-up right now. | 1 | 2 | 3 | 4 | 5 |

## Measures for Helping Recipients

*Manipulation checks for autonomous helping motives:* Indicate the extent to which you agree with the following statements based on interactions that you just had with your partner during the decision making task.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| | | | | | |
|---|---|---|---|---|---|
| I think my partner had complete freedom to determine the amount of money to give to me. | 1 | 2 | 3 | 4 | 5 |
| I think the decision about how much money to give to me was totally up to my partner. | 1 | 2 | 3 | 4 | 5 |

*Manipulation checks for other-oriented helping motives:* Indicate the extent to which you agree with the following statements based on interactions that you just had with your partner during the decision making task.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| | | | | | |
|---|---|---|---|---|---|
| I think my partner cared about my needs during this task. | 1 | 2 | 3 | 4 | 5 |
| I think my partner cared about my personal feelings during this task. | 1 | 2 | 3 | 4 | 5 |

*Attributions for autonomous helping motives:* Think about the extent to which your partner just helped you during the decision making task and indicate the extent to which you agree with the following statements *right now*.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| | | | | | |
|---|---|---|---|---|---|
| I think my partner likes to help. | 1 | 2 | 3 | 4 | 5 |
| I think helping is important to my partner. | 1 | 2 | 3 | 4 | 5 |
| I think my partner decided how much to help me based on his/her own free choice. | 1 | 2 | 3 | 4 | 5 |
| I think my partner would feel bad if he/she didn't help me. | 1 | 2 | 3 | 4 | 5 |
| I think my partner believed others would get mad if he/she didn't help. | 1 | 2 | 3 | 4 | 5 |

*Attributions for other-oriented helping motives:* Think about the extent to which your partner just helped you during the decision making task and indicate the extent to which you agree with the following statements *right now*.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| | | | | | |
|---|---|---|---|---|---|
| I think my partner is concerned about my needs and interests. | 1 | 2 | 3 | 4 | 5 |
| I think my goals and aspirations are important to my partner. | 1 | 2 | 3 | 4 | 5 |
| I think my partner considers my wishes and desires to be relevant. | 1 | 2 | 3 | 4 | 5 |

*Gratitude:* Indicate the extent you are experiencing each of the following feelings and moods *right now* based on interactions that you just had with your partner during the decision making task.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| | | | | | |
|---|---|---|---|---|---|
| As a result of my interaction with my partner, I feel I have so much to be thankful for. | 1 | 2 | 3 | 4 | 5 |
| If I had to list everything that I am feeling grateful for now as a result of my interaction with my partner, it would be a very long list. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I am feeling grateful right now. | 1 | 2 | 3 | 4 | 5 |

| | | | | | |
|---|---|---|---|---|---|
| As a result of my interaction with my partner, I feel it will be a long time before I would feel this grateful to something or someone. | 1 | 2 | 3 | 4 | 5 |
| As a result of my interaction with my partner, I don't see much to be grateful for. | 1 | 2 | 3 | 4 | 5 |

**Priming Scenario for Helpers**

*A scenario to prime high other-oriented motives:* Try to put yourself into this situation as it is described. Imagine the following scenario occurring between you and your friend. Think about what thoughts and feelings you would have in such a situation. Please read the following scenario and do the accompanying task.

It's the beginning of the semester, and I'm standing in line at the bookstore to buy all the books for my classes. I am waiting in line with a friend, and I joke about how long the line is taking.

After a long wait, the cashier rings me up, and I find out that the total cost for my books is $400. This is much more expensive than what I expected. I only have $200 in my checking account.

As I am standing there wondering what to do, my friend offers to pay the extra $200 for me: "Don't worry about it. I've been in that situation before and it's a real bummer! Let me pay for it and you won't have to stress about getting your books in time for the first class or anything."

I know that my friend is really concerned about me and wants to help me out. So I say yes.

*A scenario to prime low other-oriented motives:* Try to put yourself into this situation as it is described. Imagine the following scenario occurring between you and your friend. Think about what thoughts and feelings you would have in such a situation. Please read the following scenario and do the accompanying task.

It's the beginning of the semester, and I'm standing in line at the bookstore to buy all the books for my classes. I am waiting in line with a friend, and I joke about how long the line is taking.

After a long wait, the cashier rings me up, and I find out that the total cost for my books is $400. This is much more expensive than what I expected. I only have $200 in my checking account.

As I am standing there wondering what to do, my friend offers to pay the extra $200 for me: "Don't worry about it. I've been in that situation before and it's a real bummer! Let me pay for it and you won't have to stress about getting your books in time for the first class or anything."

I know that my friend is really doing this in order to borrow my car next weekend. But I need the textbooks so I say yes.

**Writing up Stories for Helpers**

*High other-oriented helping motives:* Please try to remember a time when you did a favor for *your friend's benefit*. Try to imagine yourself back in that situation and recall it as vividly as possible. Focus on the reasons why you did this favor for *your friend's benefit* and what came before or after the experience. Now try to describe this same experience to your best friend or relative. It is very important that your friend understands exactly what you did, how you felt, and why you did it. Please write what you would tell your friend or relative. Include as much detail as possible. As a guide, we expect that your story will fill at least this side of the page –turn the page over for more space as needed. Be sure to pick a specific situation when you clearly did a favor for *your friend's benefit* not for any other reasons. Don't pick a situation where you did a favor for mixed reasons.

*Remember: Your reply is completely anonymous.*

*Low other-oriented helping motives:* Please try to remember a time when you did a favor for *your own benefit*. Try to imagine yourself back in that situation and recall it as vividly as possible. Focus on the reasons why you did this favor for *your own benefit* and what came before or after the experience. Now try to describe this same experience to your best friend or relative. It is very important that your friend understands exactly what you did, how you felt, and why you did it. Please write what you would tell your friend or relative. Include as much detail as possible. As a guide, we expect that your story will fill at least this side of the page –turn the page over for more space as needed. Be sure to pick a specific situation when you clearly did a favor for *your own benefit* not for any other reasons. Don't pick a situation where you did a favor for mixed reasons.

*Remember: Your reply is completely anonymous.*

**Filler Task for Recipients**

*Scenario:* Imagine the following: you have gone on a canoe trip to Northern Minnesota. You have been traveling through the lakes and rivers in the area known as the "Boundary Waters." The terrain is about 70 percent water and 30 percent land, with small patches of land here and there in between lakes and rivers. Bears are not uncommon in this region. The daytime temperature ranges from about 25 to 70 degrees Fahrenheit (from -4 to 21 degrees Celsius), often in the same day. Nighttime temperatures can be in the 20s (below 0 degrees Celsius). Rain is frequent during the day (nights too) and can be life-threatening if the temperature is cold.
    You were in a single canoe going down the river, when you came to some rapids. The rapids looked manageable at first, but they became much more difficult. While going over the rapids, you fell out of the canoe and suffered cuts and bruises.
    The canoe was severely damaged. It was bent in half and has broken gunwales (i.e., the upper edges on both sides of the canoe). Most of your possessions were lost in the river. You have eight items that may increase your chances of survival. The possessions you have left include the following: a magnetic compass, duct tape, a broken fishing pole, food, a map of the area, matches, sleeping bag, and whiskey. Some items are more important in facilitating your survival than are others.

Just now it has started to drizzle and it looks like rain will follow.  Since it is unlikely that you would receive help from anyone for several days, you decide to attempt to paddle to a road and eventually get to Grand Marais.  The closest road is 16 miles (26 km) away, which you could get to by traveling through the lakes and rivers.  Grand Marais is 60 miles (97 km) away.

Given this situation, you must attempt to survive in this harsh environment. Your task is to rank order the 8 items in order of their importance in allowing you to reach Grand Marais alive. You need to rank the 8 items on your own.

*Rankings:* Given the scenario, use your judgment to rank the 8 items in terms of importance, with 1 being the most important and 8 being the least important item. The items are shown in alphabetical order.


Compass             _____

Duct tape           _____

Fishing pole        _____

Food                _____

Map                 _____

Matches             _____

Sleeping bag        _____

Whiskey             _____


**Quiz on the Task for Helpers**

1. What is your role?
1) I am in charge of distributing money to my partner.
2) I will receive money from my partner. 3) a facilitator

2. How much money do you have at the beginning of each trial?
1) $1
2) $2
3) $10
4) $15
5) $5

3. How much money will your partner have at the end of each trial?
1) $1
2) $2
3) $10

4) The amount of money that I keep
5) The amount of money that I send

## Quiz on the Task for Recipients

1. What is your role?
1) I will receive money from my partner.
2) I am in charge of distributing money to my partner.
3) a facilitator

2. How much money does your partner have at the beginning of each trial?
1) $1
2) $2
3) $10
4) $15
5) $5

3. How much money will you have at the end of each trial?
1) $1
2) $2
3) $10
4) The amount of money that my partner keeps
5) The amount of money that my partner sends to me

## Gratitude Expression for Recipients

Note: 1) Indicate the extent to which you are feeling gratitude to your partner *right now* based on interactions that you just had with your partner during the decision making task using the scale below.

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| To a Very Little Extent | To a Little Extent | Somewhat | To a Large Extent | To a Very Large Extent |

| As a result of my interaction with my partner, I feel I have so much to be thankful for. | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|

2) The following statements describe different levels of gratitude you may be feeling *right now*. Please mark one statement, which indicates your current levels of gratitude to your partner and then print the sentence with your pen or pencil.

_____As a result of my interaction with my partner, I am feeling a very large amount of gratitude right now.

_____

_____

_____As a result of my interaction with my partner, I am feeling a large amount of gratitude right now.

_____

_____

____As a result of my interaction with my partner, I am feeling a small amount of gratitude right now.

_____

_____

____As a result of my interaction with my partner, I am feeling a small amount of gratitude right now.

_____

_____

**New Task Instructions for Helpers**

We will do the decision making task again. This time, you were randomly assigned to be in charge of distributing money and your partner will be the receiver.

You will have $5 in each trial. For each trial, you can choose to keep some of the money and give the rest to your partner. So, if you choose to keep $4, your partner will receive $1 for the round. Your partner can also choose to keep all of the money or give all of the money to your partner.

The amount of money that you keep and the amount you give to your partner are totally up to you. You have complete freedom to decide how much money, if any, money to give to your partner.

**New Task Instructions for Recipients**

We will do the decision making task again. This time, your partner was randomly assigned to be in charge of distributing money and you will be the receiver.

Your partner will have $5 in each trial. For each trial, your partner can choose to keep some of the money and give the rest to you. So, if your partner chooses to keep $4, you will receive $1 for the round. Your partner can also choose to keep all of the money or give all of the money to you.

The amount of money that your partner keeps and the amount of money your partner gives to you are totally up to your partner. Your partner has complete freedom to decide how much money, if any, money to give to you.

## APPENDIX B

**High Autonomous Motives and High Other-oriented Motives for Helpers**

This study looks at the ways that people make decisions. Due to the order of participation in the study you were randomly assigned to be in charge of distributing money and your partner was randomly assigned to be the receiver. You will have $5 in each trial. For each trial, you can choose to keep some of the money and give the rest to your partner. So, if you choose to keep $4, your partner will receive $1 for the round. You can also choose to keep all of the money or give all of the money to your partner. The amount of money that you keep and the amount you give to your partner are totally up to you. You have complete freedom to decide how much money, if any, to give to your partner. The amount of money you give will be based on the extent to which you value doing so.

The money given to your partner can help them make ends meet and enhance their well-being. It is better for you to focus on genuine concern for your partner's needs and feelings during this decision making task. Research demonstrates that genuine care is important and this will make a difference for your partner who might be struggling to make ends meet. Please try to imagine how your partner feels about what you are doing throughout this task.

**High Autonomous Motives and High Other-oriented Motives for Recipients**

This study looks at the ways that people make decisions. Due to the order of participation in the study your partner was randomly assigned to be in charge of distributing money and you were randomly assigned to be the receiver. Your partner will have $5 in each trial. For each trial, your partner can choose to keep some of the money and give the rest to you. So, if your partner chooses to keep $4, you will receive $1 for the round. Your partner can also choose to keep all of the money or give all of the money to you. The amount of money that your partner keeps and the amount of money your partner gives to you are totally up to your partner. Your partner has complete freedom to decide how much money, if any, to give to you. The amount of money given to you will be based on the extent to which your partner values doing so.

The money given to you can help you make ends meet and enhance your well-being. It is better for your partner to have genuine concern for your needs and feelings during this decision making task. Research demonstrates that genuine care is important, and this will make a difference for you. Your partner will try to imagine how you feel about what he/she is doing throughout this task.

**Low Autonomous Motives and High Other-oriented Motives for Helpers**

This study looks at the ways that people make decisions. Due to the order of participation in the study you were randomly assigned to be in charge of distributing money and your partner was randomly assigned to be the receiver.  You will have $5 in each trial. For each trial, you have to give a prespecified amount to your partner and keep the rest for yourself. So, if you are told to send $4 to your partner, you will get $1 for the round.  Here are the amounts you need to keep and the amounts you need to distribute. You have no freedom to decide how much money to give to your partner. The amount of money you give is pre-decided by a lab facilitator and you have no choice but to send a prespecified amount of money to your partner.

| Round | Keep $ | Send $ |
|---|---|---|
| Round1 | 2 | 3 |
| Round2 | 3 | 2 |
| Round3 | 1 | 4 |
| Round4 | 2 | 3 |
| Round5 | 2 | 3 |

The money given to your partner can help them make ends meet and enhance their well-being. It is better for you to focus on genuine concern for your partner's needs and feelings during this decision making task. Research demonstrates that genuine care is important and this will make a difference for your partner who might be struggling to make ends meet. Please try to imagine how your partner feels about what you are doing throughout this task.

**Low Autonomous Motives and High Other-oriented Motives for Recipients**

This study looks at the ways that people make decisions. Due to the order of participation in the study your partner was randomly assigned to be in charge of distributing money and you were randomly assigned to be the receiver. Your partner will have $5 in each trial. For each trial, your partner has to give a prespecified amount to you and keep the rest for himself/herself. So, if your partner was told to send $4 to you, your partner will keep $1 for the round. Here are the quantities your partner needs to keep and distribute to you. Your partner has no freedom to decide how much money to give to you. The amount of money given to you is pre-decided by a lab facilitator and your partner has no choice but to send a prespecified amount of money to you.

| Round | Keep $ | Send $ |
|--------|--------|--------|
| Round1 | 2 | 3 |
| Round2 | 3 | 2 |
| Round3 | 1 | 4 |
| Round4 | 2 | 3 |
| Round5 | 2 | 3 |

The money given to you can help you make ends meet and enhance your well-being. It is better for your partner to have genuine concern for your needs and feelings during this decision making task. Research demonstrates that genuine care is important, and this will make a difference for you. Your partner will try to imagine how you feel about what he/she is doing throughout this task.

**High Autonomous Motives and Low Other-oriented Motives for Helpers**

This study looks at the ways that people make decisions. Due to the order of participation in the study you were randomly assigned to be in charge of distributing money and your partner was randomly assigned to be the receiver. You will have $5 in each trial. For each trial, you can choose to keep some of the money and give the rest to your partner. So, if you choose to keep $4, your partner will receive $1 for the round. You can also choose to keep all of the money or give all of the money to your partner. The amount of money that you keep and the amount you give to your partner are totally up to you. You have complete freedom to decide how much money, if any, to give to your partner. The amount of money you give will be based on the extent to which you value doing so.

The money given to your partner can help them make ends meet and enhance their well-being. But, it is better for you to focus on your own personal benefits during this decision making task. This is because taking care of yourself is more important. Research demonstrates that people are generally viewed as helpful so try not to get caught up in thinking about how your partner might feel; instead just remain objective.

**High Autonomous Motives and Low Other-oriented Motives for Recipients**

This study looks at the ways that people make decisions. Due to the order of participation in the study your partner was randomly assigned to be in charge of distributing money and you were randomly assigned to be the receiver. Your partner will have $5 in each trial. For each trial, your partner can choose to keep some of the money and give the rest to you. So, if your partner chooses to keep $4, you will receive $1 for the round. Your partner can also choose to keep all of the money or give all of the money to you. The amount of money that your partner keeps and the amount of money your partner gives to you are totally up to your partner. Your partner has complete freedom to decide how much money, if any, to give to you. The amount of money given to you will be based on the extent to which your partner values doing so.

The money given to you can help you make ends meet and enhance your well-being. But, it is better for your partner to focus on personal benefits during this decision making task. This is because taking care of him/herself is more important. Research demonstrates that people are generally viewed as helpful so your partner will try not to get caught up in thinking about how you might feel; instead he/she will just remain objective.

**Low Autonomous Motives and Low Other-oriented Motives for Helpers**

This study looks at the ways that people make decisions. Due to the order of participation in the study you were randomly assigned to be in charge of distributing money and your partner was randomly assigned to be the receiver.  You will have $5 in each trial. For each trial, you have to give a prespecified amount to your partner and keep the rest for yourself. So, if you are told to send $4 to your partner, you will get $1 for the round.  Here are the amounts you need to keep and the amounts you need to distribute. You have no freedom to decide how much money to give to your partner. The amount of money you give is pre-decided by a lab facilitator and you have no choice but to send a prespecified amount of money to your partner.

| Round | Keep $ | Send $ |
|---|---|---|
| Round1 | 2 | 3 |
| Round2 | 3 | 2 |
| Round3 | 1 | 4 |
| Round4 | 2 | 3 |
| Round5 | 2 | 3 |

The money given to your partner can help them make ends meet and enhance their well-being. But, it is better for you to focus on your own personal benefits during this decision making task. This is because taking care of yourself is more important. Research demonstrates that people are generally viewed as helpful so try not to get caught up in thinking how your partner might feel; instead just remain objective.

**Low Autonomous Motives and Low Other-oriented Motives for Recipients**

This study looks at the ways that people make decisions. Due to the order of participation in the study your partner was randomly assigned to be in charge of distributing money and you were randomly assigned to be the receiver. Your partner will have $5 in each trial. For each trial, your partner has to give a prespecified amount to you and keep the rest for himself/herself. So, if your partner was told to send $4 to you, your partner will keep $1 for the round. Here are the quantities your partner needs to keep and distribute to you. Your partner has no freedom to decide how much money to give to you. The amount of money given to you is pre-decided by a lab facilitator and your partner has no choice but to send a prespecified amount of money to you.

| Round | Keep $ | Send $ |
|-------|--------|--------|
| Round1 | 2 | 3 |
| Round2 | 3 | 2 |
| Round3 | 1 | 4 |
| Round4 | 2 | 3 |
| Round5 | 2 | 3 |

The money given to you can help you make ends meet and enhance your well-being. But, it is better for your partner to focus on personal benefits during this decision making task. This is because taking care of him/herself is more important. Research demonstrates that people are generally viewed as helpful so your partner will try not to get caught up in thinking about how you might feel; instead he/she will just remain objective.

**REFERENCES**

# REFERENCES

Allen, T. D., & Rush, M. C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology, 83(2),* 247-260.

Ahuja, G. (2000). Collaboration networks, structural holes, and innovation: A longitudinal study. *Administrative Science Quarterly. 45,* 425-455.

Bakker, A. B., & Xanthopoulou, D. (2009). The crossover of daily work engagement: Test of an actor-partner interdependence model. *Journal of Applied Psychology, 94(6),* 1562-1571.

Bandura, A. (1977). *Social Learning Theory.* New York: General Learning Press.

Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: W.H. Freeman.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52,* 1-26.

Bandura, A. (2008). Reconstrual of "free will" from the agentic perspective of social cognitive theory. Are we free? Psychology and free will. In J. Baer, J.C. Kaufman, & R.F. Baumeister (Eds.), *Are We Free? Psychology and Free Will* (pp. 86-127). New York, NY: Oxford University Press.

Bartlett, M. Y., & De Steno, D. (2006). Gratitude and Prosocial Behavior: Helping When It Costs You. *Psychological Science, 17(4),* 319-325.

Barusch, A. S. (1997). Self-concepts of low-income older women: Not old or poor, but fortunate and blessed. *International Journal of Aging and Human Development, 44,* 269-282.

Batson, C. D. (1987). Prosocial Motivation: Is it Ever Truly Altruistic? In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 20 pp. 65-122.) San Diego, CA: Academic Press Inc.

Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review, 103(1),* 5-33.

Bazerman, M. H. (1993). *Negotiating Rationally.* New York, NY: The Free Press.

Betancourt, H. (1990). An attribution-empathy model of helping behavior. *Personality and Social Psychology Bulletin, 16(3),* 573-591.

Blau, P. M. (1964). *Exchange and Power in Social Life.* New York: Wiley.

Bolino, M. C. (1999). Citizenship and Impression Management: Good Soldiers or Good Actors? *The Academy of Management Review, 24(1),* 82-98.

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 Psychology, 90(4),* 740-748.

Bolino, M. C., Turnley, W. H., & Niehoff, B. P. (2004). The other side of the story: Reexamining Prevailing assumptions about organizational citizenship behavior. *Human Resource Management Review, 14(2),* 229-246.

Bower, G. H. (1981). Mood and Memory. *American Psychologist, 36 (2)*, 129-148.

Brandts, J. & Solà, C. (2001). Reference points and negative reciprocity in simple sequential games. *Games and Economic Behavior, 36,* 138-157.

Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology, 75(1),* 219-229.

Campbell, W. K. (1999). Narcissism and romantic attraction. *Journal of Personality and Social Psychology, 77,* 1254–1270.

Caprara, G.V., & Steca, P. (2005). Affective and Social Self-Regulatory Efficacy Beliefs as Determinants of Positive Thinking and Happiness. *European Psychologist, 10(4),* 275-286.

Chan, D. (2006). Interactive effects of situational judgment effectiveness and proactive personality on work perceptions and work outcomes. *Journal of Applied Psychology,91*, 475-481.

Chang, C.-H., Johnson, R. E., & Yang, L. (2007). Emotional strain and organizational citizenship behaviors: A meta-analytic review. *Work & Stress, 21,* 312-332.

Cialdini, R. B., Darby, B. L., & Vincent, J. E. (1973). Transgression and altruism: A case for hedonism. *Journal of Experimental Social Psychology, 9,* 502-516.

Cialdini, R. B., Schaller, M., Houlihan, D., Arps, K., Fultz, J., & Beaman, A. L. (1987). Empathy-based helping: Is it selflessly or selfishly motivated? *Journal of Personality and Social Psychology, 52(4),* 749-758.

Clark, M. S., & Isen, A. M. (1982). Toward understanding the relationship between feeling states and social behavior. In A. H. Hastorf & A. M. Isen (Eds.), *Cognitive social psychology* (pp. 73-108). New York: Elsevier.

Clark, M. S., Ouellette, R., Powell, M. C., & Milberg, S. (1987). Recipient's mood, relationship type, and helping. *Journal of Personality and Social Psychology, 53,* 94-103.

Clark, M. S., & Mills, J. (1993). The Difference Between Communal and Exchange Relationships: What is and What is Not. *Personality and Social Psychology Bulletin, 19 (6),* 684-691.

Clary, E. G., & Snyder, M. (1991). A Functional Analysis of Altruism and Prosocial Behavior: The Case of Volunteerism. In C.S. Margaret (Ed.), *Prosocial Behavior, Review of*

*Personality and Social Psychology* (Vol. 12, pp. 119-148.) Thousand Oaks, CA: Sage Publications.

Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology, 74(6),* 1516-1530.

Clore, G. L. (1992). Cognitive Phenomenology: Feelings and the Construction of Judgment. In L.L. Martin & A. Tesser (Eds.), *The Construction of Social Judgments* (pp.133-165). Hillsdale, NJ: Lawrence Eribaum Associates, Inc.

Coffman, S. (1996). Parents' struggles to rebuild family life after Hurricane Andrew. *Issues in Mental Health Nursing, 17,* 353-367.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd Ed.). Hillsdale, NJ: Erlbaum.

Crandall, J. E., & Lehman, R. E. (1977). Relationship of stressful life events to social interest, locus of control and psychological adjustment. *Journal of Consulting and Clinical Psychology, 45,* 1208.

Crandall, J. E. (1984). Social interest as a moderator of life stress. *Journal of Personality and Social Psychology, 47(1),* 164-174.

Cunningham, M. R., Steinberg, J. & Grev, R. (1980). Wanting to and having to help: Separate motivations for positive mood and guilt-induced helping. *Journal of Personality Social Psychology, 38 (2),* 181-192.

Dalal, R. S., Lam, H., Weiss, H. M., Welch, E. R. & Hulin, C. L. (2009). A within-person approach to work behavior and performance: Concurrent and lagged citizenship-counter productivity associations, and dynamic relationships with affect and overall job performance. *The Academy of Management Journal, 52(5),* 1051-1066.

Davidson, D. (1971). Agency. In R. Binkley, R. Bronaugh, & A. Marras (Eds.), *Agent, Action, and Reason* (pp. 3–37). Toronto: University of Toronto Press.

DeCharms, R. (1968). *Personal Causation: The Internal Affective Determinants of Behavior*. New York, NY: Academic Press.

De Dreu, C. K. W. (2006). When too little or too much hurts: Evidence for a curvilinear relationship between task conflict and innovation in teams. *Journal of Management, 32(1),* 83-107.

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 (4),* 913-926.

Deckop, J. R., Cirka, C. C., & Andersson, L. M. (2003). Doing unto others: The reciprocity of helping behavior in organizations. *Journal of Business Ethics, 47,* 101-113.

Deci, E. L. & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Pyschological Inquiry, 11(4),* 227-268.

De Jonge, J., Dormann, C., Janssen, P. P. M., Dollard, M. F., Landeweerd, J. A., & Nijhuis, F. J. N. (2001). Testing reciprocal relationships between job characteristics and psychological well-being: A cross-lagged structural equation model. *Journal of Occupational and Organizational Psychology, 74,* 29-46.

Dunn, J. & Schweitzer, M. (2005). Feeling and believing: The influence of emotion on trust. *Journal of Personality and Social Psychology, 88(6),* 736-748.

Eastman, K. K. (1994). In the eyes of the beholder: An attributional approach to ingratiation and organizational citizenship behavior. *Academy of Management Journal, 37(5),* 1379-1391.

Eatough, E. M., Chang, C.-H., Miloslavic, S., & Johnson, R. E. (2011). Relationships of role stressors with organizational citizenship behavior: A meta-analysis. *Journal of Applied Psychology, 96,* 619-632.

Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: An experimental investigation of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology, 84(2),* 377-389.

Falk, M., Band, M., & McLaughlin, T. F. (2003). The effects of reading racetracks and flashcards on sight word vocabulary of three third grade students with a specific learning disability: A further replication and analysis. *International Journal of Special Education, 18(2),* 51-57.

Farmer, S.M., & Van Dyne, L. (2010). The idealized self and the situated self as predictors of employee work behaviors. *Journal of Applied Psychology, 95*, 503-516.

Ferrin, D. L., Bligh, M. C., & Kohles, J. C. (2008). It takes two to tango: An interdependence analysis of the spiraling of perceived trustworthiness and cooperation in interpersonal and intergroup relationships. *Organizational Behavior and Human Decision Processes, 107(2),* 161-178.

Frith, C. D., & Frith, U. (2012). Mechanisms of social cognition. *Annual Review Psychology, 63,* 287-313.

Finkelstein, M. A. (2006). Dispositional predictors of organizational citizenship behavior: Motives, motive fulfillment, and role identity. *Social Behavior and Personality, 34(6),* 603-616.

Finkelstein, M. A., Penner, L. A., & Brannick, M. T. (2005). Motive, role identity, and Prosocial personality as predictors of volunteer activity. *Social Behavior and Personality, 33(4),* 403-418.

Fisher, J. D. (1983). *New Directions in Helping: Recipient Reactions to Aid.* New York, NY: Academic Press.

Fisher, J. D., & Nadler, A. (1976). Effect of donor resources on recipient self-esteem and self-

help. *Journal of Experimental Social Psychology, 12(2),* 139-150.

Fisher, J. D., Nadler, A., & Whitcher-Alagna, S. (1982). Recipient reactions to aid: A conceptual review. *Psychological Bulletin, 91,* 27-54.

Ford, J. K., Kraiger, K., & Schechtman, S. (1986). The study of race effects in objective indices and subjective evaluations of performance: A meta-analysis of performance criteria. *Psychological Bulletin, 99,* 330-337.

Forgas, J. P. (1995). Mood and judgment: The affect-infusion model (AIM). *Psychological Bulletin, 117(1),* 39-66.

Fredrickson, B.L. (2004). The broaden-and-build theory of positive emotions. In Csikszentmihalyi, M. & Csikszentmihalyi, I.S. (Eds.) A *Life Worth Living: Contributions To Positive Psychology* (pp. 85-103). NY: Oxford University Press.

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). San Diego, CA: JAI.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25,* 161-178.

Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *The Academy of Management Review Archive, 32(2),* 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(1),* 48-58.

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(4),* 900-912.

Grant, A.M., Parker, S., & Collins, C. (2009). Getting credit for proactive behavior: supervisor reactions depend on what you value and how you feel. *Organizational & Industrial Psychology, 62(1),* 31-55.

George, J. M. (1991). State or trait: Effects of positive mood on prosocial behaviors at work. *Journal of Applied Psychology, 76(2),* 299-307.

Harder, D. W., & Zalma, A. (1990). Two promising shame and guilt scales: a construct validity comparison. *Journal of Personality Assessment, 55,* 729-745.

Hart, D. & Matsuba, K. (2007). Pride and moral life. In J. Tracy, R. Robins, & J. Tangney (Eds.) *The selfconscious emotions: Theory and research* (pp. 114-133). New York: Guilford.

Henrich, J., & Gil-White, F. J. (2001). The evolution of prestige: Freely conferred deference as a mechanism for enhancing the benefits of cultural transmission. *Evolution and Human Behavior, 22(3),* 165-196.

Herrald, M. M., & Tomaka, J. (2002). Patterns of emotion-specific appraisals, coping and physiological reactivity during an ongoing emotional episode. *Journal of Personality and Social Psychology, 83,* 425-433.

Hershcovis, S. M., & Barling, J. (2010). Towards a multi-foci approach to workplace aggression: A meta-analytic review of outcomes from different perpetrators. *Journal of Organizational Behavior, 31,* 24-44.

Ilies, R., Scott, B. A., & Judge, T. A. (2006). Hostility, job attitudes, and workplace deviance: Test of a multilevel model. *Journal of Applied Psychology, 91(1),* 126-138.

Isen, A. M., Clark, M., & Schwartz, M. F. (1976). Duration of the effect of good mood on helping: Footprints on the sands of time. *Journal of Personality and Social Psychology, 34 (3),* 385-393.

Isen, A. M., & Levin, P. F. (1972). Effect of feeling good on helping: Cookies and kindness. *Journal of Personality and Social Psychology, 21(3),* 384-388.

Isen, A. M., Shalker, T. E., Clark, M., & Karp, L. (1978). Affect, accessibility of material in memory and behavior: A cognitive loop? *Journal of Personality and Social Psychology, 36 (1),* 1-12.

Johnson, D. E., Erez, A., Kiker, D. S., & Motowidlo, S. J. (2002). Liking and attributions of motives as mediators of the relationships between individuals' reputations, helpful behaviors and raters' reward decisions. *Journal of Applied Psychology, 87(4),* 808-815.

Joireman, J., Kamdar, D., Daniels, D., & Duell B. (2006). Good citizens to the end? It depends: Empathy and concern with future consequences moderate the impact of a short-term horizon on organizational citizenship behaviors. *Journal of Applied Psychology, 91(6),* 1307-1320.

Jones, E. E., & Davis, K. E. (1965). From acts to dispositions: The attribution process in social psychology. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 219-266). Academic Press: New York.

Jones, E. E., & McGillis, D. (1976). Correspondent inferences and the attribution cube: A comparative reappraisal. In J. H. Harvey, W. Ickes, & R. F. Kidd (Eds.), *New directions in attribution research* (Vol. 1, pp. 389-420). Hillsdale, NJ: Erlbaum.

Jones, J. R., & Schaubroeck, J. (2004). Mediators of the relationship between race and organizational citizenship behavior. *Journal of Managerial Issues, 16,* 505-527.

Kamdar, D, McAllister, D. J., & Turban, D. B. (2006). "All in a day's work": How follower individual differences and justice perceptions predict OCB role definitions and behavior. *Journal of Applied Psychology, 91(4),* 841-855.

Kamdar, D., & Van Dyne, L. (2007). The joint effects of personality and workplace social exchange relationships in predicting task performance and citizenship performance. *Journal of Applied Psychology, 92*, 1286-1298.

Kanfer, R. (1990). Motivation theory and industrial/organizational psychology. In M. D. Dunnette & L. Hough (Eds.), *Handbook of industrial and organizational psychology. Volume 1. Theory in industrial and organizational psychology* (pp. 75-170). Palo Alto, CA: Consulting Psychologists Press.

Kelley, H. H. (1967). Attribution Theory in Social Psychology. *Nebraska Symposium on Motivation, 15,* 192-238.

Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York: Guilford Press.

Kenrick, D. T. & Funder, D. C. (1988). Profiting from controversy: Lessons from the person situation debate. *American Psychologist, 43,* 23-34.

Kim, Y. -J., Van Dyne, L., Kamdar, D., & Johnson, R. E. (in press). Why and when do motives matter? An integrative model of motives, role cognitions, and social support as predictors of OCB. *Organizational Behavior and Human Decision Processes.*

Kline, R. B. (2005). *Principles and practice of structural equation modeling.* New York, NY: Guilford Press.

Korsgaard, M.A., Meglino, B.M., Lester, S.W., & Jeong, S.S. (2010). Paying you back or paying me forward: Understanding rewarded and unrewarded organizational citizenship behavior. *Journal of Applied Psychology, 95(2),* 277-290.

Krasikova, D., & LeBreton, J. M. (2012). Just the two of us: Misalignment of theory and methods in examining dyadic phenomena. *Journal of Applied Psychology, 97,* 739-757.

Kuh, G. D., Krehbiel, L., & MacKay, K. A. (1988). *Personal development and the college student experience: A review of the literature.* Trenton, NJ: New Jersey Department of Higher Education.

La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology, 79,* 367-384.

Lawler, E. J. (2001). An affect theory of social exchange. *American Journal of Sociology, 107(2),* 321-352.

Lawler, E. J., & Thye, S. R. (1999). Bringing emotion into social exchange theory. *Annual Review of Sociology, 25*, 217-244.

Lawler, E. J., & Yoon, J. (1998). Network structure and emotion in exchange relations. *American Sociological Review, 63,* 871-894.

Lazarus, R. S. (1991). *Emotion and adaptation.* New York: Oxford University Press.

Lazarus, R. S. & Lazarus, B. N.  (1994). *Passion and reason: Making sense of our emotions.* New York: Oxford University Press.

Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: The

role of affect and cognitions. *Journal of Applied Psychology, 87(1),* 131-142.

Lerner, J. S., & Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology, 81(1),* 146-159.

Levenson, R.W. (2003). Autonomic specificity and emotion. In R.J. Davidson, K.R. Schaffer, & H.H. Goldsmith (Eds.), *Handbook of Affective Sciences* (pp. 212-224). New York, NY: Oxford University Press.

Lewis, M. D. (2000). Emotional self-organization at three time scales. In M.D. Lewis & I. Granic (Eds.), *Emotion, development, and self-organization: Dynamic systems approaches to emotional development, cambridge studies in social and emotional development* (pp. 37-69). New York, NY: Cambridge University Press.

Lovaglia, M. J. (1995). Power and status: exchange, attribution, and expectation states. *Small Group Research, 26,* 400-426

Lyons, B. J., & Scott, B. A. (2012). Integrating social exchange and affective explanations for the receipt of help and harm: A social network approach. *Organizational Behavior and Human Decision Processes, 117,* 66-79.

Maierhofer, N. I., Griffin, M. A., & Sheehan, M. (2000). Linking manager values and behavior with employee values and behavior: A study of values and safety in the hairdressing industry. *Journal of Occupational Health Psychology, 5,* 417-427.

Manucia, G. K., Baumann, D. J., & Cialdini, R. B. (1984). Mood influences on helping: Direct effects or side effects. *Journal of Personality and Social Psychology, 46 (2),* 357-364.

McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology, 82(1),* 112-127.

McCullough, M. E., Kilpatrick, S. D., Emmons, R. A., & Larson, D. B. (2001). Is gratitude a moral affect? *Psychological Bulletin, 127,* 249-266.

McCullough, M. E., Kimeldorf, M. B., & Cohen, A. D. (2008). An adaptation for altruism: The social causes, social effects, and social evolution of gratitude. *Current Directions in Psychological Science, 17(4),* 281-285.

McCullough, M.E., & Tsang, J. (2004). Parent of the virtues? The prosocial contours of gratitude. In R.A. Emmons & M.E. McCullough (Eds.), *The psychology of gratitude* (pp. 123–141). New York: Oxford University Press

McNeely, B. L., & Meglino, B. M. (1994). The role of dispositional and situational antecedents in prosocial organizational behavior: An examination of the intended beneficiaries of prosocial behavior. *Journal of Applied Psychology, 79(6),* 836-844.

Meglino, B. M., & Korsgaard, A. (2004). Considering rational self-interest as a disposition: Organizational implications of other orientation. *Journal of Applied Psychology, 89(6),* 946-959.

Mendelson, M. B., Catano, V. M., & Kelloway, K. (2000). The role of stress and social support in sick building syndrome. *Work & Stress, 14,* 137-155.

Miller, M. J., Denton, G. O., & Tobacyk, J. J. (1986). Social interest and feelings of hopelessness among elderly patients. *Psychological Reports, 58,* 410.

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(1),* 84-94.

Morf, C. C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry, 12,* 177-196.

Morrison, E. W. (1994). Role definitions and organizational citizenship behavior: The importance of the employee's perspective. *Academy of Management Journal, 37,* 1543-1567.

Muller, J. S., & Kamdar, D. (2011). Why seeking help from teammates is a blessing and a curse: A theory of help seeking and individual creativity in team contexts. *Journal of Applied Psychology, 96(2),* 263-276.

Murray, S. L., & Holmes, J. G. (1993). Seeing virtues in faults: Negativity and the transformation of interpersonal narratives in close relationships. *Journal of Personality and Social Psychology, 65,* 707-722.

Muthén, L. K., & Muthén, B. O. (2007). *Mplus user's guide.* Los Angeles, CA: Muthén & Muthén.

Nelson, L. D., & Norton, M. I. (2005). From student to superhero: Situational primes shape future helping. *Journal of Experimental Social Psychology, 41(4),* 423-430.

Newman, F., Milton, C., & Stroud, S. (1985). Community service and higher education: Obligations and opportunities. *American Association for Higher Education & Accreditation, 37(10),* 9-13.

O'Reilly, C., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal ofApplied Psychology. 71,* 492-499.

O'Leary-Kelly, A. M., Paetzold, R. L., & Griffin, R.W. (2000). Sexual harassment as aggressive behavior: An actor-based perspective. *The Academy of Management Review, 25(2),* 372-388.

Organ, D.W. (1988) *Organizational citizenship behavior: The good soldier syndrome.* Lexington, MA: Lexington Books.

Organ, D.W., Podsakoff, P.M., & MacKenzie, S.B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences.* Thousand Oaks, CA: Sage Publications, Inc.

Overbeck, J. R., Neale, M. A., & Govan, C. L. (2010). I feel, therefore you act: Intrapersonal and

interpersonal effects of emotion on negotiation as a function of social power. *Organizational Behavior and Human Decision Processes, 112(2),* 126-139.

Parker, S. K. (1988). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology, 83,* 835-852.

Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology, 91,* 636-652.

Paulhus, D. L., Robins, R. W., Trzesniewski, K. H., & Tracy, J. L. (2004). Two replicable suppressor situations in personality research. *Multivariate Behavioral Research, 39,* 301-326.

Piliavin, J. A., Evans, D. E., & Callero, P. L. (1984). Learning to 'Give to Unnamed Strangers': The Process of Commitment to Regular Blood Donation. In E. Staub, D. Bar-Tal, J. Karylowski, & J. Reykowski (Eds.), *The Development and Maintenance of Prosocial Behavior: International Perspectives.* New York: Plenum Press.

Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial behavior: Multilevel perspectives. *Annual Review of Psychology, 56,* 365-392.

Peterson, L., & Gelfand, D.M. (1984). Causal attributions of helping as function of age and incentives. *Child Development, 55(2),* 504-511.

Plous, S. (1993). *The psychology of judgment and decision making.* New York, NY: Mcgraw-Hill Book Company.

Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology, 82,* 262-270.

Podsakoff, P.M., & MacKenzie, S.B. (1994). An examination of the psychometric properties and nomological validity of some revised and reduced substitutes for leadership scales. *Journal of Applied Pyschology, 79(5),* 702-713.

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(3),* 513-563.

Pruitt, D. G., & Rubin, J. Z. (1986). *Social conflict: Escalation, stalemate, and settlement.* New York: Random House.

Rioux, S. M., & Penner, L. A. (2001). The causes of organizational citizenship behavior: A motivational analysis. *Journal of Applied Psychology, 86,* 1306-1314.

Robb, C., & Swearer, H. (1985). A national agenda. *American Association for Higher Education Bulletin, 37,* 3-8.

Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social*

*Psychology, 57(5),* 749-761.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55(1),* 68-78.

Salamon, S. D., & Deutsch, Y. (2006). OCB as a handicap: An evolutionary psychological perspective. *Journal of Organizational Behavior, 27(2),* 185-199.

Schwartz, S.H. (1973). Normative explanations of helping behavior: A critique, proposal, and empirical test. *Journal of Experimental Social Psychology, 9(4),* 349-364.

Schwarz, N. (1990). Feelings as information: Informational and motivational functions of affective states. In E.T. Higgins, R.M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior,* (Vol. 2, pp. 527-561). New York, NY, US: Guilford 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.* San Diego, CA: Academic

Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgment of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology, 45 (3)*, 513-523.

Schwartz, C. E., Meisenhelder, J. B., Yusheng, A., & Reed, G. (2003). Altruistic social interest behaviors are associated with better mental health. *Psychosomatic Medicine, 65,* 778-785.

Schwartz, C. E., & Sendor, R. M. (1999). Helping others helps oneself: Response shift effects in peer support. *Social Science and Medicine, 48,* 1563-1575.

Scott, B. A., Colquitt, J. A., & Paddock, E. L. (2009). An actor-focused model of justice rule adherence and violation: The role of managerial motives and discretion. *Journal of Applied Psychology, 94,* 756-769.

Settoon, R. P., & Mossholder, K. W. (2002). Relationship quality and relationship context as antecedents of person-and task-focused interpersonal citizenship behavior. *Journal of Applied Psychology, 87(2),* 255-267.

Shafir, E., & LeBoeuf, R. A. (2002). Rationality. *Annual Review of Psychology, 53,* 491-517.

Shariff, A. F., & Norenzayan, A. (2007). God is watching you: Priming God concepts increases prosocial behavior in an anonymous economic game. *Psychological Science, 18,* 803-809.

Sobus, M.S. (1995). Mandating community service: Psychological implications of requiring prosocial behavior. *Law and Psychology Review, 19,* 153-182.

Spitzmuller, M., Van Dyne, L, & Ilies, R. (2008). Organizational citizenship behavior: A review and extension of its nomological network. In J. Barling & C.L. Cooper (Eds.*), The SAGE handbook of organizational behavior* (pp. 106-123). Thousand Oaks, CA: Sage.

Stryker, S. (1980). *Symbolic interactionism: A social structural version*. Menlo Park, CA:

Benjamin/Cummings.

Swap, W. C. (1991). When prosocial behavior becomes altruistic: An attributional analysis. *Current Psychological Research and Reviews, 10(1),* 49-64.

Tangney, J. P., & Dearing R. (2002). *Shame and guilt.* New York: Guilford

Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology, 88,* 500-517.

Tracy, J. L., & Robins, R. W. (2004). Putting the self into self-conscious emotions: A theoretical model. *Psychological Inquiry, 15,* 103-125.

Tracy, J. L., & Robins, R. W. (2007a). Emerging insights into the nature and function of pride. *Current Directions in Psychological Science, 16,* 147-150.

Tracy, J. L., & Robins, R. W. (2007b). The psychological structure of pride: A tale of two facets. *Journal of Personality and Social Psychology, 92,* 506-525.

Tracy, J. L., Shariff, A., & Cheng, J. (2010). A naturalist's view of pride. *Emotion Review, 2(2),* 163-177.

Tsang, J. A. (2006). The effects of helper intention on gratitude and indebtedness. *Motivation and Emotion, 30(3),* 198-204.

Van Dyne, L., Cummings, L. L., & McLean Parks, J. (1995). Extra–role behaviors: In pursuit of construct and definitional clarity (A bridge over muddied waters). *Research in organizational behavior, 17,* 215-285.

van Overwalle, F., Mervielde, I., & De Schuyter, J. (1995). Structural modelling of the relationships between attributional dimensions, emotions, and performance of college freshman. *Cognition and Emotion, 9,* 59-85.

Venkataramani, V., & Dalal, R.S. (2007). Who helps and harms whom? Relational antecedents of interpersonal helping and harming in organizations. *Journal of Applied Psychology, 92(4),* 952-966.

Verbeke, W., Belschak, F., & Bagozzi, R. P. (2004). The adaptive consequences of pride in personal selling. *Journal of the Academy of Marketing Science,* 32(4), 386-402.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063-1070.

Weinstein, N., DeHaan, C. D., & Ryan, R. M. (2010). Attributing autonomous versus introjected motivation to helpers and the recipient experience: Effects on gratitude, attitudes, and well-being. *Motivation and Emotion, 34,* 418-431.

Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology, 2,* 222-244.

Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes, and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 18, pp. 1–74). Greenwich, CT: JAI Press.

Williams, L. A., & DeSteno, D. (2008). Pride and perseverance: The motivational role of pride. *Journal of Personality and Social Psychology, 94(6),* 1007-1017.

Wilson, M. A. & Musick, J. (1997). Volunteering and depression: the role of psychological and social resources in different age groups. *Social Science and Medicine, 56(2),* 259-269.

Yun, S., Takeuchi, R., & Liu, W. (2007). Employee self-enhancement motivates and job performance behaviors: Investigating the moderating effects of employee role ambiguity and managerial perceptions of employee commitment. *Journal of Applied Psychology, 92(3),* 745-756.

Zillmann, D.  (1988). Mood management: Using entertainment to full advantage. In L. Donohew & H. E. Sypher (Eds.), *Communication, social cognition, and affect*. Hillsdale, N.J.: Lawrence Erlbaum Associates, Inc.