Job performance has historically been divided into two subsets, that which is prescribed and that which is discretionary. Further, discretionary workplace behavior has typically been described as either helpful and ethical (i.e. organizational citizenship behavior) or harmful and unethical (i.e. workplace deviance behavior) with behavior that is both helpful and unethical rarely discussed. I term this lesser discussed type of discretionary workplace behavior unethical prosocial behavior and define it as discretionary actions that are intended to benefit a specific referent outside the self, either an individual or a group, that are illegal and/or morally inappropriate to larger society. In addition to defining unethical prosocial behavior, this paper places the behavior in an organizing framework of discretionary workplace behaviors and tests several hypotheses regarding unethical prosocial behavior.

The hypotheses address three primary research questions. First, are there contextual conditions that make it more likely that a person will engage in unethical prosocial behavior? Second, does the nature of the relationship between the actor and the beneficiary make unethical prosocial behavior more or less likely? And third, are there individual characteristics that serve to either constrain or enhance the likelihood that an individual will engage in unethical prosocial behavior? A 2 x 2 experimental design was used to test these hypotheses.

As expected, in-group (vs. out-group) salience increased the likelihood of UPB. Individuals in the in-group condition engaged in significantly greater UPBs than those in the out-group condition. Contrary to expectations, shared reward (vs. no reward) decreased the
likelihood of UPB. Individuals who were due a reward engaged less in UPBs than those who were not due a reward. Possible explanations for this relationship (both methodological and theoretical) are explored. While the overall effect of reward structure on UPB was in the opposite direction from that which was expected, propensity to morally disengage had the anticipated effect on the relationship between rewards and UPB. Those high in propensity to morally disengage were more likely to engage in UPB when a shared reward was offered (vs. no reward).

Due to the nature of the task and the data collected, it was possible to operationalize UPB as a continuous measure as well as a dichotomous event (UPB/no UPB). This lead to a supplemental analysis that shed additional light on the nature of the relationship between group salience and UPB. The analysis shows that not only do subjects tend to over report the scores for fellow in-group members, but they also tend to underreport scores for out-group members. Fruitful areas for future work on the nascent UPB construct are discussed.
I would like to thank several people for their support. First, I would like to thank my chair, Dr. Mark Davis, whose level-headed approach kept me on track with little stress and whose encouragement allowed me to finish this dissertation. My committee members, Dr. Danielle Cooper and Dr. Mary Curtis gave graciously of their time and talents throughout the process and for that I am extremely grateful. I would also like to thank my PhD colleagues for all their encouragement and support, especially “Red” and “Andy” who were there with me on every single step of this crazy journey – you two are my brothers and are stuck with me after all we have experienced in the last five years together – I love you both!

I would also like to thank my “village” outside of academia for making the last five years possible. My family and friends have put up with hearing about school from me for a LONG time and for that I am grateful. I would especially like to thank “Gorilla Nation.” I’m sure without you I would have ended up accidentally leaving one of my boys at practice or at school while I had my nose buried in a book and I know the last five years would not have been nearly as much fun! I am forever grateful for the “Silverbacks” as well who always went above and beyond for my family in this process: Gran, Marbear and Boomba – you are the BEST!

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CHAPTER 1 INTRODUCTION

It has long been acknowledged in the job performance literature that workplace behavior includes two broad subsets, that which is role prescribed and that which is discretionary, and that both may contribute to the functioning of the organization (e.g. Barnard, 1938; Hoffman, Blair, Meriac & Woehr, 2007; Katz, 1964; Katz & Kahn, 1978; Motowidlo, Borman & Schmit, 1997; Motowidlo & Van Scotter, 1994; Williams & Anderson, 1991). While role prescribed behavior is the topic of much traditional management research, in the last few decades researchers have more deeply explored the function that discretionary or extra-role behavior plays in the workplace. Discretionary behavior in the workplace may either be productive or counterproductive, which has led to the suggestion that performance in the workplace includes three broad subsets; task performance, organizational citizenship behaviors and counterproductive workplace behaviors (Rotundo & Sackett, 2002; Sackett, 2002; Viswesvaran & Ones, 2000). However, this characterization of workplace behavior in three domains does not address discretionary workplace behavior that is both unethical and intended to benefit the organization. This paper will focus on that particular gap in the literature which has not been well studied to date – unethical prosocial behavior.

In 1983 management scholars began to study organizational citizenship behavior (OCB), which is largely described as discretionary workplace actions undertaken to help another party (Organ, 1990; Organ & Ryan, 1995; 1994Smith, Organ & Near, 1983; Van Dyne, Graham & Dienesch). Much work on this topic has since been produced (e.g. Bolino, Turnley, Gilstrap & Suazo, 2009; Chiaburu, Oh, Berry, Li & Gardner, 2011; Illies, Fulmer, Spitzmüller & Johnson, 2009; Illies, Nahrgang & Morgeson, 2007; Lee & Allen, 2002; Organ, 1990; Organ & Ryan, 1995;
Van Dyne, Graham & Dienesch, 1994), most of which either explicitly or implicitly assumes that organizational citizenship behaviors are ethical (for an exception, see Turnipseed, 2002). A related construct that is the topic of more recent study is workplace deviance behavior (WPD: also called counterproductive workplace behavior, antisocial behavior and anti-citizenship behavior), which is generally described as discretionary workplace actions undertaken to harm another party. Workplace deviance behaviors are largely characterized as unethical acts (e.g. Bennett & Robinson, 2000; Robinson & Bennett, 1995; Robinson & Greenberg, 1998). In summary, the existing literature regarding discretionary workplace behaviors covers OCB, which is described as discretionary ethical behavior in the workplace intended to help another party, and WPD, which is largely described as discretionary unethical behavior intended to harm another party in the workplace. When placed on their axes (ethical vs. unethical and help vs. harm) it becomes apparent that there are two types of discretionary workplace behavior that are not well described in the existing literature (see Figure 1).

**Figure 1: Discretionary workplace behaviors - Identifying gaps in existing research**

The first is ethical behavior that is meant to harm another, which not the focus of this work. Instead, this paper focuses on behavior that is both unethical and helpful to another
party. This gap in literature was recently explored by Umphress and her colleagues who introduced the term unethical pro-organizational behavior to describe acts that would fall into this category (e.g. Umphress, Bingham & Mitchell, 2010; Umphress & Bingham, 2011). While prior work (Greenberg 1997; Vardi & Wiener, 1996) had acknowledged that helpful acts in the workplace may be either ethical or unethical, to my knowledge Umphress and her colleagues (2010, 2011) were the first to delve further into researching this gap. The paucity of research in this area is particularly surprising because Vardi and Wiener (1996) identified employee misbehavior that is undertaken primarily to benefit the member’s employing organization (OMB Type O) as part of their comprehensive framework of organizational misbehavior perpetrated by employees. In addition, the following year Greenberg (1997) acknowledged that employee theft could be motivated by either prosocial or antisocial intentions.

While both Vardi and Wiener (1996) and Greenberg (1997) describe unethical prosocial behaviors in the workplace, other authors have acknowledged that this type of behavior is likely, but have not sought to define the behavior or empirically study it. For example, Turnipseed (2002) states that “Unethical behaviors may further the ends of the organization through such acts as cover-ups, costly law and regulation evasion, selling more expensive products when less expensive items would better fit the customer’s needs and “unfairly” gaining market share.” (p. 5). Turnipseed’s purpose in providing this description was not to further explore the phenomenon of unethical prosocial behavior but to point out that current conceptualizations of organizational citizenship behavior are overly broad such that unethical acts could be included in the construct as defined by leading scholars (e.g. Organ, 1988, 1990; Smith, Organ & Near, 1983; Van Dyne, Cummings & Parks, 1995.) In summary, while the
concept of unethical prosocial behavior has been identified and acknowledged as behavior that occurs in the workplace, to my knowledge there has only been one empirical study that sought to further explain this behavior (Umphress, Bingham & Mitchell, 2010).

Building on the work of Umphress and her colleagues (2010, 2011) and drawing on the existing literature regarding discretionary workplace behaviors, this paper delves further into this particular gap in the existing management literature in order to more fully explicate and understand unethical discretionary workplace behavior that is meant to help another party. For the remainder of this paper, this behavior is termed *unethical prosocial behavior or UPB*.

In a study regarding discretionary workplace behavior, Lee and Allen (2002) state “organizations are obviously better off when helpful behavior is optimized and harmful behavior minimized” (p.132). But what if the helpful behavior exhibited by an employee is unethical? While the ultimate organizational level outcomes of unethical prosocial behavior are unclear as yet, past research has indicated that large-scale catastrophes and gross misconduct may be traced back to a pattern of smaller, individual behaviors (Guy, 1990; Grover, 1997). As such, it is important to define, acknowledge and understand the types of behaviors that individuals may enact in the workplace, including unethical prosocial behaviors.

While the relationships between OCB, WPD and performance at the individual level have been documented (e.g. Motowidlo & Van Scotter, 1994; Rotundo & Sackett, 2002), in a recent study, Dunlop & Lee (2004) showed empirically that WPD is significantly negatively correlated with business unit performance, concluding that “the bad apples do spoil the whole barrel” (p. 67). Similarly, unethical behavior, while it may be intended to help the organization or an individual in the short term, is not likely to be beneficial to either the person or the
organization in the long term. When organizational actors engage in UPB both individual performance and business performance may suffer similar to the results found for WPD. If this is true, then it is important for managers to recognize UPBs in the workplace, understand the drivers of UPB, and actively manage this behavior. Before any studies may be done regarding the ultimate performance outcomes of UPB it is important to first define the construct and begin to explore what drives individuals to engage in this type of behavior. As a starting point for future research in this area, this paper will provide a definition of UPB, place UPB in an organizing framework of workplace behaviors, and explore the role of organizational factors, relational variables and individual differences in driving UPBs.

This work contributes to the existing literature on discretionary workplace behaviors in a number of ways. First, I provide a definition of UPB that applies to behavior both in and outside the workplace and separates discretionary behavior that is meant to benefit individuals from behavior that is meant to benefit groups or the organization as a whole. This allows future researchers to build on a common conceptualization that is similar to the conceptualizations of OCB and WPD that dominate the existing literature in those areas. In addition, providing a context-neutral definition that is not workplace specific may spur research on this type of behavior in settings outside the workplace that thereafter may be applied to future management research. Second, placing this new construct in an organizing framework of discretionary workplace behaviors that includes OCB, WPD and UPB helps to explicate where the constructs overlap and diverge. This organizing framework may help spur ideas for future researchers who wish to study discretionary behavior. Third, I apply a theoretical lens developed by Katz and Kahn (1978) regarding workplace role taking to begin to define the
variables that influence UPBs. The variables used in this research are a manageable subset of the possible variables that are theoretically related to UPBs. There remain many future variables of interest that may be studied using this same lens. Fourth, this work provides some evidence of a causal link between organizational factors and unethical behavior. Robinson and Greenberg (1998) state that the links between organizational factors and deviant behavior “tend to be based more on speculation than hard evidence, and in some cases what passes for evidence tends to be merely anecdotal” (p. 16) and go on to say “the possibility of a direct causal link remains untested” (p.17). This research begins to fill that gap by providing evidence of the causal link between organizational factors and UPB.

Furthermore, this work also supplements the existing literature by reporting actual behavior instead of relying on self-reports or reports from supervisors or co-workers who may not be aware that the behavior is occurring. Because individuals tend to view themselves in a more favorable light than a disinterested observer would (Taylor & Brown, 1988) the observation of actual behavior vs. self-reported behavioral intentions strengthens the hypotheses tests. Last, this paper serves as a starting point for practitioners who seek to better understand the drivers of workplace behaviors and gives some preliminary guidance regarding organizational policies, relational variables and individual differences that may impact an individual’s choice to engage in UPBs. By manipulating contextual variables in the lab, we can prescribe which interventions are most likely to work in the field to minimize UPB.
CHAPTER 2 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Literature Review: Discretionary Workplace Behaviors

As a first step in developing this research, I will provide a literature review regarding three discretionary workplace behaviors – Unethical Prosocial Behavior (UPB), Organizational Citizenship Behavior (OCB) and Workplace Deviance Behavior (WPD) and place them in an organizing framework. Following this, I will provide a theoretical lens that is used to inform hypotheses regarding the drivers of UPB followed by the detailed hypotheses proposed for this study.

*Unethical Prosocial Behavior.* While the term unethical prosocial behavior has not been used by prior researchers, the concept stems from the unethical pro-organizational behavior construct introduced by Umphress and Bingham (2011). They defined unethical pro-organizational behavior as “actions that are intended to promote the effective function of the organization or its members (e.g. leaders) and violate core societal values, mores, laws, or standards of proper conduct” (Umphress & Bingham, 2011, p. 622.) While this definition provides for the intended beneficiary of the behavior to be either an “organization or it’s individual members” (Umphress & Bingham, 2011, p.622), in a related study, the authors operationalized the construct using phrases that only reference the organization as the intended beneficiary of the behavior such as “if it would benefit my organization I would...” and “if my organization needed me to I would...” (Umphress, Bingham & Mitchell, 2010). The operationalization of the construct chosen by Umphress and her colleagues excludes individual organizational members as the intended beneficiary of the unethical behavior whereas the original definition clearly included individual organizational members among the intended
beneficiaries. The change in wording from their unethical *pro-organizational* behavior construct to the term unethical *prosocial* behavior is meant to better reflect their original definition of this type of behavior and facilitate future study in this area.

In the first empirical study in this stream of research that I am aware of, Umphress, Bingham and Mitchell (2010) found that the combination of *organizational identification* and *positive reciprocity beliefs* predicted unethical pro-organizational behavior directed toward the organization. Contrary to their expectation, organizational identification by itself did not predict unethical pro-organizational behavior. As a follow-on to that study, Herchen, Cox and Davis (2012) looked at variables that might dampen an individual’s propensity to engage in unethical pro-organizational behavior. Their results indicated that when ethical leadership is present, the positive relationship found in the first step of a regression analysis between organizational identification and unethical pro-organizational behavior is neutralized (i.e. in the presence of ethical leadership, there was no longer a significant relationship between organizational identification and UPB). In addition, they found that when an individual has a high need for cognition, engagement in unethical pro-organizational behavior is less likely, regardless of the ethicality of the leader.

The idea that actions can be both prosocial and unethical is not new. In their review of the WPD literature, Robinson and Greenberg (1998) note that “several theorists (e.g. Moberg, 1997; Tripp & Bies, 1997; Vardi & Wiener, 1996) have noted that seemingly deviant acts can have both positive, or functional, as well as negative, or dysfunctional, consequences” (p. 11). Unlike UPBs, Robinson and Greenberg (1998) focused on the consequences of actions as opposed to the actor’s intent.
The closest conceptual relation to UPBs as defined in this paper is Vardi and Wiener’s (1996) OMB Type O construct which is also the basis for Umphress and her colleagues’ (2010, 2011) unethical pro-organizational behavior construct. Vardi and Wiener (1996) define Organizational Misbehavior as “any intentional action by members of organizations that violates core organizational and/or societal norms” (p. 151). They further define OMB Type O as “misbehavior that intends to benefit the organization” (p.151). Like the definition of UPBs used in this paper, OMB Type O is determined by the intent of the actor (vs. consequences). Unlike UPBs, however, OMB Type O is determined by the violation of organizational and/or societal norms whereas UPBs are defined as actions that violate societal or hypernorms regardless of organizational norms. In addition, the intended beneficiary of UPBs may be the organization as a whole or an individual within the organization unlike OMB Type O which only includes the organization as a beneficiary.

More recently, concepts like constructive deviance and pro-social rule breaking have focused on positive outcomes of non-normative behavior. Constructive deviance, defined as “behavior that deviates from the reference group norms but conforms to hypernorms” (Warren, 2003, p. 628), is different from UPB in that it is in line with the norms of larger society (i.e. hypernorms) whereas UPBs do not conform with macro level expectations of ethical behavior. Examples of constructive deviance include whistleblowing (Near & Miceli, 1995), exercising voice (Van Dyne & Lepine, 1998) and principled organizational dissent (Graham 1986). Prosocial rule breaking (PSRB) is another form of constructive deviance that has garnered recent attention. This behavior, which Dahling, Chau, Mayer and Gregory (2012) define as “volitional rule breaking in the interest of the organization or its stakeholders” (p.21)
is similar to UPBs in that it is volitional discretionary behavior intended to help the organization or an individual within it with little or no benefit expected for the self. However, while PSRBs refer to deviance from internal organizational norms (rules) the actual acts are likely in line with societal or hyernorms, unlike UPBs which are considered unethical by larger society. For instance, a waiter who engages in PSRB by providing a free dessert to an upset customer is breaking his organizational rules in the interest of customer service, but this action is not likely to be viewed as unethical by larger society.

One of the contributions of this paper is to identify unethical prosocial behavior as a construct that can apply to targets at various levels and can occur in a variety of social settings. Beneficiaries of this behavior may be either individuals (i.e. co-workers or leaders) or collectives (i.e. work group, organization or professional association). In addition, while unethical prosocial behavior is of particular interest to management scholars, it is not unique to the workplace. Unethical prosocial behavior may be observed in many social settings; for example lying about a situation to protect a friend from hurt feelings, paying a service provider such as a hairdresser in cash to help him/her avoid reporting the income to the IRS, or hiding a friend’s property so that it is not considered part of community property in a divorce case. More broadly defining this behavior as that which occurs both in organizational settings and in other social systems may help future researchers across academic disciplines to more fully explore the antecedent conditions and outcomes of UPB. Further, by specifically acknowledging the different types of beneficiaries of UPB, future research may better explore differing motivations for engaging in this type of behavior.
In sum, whereas the unethical pro-organizational behavior construct has been applied specifically to the organizational environment and the scale used to measure the construct uses the organization as a referent, the term unethical prosocial behavior is intended to be more broadly applicable to many types of environments and is intentionally referent neutral in recognition that the intended beneficiary of the behavior may be either an individual or a collective. Therefore, unethical prosocial behavior (UPB) is defined as discretionary actions that are intended to benefit a specific referent outside the self, either an individual or a group, that are illegal and/or morally inappropriate to larger society. The next section delves more deeply into the literature that informs the two constituent parts of the definition of unethical prosocial behavior – unethical behavior and prosocial behavior.

Unethical Behavior. The term “unethical” means different things to different people and the existing management research includes a host of definitions regarding what behavior is considered ethical and what is unethical. In order to be clear as to what is meant by the term “unethical” in my definition of UPB, I use the phrase “illegal and/or morally inappropriate to larger society.” This wording is chosen so that societal norms, as opposed to organizational norms, are the referent for what is deemed unethical. This view comes from the literature on Integrative Social Contract Theory (ISCT), which categorizes ethical obligations according to two levels (Donaldson & Dunfee, 1994). The macrosocial level encompasses the ethical obligations recognized by rational members of a larger society while the microsocial level describes the ethical expectations and shared understandings of a specific community (i.e. an organization, department, work group or professional association.)
Use of the term “larger society” in the definition of UPB is meant to encompass the macrosocial level described by Donaldson & Dunfee (1994). Therefore, actions that are considered unethical for purposes of recognizing UPB are defined by lack of adherence to societal norms rather than lack of adherence to work group, industry or organizational norms. This is important because prior research has shown that some organizational and/or industry climates foster behavior that would be unacceptable to the larger society in which the organization operates (e.g. Ashforth & Anand, 2003; Brief, Buttram & Dukerich, 2001, Tenbrunsel, Smith-Crowe & Umphress, 2003). Using the macrosocial level to describe unethical behavior allows researchers to focus on behavior which may be normative inside an organization, group or industry but is not considered acceptable by the larger society in which the organization, group or industry is located.

Prosocial Behavior. The definition of unethical prosocial behavior proposed in this paper uses the phrase “intended to benefit a specific referent outside the self, either an individual or a group” to describe what is meant by prosocial behavior. This is consistent with the definition of prosocial behavior put forth by Brief & Motowidlo (1986) as “behavior which the actor expects will benefit the person or persons to whom it is directed” (p. 711.) Building on this context neutral definition, Brief and Motowidlo (1986) further define this behavior for organizational settings. They describe prosocial organizational behavior as “behavior which is a) performed by a member of an organization, b) directed toward an individual, group, or organization with whom he or she interacts while carrying out his or her organizational role, and c) performed with the intention of promoting the welfare of the individual, group or organization toward which it is directed” (p. 711.) Inherent in this definition is that the
behavior may be targeted to individuals or collectives, it may be role prescribed or
discretionary, and actions may ultimately prove to be functional or dysfunctional for the
organization.

Specifically, for an action to be deemed prosocial, the actor must intend to benefit a
target outside the self. What is important is the intent with which the actor undertakes the
action, not the ultimate outcome of the action. An action undertaken with the intent to benefit
the organization is prosocial even if that action ultimately proves to be dysfunctional for the
organization. For instance, a non-exempt employee who stays late to complete a task but does
not report the overtime because he knows the organization has limited funds does so with the
intent of helping his organization. This person is engaging in a prosocial behavior with his
organization as the intended beneficiary. Because his intent is to help the organization, even if
his action ultimately results in a dysfunctional outcome for the intended beneficiary (such as an
audit issue arising from unpaid overtime) his action is still deemed prosocial based on his intent
when engaging in the behavior. According to O’Leary-Kelley and her colleagues (2000)
“understanding both how the organization can constrain the enactment of intentions, and
understanding how intentions themselves develop, seem important to the prevention of
negative workplace actions” (p.300).

Having explicated what is meant by the term Unethical Prosocial Behavior (UPB), the
next section will describe how this construct compares to two other discretionary workplace
behavior constructs – Organizational Citizenship Behavior (OCB) and Workplace Deviance
Behavior (WPD). Each of these three behaviors; 1) is discretionary, 2) may occur in the
workplace, and 3) may be targeted toward a collective or an individual outside the self. The
behaviors are quite different, however, when it comes to the two dimensions depicted in Figure 1: the intention to help or harm the target of the behavior and whether the behavior is ethical or unethical.

Organizational citizenship behavior is commonly described as discretionary ethical prosocial behavior undertaken by individual actors in the workplace to aid in the functioning of the organization, group or individual to whom the behavior is targeted (e.g. Bateman & Organ, 1983; Organ, 1990; Smith, Organ & Near, 1983). Workplace deviance behavior, on the other hand, is commonly described as unethical antisocial behavior undertaken by organizational actors to harm an organization, group or individual to whom the behavior is targeted (e.g. Bennett & Robinson, 2003; Cullen & Sackett, 2004; Robinson & Bennett, 1995). A multidimensional scaling study produced by Bennett and Stamper in 2002 described OCB and WPD along a two-dimensional framework of discretionary work behavior. The first dimension consists of positive (helpful) versus negative (harmful) discretionary behaviors and the second dimension reflects who or what may be helped or harmed by the behavior. The framework I propose in this paper builds on their conceptualization by adding a third dimension – whether the behavior is ethical or unethical (see Figure 2). In addition, instead of focusing on who is ultimately helped or harmed by the behavior, this framework focuses on the intent of the actor instead of the ultimate outcome of the behavior. The actor’s intent to either help or harm the target is the operative issue in this framework as opposed to the ultimate outcome of the behavior. The focus on intent as opposed to outcome follows Brief and Motowidlo’s (1986) description of prosocial behavior and allows for the outcome of the behavior to be either functional or dysfunctional for the organization.
In order to provide more clarity regarding the places where OCB, WPD and UPB overlap and diverge, the next section describes and compares these three related constructs.

**Figure 2: Discretionary Workplace Behavior Organizing Framework**

<table>
<thead>
<tr>
<th>TARGET</th>
<th>BEHAVIOR</th>
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<td></td>
<td>Ethical</td>
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<tr>
<td><strong>Prosocial Behavior</strong></td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td>OCB – O</td>
</tr>
<tr>
<td>Top Mgmt Team</td>
<td>OCB – TMT</td>
</tr>
<tr>
<td>Work Group</td>
<td>OCB – G</td>
</tr>
<tr>
<td><strong>Collective Referents</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Individual Referents</strong></td>
<td></td>
</tr>
<tr>
<td>Direct Leader</td>
<td>OCB – L</td>
</tr>
<tr>
<td>Co-Worker</td>
<td>OCB – I</td>
</tr>
<tr>
<td><strong>Self-Serving</strong></td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td>Selfish Ethical Behavior</td>
</tr>
</tbody>
</table>

To my knowledge, there has been no work to date that has examined discretionary workplace behaviors along these three dimensions. While the relationship between OCB and
WPD has received recent attention in the academic literature, the integration of UPB into this framework brings a fuller conceptualization of discretionary behavior into the academic literature.

The relationship between OCB and WPD has received enough recent attention to prompt a meta-analysis by Dalal (2005) who concluded that there is a modest negative relationship between the two types of discretionary behavior in the workplace. Other recent studies have focused on determining whether OCBs and WPDs are differentially motivated when the actions are directed at individuals versus collectives. For instance, Lee and Allen (2002) conducted a study among registered nurses to determine whether cognitive evaluations or feelings at work had a greater impact on OCBs and WPDs. They concluded that both job affect and cognitions are related to OCBs and WPDs and that job affect was more strongly related to OCB directed toward individuals than job cognitions whereas job cognitions were more strongly related to OCB directed toward the organization than job affect, suggesting that differentiating between individual and organizational foci of discretionary behavior is important.

As noted in the organizational framework depicted in Figure 2, in addition to the two primary dimensions (ethical vs. unethical and prosocial vs. antisocial) the organizing framework adopts a target-based conceptualization of discretionary behaviors by acknowledging that both individuals and collectives may be the intended target of the behavior. In order to more effectively study the motivations of discretionary workplace behavior, prior work in both the OCB literature and the WPD literature has distinguished between organizationally directed and individually directed discretionary behaviors (e.g. Bennett & Robinson, 2003; Coleman &
Borman, 2000; Robinson & Bennett, 1996; Smith et al., 1983; Van Dyne et al., 1994; Van Scotter & Motowidlo, 1996; Williams & Anderson, 1991). Prior research has empirically distinguished between organizational deviance which is aimed at harming the organization and interpersonal deviance which is targeted at harming a specific person (Robinson & Bennett, 1996). Similarly, organizational citizenship behaviors have been separated into those helpful behaviors targeted toward helping the organization as a whole (OCB – O) and those targeted at helping a specific individual (OCB-I) (Smith et al., 2003; Williams & Anderson, 1991). McNeely and Meglino undertook a study specifically aimed at differentiating antecedents of individually directed and organizationally directed prosocial behavior and found that “the psychological processes that underlie prosocial behavior are different depending on the beneficiary of the behavior”. As a whole, this body of work suggests that differentiating between individual and collective targets of discretionary behavior is beneficial in researching the motivations that drive the behavior.

Unlike OCB and WPD which have been the topic of much scholarly research, the study of unethical prosocial workplace behavior is in its infancy and prior empirical research has only focused on unethical prosocial workplace behavior targeted at the organization as a whole (Umphress et. al., 2010). Even at this early stage, however, it seems prudent to distinguish between unethical prosocial behavior that is targeted toward helping the organization as a whole and unethical prosocial behavior that is undertaken to benefit a specific individual. This follows the format of both the OCB and WPD literatures which have found differential predictors of behaviors that are targeted at individuals vs. collectives (e.g. Bennett & Robinson, 2000, 2003; Berry, Ones & Sackett, 2007; Chiaburu, Oh, Berry, Li & Gardner, 2011; Illies, Fulmer,
Spitzmuller & Johnson, 2009; Penner, Midili & Kegelmeyer, 1997; Rioux & Penner, 2001; Robinson & Bennett, 1995; Smith et al., 1983; Williams & Anderson, 1991).

Having described the discretionary behavior organizing framework, the next three sections will provide a review of the literature on the two types of discretionary behavior other than UPBs – organizational citizenship behavior (OCB) and workplace deviance behavior (WPD). Because there is very little work on UPBs and because these behaviors are theoretically similar to OCBs and WPDs, a review of those two literatures serves as a basis for developing hypotheses related to UPBs. Each section will follow the same structure. First I will provide a definition of the behavior that I am using for this paper and address similar constructs. Second, I will describe prior research as to the dimensionality of the behavior and how prior researchers have conceptualized the behavior according to the foci or referent of the behavior. Third, I will discuss prior research regarding the antecedents to the behavior, focusing primarily on individual difference variables, relational variables and situational variables in line with the person-situation interactionist model proposed by Trevino (1986).

**Organizational Citizenship Behavior.** Organizational citizenship behavior was originally simply defined as “discretionary acts aimed at helping others” (Smith, Organ & Near, 1983, p. 655) and was divided into two domains; altruistic behavior that benefits other individuals and generalized compliance that benefits the broader organization as a whole. This definition was later more fully explicated by Organ (1988) who defined OCB as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate, promotes the efficient and effective functioning of the organization” (p.4). In essence, OCBs are discretionary workplace acts intended to help the functioning of the
Van Dyne and LePine (1998) describe extra role behavior as “positive and discretionary. It is 1) not specified in advance by role prescriptions, 2) not recognized by formal reward systems and 3) not a source of punitive consequences when not performed by job incumbents.” (p. 108). Motowidlow and Van Scotter describe contextual performance as “Behaviors that do not support the technical core itself as much as they support the broader organization, social and psychological environment in which the technical core must function” (p. 476). Borman and Motowidlo (1993) provide five categories of contextual performance that are largely consistent with the conceptualization of OCBs; 1) volunteering to carry out task activities that are not formally part of the job, 2) persisting with extra enthusiasm when necessary to complete own task activities successfully, 3) helping and cooperating with others, 4) following organizational rules and procedures even when it is personally inconvenient, and 5) endorsing, supporting and defending organizational objectives.

While the word “ethical” is not explicitly included in the definitions of OCB and related constructs provided above, the way the constructs have been operationalized has a decidedly ethical tone leading one scholar to suggest that OCBs are the manifestation of ethical behavior in the workplace (Turnipseed, 2002). Organ (1988) described OCB as a “good soldier syndrome” suggesting that the behaviors described by OCB are inherently good or valuable. Very few authors have acknowledged that behaviors undertaken to help the organization or
individuals within an organization may be either ethical or unethical (for exceptions see Turnipseed, 2002; Umpress & Bingham, 2011; Umphress et al., 2010).

While many different studies have suggested that OCBs have up to five differing dimensions (e.g. Organ, 1988; Podsakoff, MacKenzie, Moorman & Fetter, 1990; Smith et al., 1983), Williams and Anderson (1991) suggested that all these conceptualizations could be summarized in two dimensions similar to the original conception provided by Smith et al. (1983). The authors proposed the two umbrella dimensions as OCB – I, organizational citizenship behaviors directed at individuals, which is similar to the altruism dimension described by Smith et al. (1983), and OCB – O, organizational citizenship behaviors directed toward the organization, which is similar to the generalized compliance dimension provided in the original work by Smith and her colleagues (1983).

Supporting the idea that there are differential drivers of discretionary, or extra-role, and task, or in-role, behaviors; Hoffman et al (2007) found that attitudes consistently relate more strongly to OCBs than to task performance, which is consistent with the prior meta-analytic findings of Organ and Ryan (1995). The common reasoning for the stronger link between attitudes and OCBs vs. task performance is that tasks tend to require specific knowledge, skills and abilities to perform while OCBs do not (e.g. Bateman & Organ, 1983; Borman & Motowidlo, 1993; Organ & Ryan, 1995; Smith, Organ & Near, 1983.) The same reasoning likely applies equally to the other two discretionary workplace behaviors, WPD and UPB, which are included in the organizing framework presented in Figure 2. Because discretionary behaviors are those that do not require specific knowledge or skills to perform, they are likely to relate more strongly to dispositions, attitudes, relationships and situational variables.
There is a large body of research that has sought to define the predictors of OCBs. Researchers have found relationships between OCB and 1) individual difference variables, 2) relational variables and 3) situational variables. Personality, an individual difference variable, has been a much studied antecedent of OCB (e.g. Borman, Penner, Allen & Motowidlo, 2001; Organ & Ryan, 1995). Illies, Fulmer, Spitmuller and Johnson’s meta-analytical review in 2009 showed that Big 5 personality factors, specifically agreeableness and conscientiousness, predict OCBs. Further supporting this link, a 2011 meta-analysis conducted by Chiaburu, Oh, Berry, Li and Gardner confirmed that personality predicts OCBs and showed that two dimensions of personality, openness and agreeableness, predict OCB more strongly than task performance.

Wright and Sablynski (2008) explored the role of prosocial personality, another individual difference, in predicting citizenship behavior in an experimental setting and found the Helpfulness factor of the *Prosocial Personality Battery (PSB)* explained a marginally significant amount of variance in extra-role behavior over and above a justice manipulation. In a cross-sectional study, Midli (1995) found that both factors of the *PSB*, Helpfulness and Other-Oriented Empathy, were predictors of OCB.

Other individual difference variables have also been studied in relation to OCB. Moorman and Blakely (1995) found that individuals with collectivistic values were more likely to engage in citizenship behaviors. Similarly, Rioux and Penner (2001) found that prosocial values, which they describe as an “enduring disposition” (p.1314) were associated with OCB and Lee and Allen (2002) found that both job affect and job cognitions impact OCBs to varying degrees at both the OCB – I and OCB – O level.
Relational variables have also been studied in relation to OCBs. Illies, Nahrgang and Morgeson (2007) showed that leader-member exchange, an indicator of the relationship quality between a leader and a follower, impacts OCB, and Van Dyne, Graham, and Dienesch (1994) showed that the effects of attitudinal and situational variables on OCBs is mediated by covenantal relationship, a stronger form of relationship than that which is bound by exchange or contract, but is rather a mutual promise characterized by open-ended commitment, mutual trust and shared values. In a study assessing OCBs targeted at individuals, Settoon and Mossholder (2002) found that relationship quality and relationship context were correlated with citizenship behaviors.

Lastly, studies have shown that the situation may impact the enactment of OCBs. Smith and her colleagues (1983) found that perceptions of leader supportiveness had a direct effect on the generalized compliance dimension of OCB (similar to OCB-O) and an indirect effect on the altruism dimension of OCB (similar to OCB-I). Niehoff and Moorman (1993) found that perceptions of organizational justice also predicted OCB.

Taken together, this body of empirical work suggests that helpful discretionary workplace behaviors have dispositional, relational and situational drivers.

**Workplace Deviance Behavior.** Much like discretionary behavior intended to help others in the workplace, discretionary behavior intended to harm others is associated with many different constructs; the most frequently cited of which are counterproductive work behavior or CWB (Dalal, 2005; Gruys & Sackett, 2003; Martinko, Gundlach & Douglas, 2002; Sackett, 2002; Sackett & Devore, 2001), antisocial behavior (Giacalone & Greenberg, 1987, Miceli & Near, 1987; O’Leary-Kelly, Duffy & Griffin, 2000; Spector, 1978; 1987) and workplace
deviance behavior (Bennett & Robinson, 2003; Robinson & Bennett, 1995; Robinson & Greenberg, 1998; Rotundo & Sackett, 2002). CWB refers to “any intentional behavior on the part of an organization member viewed by the organization as contrary to its legitimate interests” (Sackett, 2002, p. 5). Giacalone and Greenberg (1997) define antisocial behavior as “any behavior that brings harm, or is intended to bring harm, to an organization, its employees or stakeholders. It is the opposite of prosocial behavior, which is designed to help or to bring good” (p.vii).

I have chosen to use the workplace deviance behavior (WPD) construct in this paper following the guidance of Robinson and Greenberg (1998) who reviewed the literature relating to 8 distinct terms that related to the same general behavior and proposed the WPD construct as one that future researchers could use to bring structure to this research stream. Robinson and Bennett (1995) define workplace deviance behavior as “voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both” (p.556.)

It is clear from the definition that the behavior is intentional and volitional, much like the definitions of OCB and UPB. In addition, the construct includes the idea that the intent is to harm an organization or its members or both much as OCB and UPB are intended to help a collective or individual or both.

While none of these definitions explicitly uses the term “unethical” the intent to cause harm to another person or the organization is considered “misconduct” according to the Ethics Resource Center National Business Ethics Survey of the US Work Force (2014). Because harming another person or the organization is the intent of the person who enacts WPD, the
behavior is considered ethical misconduct or unethical. Some examples of WPD include employee theft, destruction of property, covering up mistakes, accepting kickbacks, etc. (Robinson & Bennett, 1995). In sum, WPDs then, are unethical acts undertaken to harm a co-worker or the organization as a whole.

Like OCBs researchers, WPD researchers have largely concluded that there are differential drivers of organizationally directed WPD (organizational deviance) and interpersonally directed WPD (interpersonal deviance) and that these are distinct forms of deviance (e.g. Bennett & Robinson, 2000; Berry, Ones & Sackett, 2007; Dalal, 2005; Robinson & Bennett, 1995). In developing a measure of WPD, Bennett and Robinson (2000) showed that a two factor structure (organizational vs. interpersonal deviance) fit their data well; this is consistent with the conceptual literature on WPDs. Further, in a meta-analysis, Berry and his colleagues (2007) showed that while interpersonal deviance and organizational deviance were highly correlated, they showed differential relationships with the variables of interest, providing support to the separability of the two constructs. Due to the conceptual similarity of OCBs and WPDs to UPBs, it seems prudent, therefore, to assume that drivers of interpersonally directed UPBs may differ from drivers of organizationally directed UPBs.

Drivers of WPD, like drivers of OCB, include individual differences, relational variables and situational variables. Empirical evidence regarding examples of drivers in each of these categories is discussed next.

The idea that personality or individual differences drives behavior is not new and research in WPD shows that individual differences do, in fact, predict some forms of WPD. For instance, Diefendorff and Mehta (2007) show that approach and avoidance motivational traits
predict WPD while Lee and Allen (2002) showed that individual cognitions in general and discrete emotions in particular, especially hostility, predict WPD. Work specific to discrete acts of WPD (i.e. theft, absenteeism, violence, etc.) also abounds (Cullen & Sackett, 2004). Prior research has shown that personality predicts absenteeism (Judge, Martocchio & Thoresen, 1997), turnover (Barrick & Mount, 1996), workplace violence (Ones & Viswesvaran, 2001) and property damage (Ones & Viswesvaran, 1998).

Relational variables have also been shown to predict WPDs. For instance, Mitchell and Ambrose (2007) show that abusive supervision (i.e. a subordinate’s perception that their supervisor engages in hostile behavior or that supervisors mistreat employees) predicts WPD. In addition, social identification, conceptualized as the extent to which there is a “connection that exists between people - personal affiliation, closeness or similarity” (Duffy, Scott, Shaw, Tepper and Aquino, 2012, p. 647) was shown to moderate the relationship between envy and social undermining behavior – an antisocial behavior.

Situational variables have also been shown to predict various forms of WPD. Greenberg (1990, 1993) showed that theft was a consequence of underpayment inequities. More recently, researchers have commonly looked at the interaction between individual differences and situational influences in predicting UPBs. Consistent with the person-situation interactionist model, Colbert, Mount, Harter, Witt and Barrick (2004) found that positive perceptions of the work situation were negatively related to WPD and that 3 personality traits (conscientiousness, emotional stability and agreeableness) moderate this relationship. Similarly, Colquitt, Scott and Lepine (2007) found that trust (“the intention to accept vulnerability to a trustee based on positive expectations of his or her actions” p. 909) partially
mediates the relationship between trust propensity (“a dispositional willingness to rely on others” p. 909) and WPD, and Judge, Scott and Ilies (2006) found that trait hostility (a stable individual difference) influenced both state hostility and hostile reactions to perceived injustice (WPD). Additionally, Mitchell and Ambrose (2007) found that the relationship between abusive supervision and supervisor-directed deviance behavior was stronger when individuals held higher negative reciprocity beliefs (an individual difference variable).

While researchers have looked at OCBs and WPDs in isolation, recently authors have looked at the relationship between OCB and WPD and found many common predictors of the two constructs (see Bennett & Stamper, 2002 for an overview). These predictors are situational, relational and dispositional. For instance, while job satisfaction predicts OCB (Farh, Podsakoff & Organ, 1990; Smith et al., 1983, Puffer, 1987); job dissatisfaction predicts WPD (Adler & Golan, 1981, Chen & Spector, 1992, Robinson, 1993). While organizational justice predicts OCB (Niehoff & Moorman, 1993); a lack of organizational justice predicts WPD (Bies & Tripp, 1995, Greenberg, 1993). Lastly, while positive dispositional traits including positive affect, concern for others, empathy, and need for achievement predict OCB (Smith et al., 1983; Carlson, Charlin & Miller, 1988; George & Brief, 1992; Puffer, 1987); negative dispositional traits including negative affect, low need for achievement and authoritarianism predict WPD (Aquino, Lewis & Bradford, 1999; Aquino & Bennett, 2000; Puffer, 1987; Spector & Fox, 2002; Weyant, 1978). Like OCB and WPD, UPB is also a discretionary behavior and it is likely that situational, relational and dispositional variables will also relate to UPBs. This is likely a fruitful area for future research on UPBs.
Theoretical Lens

In order to study unethical prosocial behavior this paper adopts the view of an organization as a system of roles as described by Katz and Kahn in their book *The Social Psychology of Organizations* (1966, 1978). In adopting this view, organizations are viewed as contrived structures “consisting of acts or events rather than unchanging physical components” (p. 187). In other words, organizations are collectives of behaviors (acts) undertaken by individuals. Because I am seeking to better understand the unethical prosocial acts of individuals within organizations, this lens provides an appropriate means for examining the forces that influence the behavior of individual actors within organizations.

One of the key assumptions of this view is that the units of organization in the structure are not linked physically, but psychologically, so that behaviors exhibited by a member of the organization are largely a result of the influence provided by the other elements in the organization’s structure – organizational factors, interpersonal factors, the attributes of the focal person (the person whose behavior we seek to understand) and the role expectations of other actors within the focal person’s role set. A pictorial view of the organization as a system of roles is presented in Figure 3 (Katz & Kahn, 1978, p. 196).
When viewed in this manner, individual behavior is seen as influenced by the attributes of the person (individual differences), interpersonal factors (psychological bonds with individuals and collectives within the organization) and organizational factors (the environment or climate in which the behavior takes place.) In addition, role expectations are conveyed to the individual actor from all persons within the individual’s role set (those who affect or are affected by the focal person’s performance). In the aggregate, role expectations define the behaviors that are expected of the person in the role. It is important to note that Katz and Kahn viewed these role expectations as going well beyond the typical job description. The authors state “The content
of role expectations consists mainly of preferences with respect to specific acts, things the person should do or avoid doing. But role expectations may also refer to personal characteristics or style, ideas about what the person should be, should think or should believe.” (p. 190). Further, the model indicates that it is not only the role expectations that the role sender intends to convey that drive behavior, but also the received role which includes the receiver’s perceptions and cognitions regarding the expectations that were sent. This allows for some incongruence between the sent role expectations and the received role expectations. In addition, each individual can in a sense become a role sender to themselves, in essence the actors own expectations are also a driver of his or her behavior.

Further, Katz and Kahn (1978) state that role expectations do not need to be continuously conveyed to the focal person in order to impact behavior. Adults have a gone through a lifetime of assimilating to various organizational roles as members of families, schools, community organizations, the workplace and other social systems and are therefore able to infer role expectations with very few cues. Role expectations are therefore the aggregate of forces that influence the behavior of an individual as prescribed either explicitly or implicitly by persons within the focal person’s role set. Because of the variety of persons who make up the role set, these expectations may encompass both formal job requirements (expected in-role behavior) and extra-role expectations (discretionary behavior).

While prior research has used this theoretical model to better explain the behavior of incumbents in formal roles (e.g. Bowden & Ostroff, 2004; Graen & Uhl-Bien, 1995; Wrzesniewski & Dutton, 2001) the model is equally applicable to explaining the discretionary behavior of individuals in organizations. Katz (1964) states that “an organization which
depends solely upon its blueprints of prescribed behavior is a very fragile social system (p. 132) which implies that the “roles” described in this social system include both prescribed, or in-role, and discretionary, or extra-role, behaviors. Katz and Kahn (1978) state that some role expectations “may be directed toward the accomplishment of formally specified responsibilities and objectives of the office while others may be directed toward making life easier or more pleasant for the senders themselves, in ways unrelated or even contrary to official requirements.” (p. 190 emphasis added). In this statement the authors are very clear that the role behaviors described by this model encompass both in-role and extra-role behaviors. Further, the statement implies that role expectations encompass discretionary behaviors that are expected to help the role sender in some way (i.e. “making life easier or more pleasant”) and may be either normative or non-normative (i.e. “contrary to official requirements”). While I am not aware of prior research that has applied this model to discretionary unethical prosocial behaviors in the workplace, the authors took great pains to assure the model was broad enough to cover such behaviors.

Further, Katz and Kahn state that “in formal organizations the roles people play are more a function of the social setting than of their own personality characteristics” (p. 189). If this is true, then past research regarding the drivers of unethical organizational behavior that have focused only on individual differences may be enhanced by focusing on the other three elements in this model as well – role expectations, interpersonal relationships and the climate in which they take place. This approach to discovering the drivers of unethical behavior is in line with the person-situation interactionist model advocated by Trevino (1986). This paper will
address factors in each of these areas that are believed to influence individual behavior in the workplace in order to extend our knowledge regarding the drivers of these behaviors.

By addressing variables from each of the components of Katz and Kahn’s model we should achieve a better understanding of the factors that underlie discretionary workplace behaviors that are intended to help a beneficiary in general and unethical prosocial behavior in particular. Specific variables were chosen to represent each of the elements of this model based on prior literature. This is by no means an exhaustive set of variables that may influence the enactment of unethical prosocial behavior, but rather a starting point in discovering the multiple forces that cause individuals to engage in unethical discretionary behavior intended to help an organizational beneficiary. The specific variables chosen to represent each part of the model are depicted in Figure 4 and each is more fully explained in the next section of the paper.
The circles in this model represent relatively stable elements of the organizational environment. Each will be addressed briefly in turn followed in the next section by a discussion regarding each variable chosen to represent this element of the model.

The circle on the far left in Figure 3 represents the relatively stable organizational factors of this system which are properties of the organization itself. Organizational factors may describe an organization as a whole, or just part of it and may include elements such as “the technology of the organization, the structure of its subsystems, its formal policies, and its rewards and penalties” (Katz & Kahn, p.196). The organizational factors provide cues to individual actors.
regarding what the actor is supposed to do and for whom. In my particular model, I will explore the role of rewards in encouraging unethical prosocial behavior.

Interpersonal relations (represented by the bottom circle in Figure 3) represent the quality of the relationships between the focal person and the members of his/her role set. The members of the role set include all those who rely upon the focal person to achieve performance of their own goals and those on whom the focal person relies to achieve his/her goals. The focal person uses the lens of the existing interpersonal relationship to interpret the role expectations sent to him or her. In my model the interpersonal relations element is represented by in-group or out-group salience of identification that the participant has with the person with whom he/she is paired. Much of past research has focused on individual differences and situational elements in examining helping and harming behavior suggesting a “generalized exchange orientation rather than a relational exchange orientation” (Venkataramani & Dalal, 2007, p. 952). In the past several years, however, researchers have built on the existing knowledge we have about individuals’ general tendencies to behave in certain ways by introducing relational elements in their models to explain additional variance in observed behaviors (i.e. Venkataramani & Dalal, 2007). Examining relational elements would seem especially appropriate when we are seeking to better understand helping and harming behaviors because individuals are not likely to react in exactly the same way toward all others, regardless of their innate tendencies.

That last contextual element in the model, individual attributes, is represented by the top circle in Figure 3. These are more commonly referred to as individual differences in more recent literature and represent the relatively enduring propensity of an individual to act in
certain ways. While the list of individual difference variables that may relate to an individual’s choice to engage in UPB is likely long, this research will address three variables: 1) the propensity to morally disengage (PMD), 2) prosocial personality and 3) need for cognition (NFC). Prior research has linked PMD to self-reported unethical behavior, other-reported unethical behavior and observed unethical behavior (Moore, et al., 2012). Similarly, an individual’s propensity to morally disengage should also predict unethical acts aimed at helping others. On the other end of the spectrum, prosocial personality has been empirically linked to workplace helping behaviors (Borman, Penner, Allen & Motowidlo, 2001; Penner, Midili & Kegelmeyer, 1997; Wright & Sablynsky, 2008). Because the intent that drives UPBs is helping, this variable should relate to UPBs in much the same way it does to OCBs. Lastly, need for cognition has been shown to negatively correlate with self-reported UPBs (Herchen et al, 2012) and is included in this model to assess whether the same holds true for observed UPBs.

Each of the variables chosen to represent elements of the factors involved in the taking of organizational roles will be discussed in turn in the following section.

The theoretical model supplied by Katz and Kahn indicates that organizational factors, interpersonal relationships and individual attributes along with messages sent by members of a person’s role set all influence the behavior of individual actors. While Umphress and her colleagues (2010) addressed two individual difference variables that impact unethical prosocial behavior intended to benefit organization level beneficiaries, I am not aware of research that addresses the other critical elements in the model. To begin to address this gap in the existing empirical literature, two organizational factors and one interpersonal factor will be examined in relation to UPBs along with three individual difference variables. Each of the factors will be
described below followed by the hypothesized relationships I expect to see when conducting empirical research.

Research Questions and Hypotheses

The first question addressed in this study is: Are there contextual conditions that make it more likely that a person will engage in UPBs? According to Johns (2006) “the impact of context on organizational behavior is not sufficiently recognized or appreciated by researchers” (p. 386). Johns (2006) defines context as “situational opportunities and constraints that affect the occurrence and meaning of organizational behavior as well as functional relationships between variables.”

Reward Structure. Vardi and Wiener (1996) cite organizational control systems as a key determinant in individual’s predisposition to engage in misbehavior. “Regardless of the inherent opportunity, control systems such as appraisal, reward and disciplinary systems, or special monitoring arrangements in some organizations are more effective at controlling behavior than in others.” (Vardi & Wiener, 1996: p.160). One of the classic forms of controlling individual behavior is through rewarding desired behaviors. According to the classic economic self-interest paradigm, people will engage in behaviors that serve their own best interest. The idea that self-interest motivates individual behavior is evident in agency theory (Eisenhardt, 1989; Jensen & Meckling, 1976), an oft cited paradigm in management literature that contends that when a conflict arises, it may be resolved through a co-alignment of incentives via a pricing mechanism where rewards are assigned to desired behavior. Organizational reward structures are just such a pricing mechanism.
Various researchers have shown that the provision of material rewards increases helping behavior in the short term (i.e. Kunda & Schwartz, 1983). For instance, in a review of the literature on charitable giving, an oft studied form of helping behavior, Bekkers and Wiepking (2011) cite benefits as one of the eight drivers of philanthropic giving. Specifically, it has been shown that that providing material benefits for charitable giving (i.e. receiving a coffee mug or tote bag for donating to your local public radio station) increases donations and this effect is heightened further if the benefits are greater for sequentially higher tiers of giving (Andreoni & Petrie, 2004; Buraschi & Comelli, 2002). In addition, donors who are initially attracted to a cause by an economic benefit are more likely to continue giving than those attracted by a non-economic mechanism (Landry, Lange, List, Price & Rupp, 2010). Similarly, Fabes, Fultz, Eisenberg, May-Plumlee and Christopher (1989) revealed that provision of a reward (a toy) vs. no reward enhanced helping behaviors among grade school children who were ostensibly given the opportunity to help “poor, sick children in the hospital who had nothing to play with”.

It follows, therefore, that when individuals are rewarded for helping another party achieve goals, they will strive to achieve these rewards to further their own interests. While past research has most often applied this theory to desired behaviors, it should be equally applicable to UPBs since the intent behind UPBs is to help a party outside the self. Coupling Vardi and Wiener’s (1996) views on the role played by control systems with the traditional agency view of self-interest driving behavior, it seems likely that when individuals are rewarded for helping others (even if that help comes in the form of an unethical act) individuals are more likely to engage in these helping behaviors.
**Hypothesis 1**: Shared reward (vs. no reward) increases the likelihood of UPB (“Reward Hypothesis”)

The second question addressed by this research is: *Does the nature of the relationship between the actor and the beneficiary make UPBs more or less likely?*

**Interpersonal Factors**

*In-group identification salience.* Another factor cited by Vardi and Wiener that is expected to impact organizational misbehavior, especially that which is intended to benefit the organization (OMB Type O) is organizational cohesiveness. They cite cohesiveness as the “degree of attachment or attractiveness the members of a social unit (e.g., work organization) experience toward each other and toward the social unit itself” (p. 162). In their propositions, this is operationalized as identification with the organization. This is supported by Etzioni’s (1998) socioeconomic theory that postulates that individuals behave consistently with their identification group’s requirements. Further, Van Dick and his colleagues state, “There is good evidence that employees who identify more strongly with work-relevant foci ... report more efforts on behalf of these foci” (Van Dick, Wagner, Stellmacher, Christ & Tissington, 2005, p. 201) suggesting that identification with either individuals or collectives in the workplace will lead to extra effort on behalf of those individuals or collectives. This is supported by O’Reilly & Chatman (1986) who showed in two separate studies that identification with an organization predicted self-reported extra-role or prosocial behaviors that benefitted the organization.
In a study conducted by Venkataramani and Dalal (2007) interpersonal relationships explained incremental variance over and above traditional predictors of both interpersonal helping (citizenship) and interpersonal harming (counterproductivity). This lead the authors to suggest that relational variables “- in addition to individual differences and situational attitudes and appraisals – should be used to predict interpersonal helping and harming” (p.961).

One form of identification is self-categorization (i.e self-categorization theory or SCT; Turner, Hogg, Oakes, Reicher & Wetherell, 1987; Turner, Oakes, Haslam & McGarty, 1994) which is an extension of Tajfel and Turner’s (1986) social identity theory. This theory proposes that an individual’s self-concept is impacted by the social context they find themselves in so that individual’s social identity changes as other individuals or groups either enter or leave the current social context. The theory suggests that an individual’s self-definition changes as different group memberships become salient and that this categorization can help explain behavior. According to Bilewicz (2009) “The general and often replicated finding has been that perceiving a potential help recipient as a member of a common in-group leads to greater helping, while perceiving a potential help recipient as an out-group member decreases the probability of helping” (p.2779). Further, Messick (1998) states “The very perception of common category membership is sufficient to induce helping behavior. Common group membership, when made salient, is a proximal cue that renders us pragmatists – we are more likely to help other ingroupers than outgroupers.” (p. 152). The author goes on to note that these proximal cues can be quite shallow and need not be indicative of a deep connection between group members. It follows that when individuals perceive another party as part of
their in-group, and when that categorization is made salient, helping behaviors, even unethical helping behaviors, directed toward that person are more likely.

Taken together, this body of research suggests that because UPBs are intended to help another, when an individual perceives the beneficiary of UPB as a member of a common in-group they should be more likely to engage in UPBs to help that fellow ingrouper. Therefore, when individuals perceive common group membership with the beneficiary of their actions via the salience of a shared group, this perception of shared identification should increase the likelihood that an individual will engage in UPBs.

**Hypothesis 2:** In-group (vs. out-group) salience increases the likelihood of UPB

(“Identification Hypothesis”)

**Individual Differences**

There has long been a focus on individual differences in ethics research. In the 1920s, Hartshorne and May (1928) conducted a series of experiments in an attempt to establish honesty as a personality type that could predict individual behavior. Their findings, however, did not support honesty as a stable individual difference, so they concluded that perhaps ethical behavior was more a function of the situation than of the individual (Hartshorne & May, 1928). Contemporary ethics researchers consider both individual differences and the situation by taking an interactionist perspective on ethical decision making which advocates examining the interaction of the situation and individual differences in producing behavior (see Trevino,
1986). For example, using this perspective, Trevino and Youngblood (1990) showed that locus of control interacts with situations to influence a range of ethical behaviors.

In addition to Trevino and Youngblood’s model that includes both the person and the situation, there is an “ongoing effort within personnel psychology to understand the causal paths between personality and behavior generally” (Cullen & Sackett, 2004, p. 175). The authors argue that personality traits may exert influence both directly and indirectly on WPD behaviors. Bennett and Robinson (2003) discuss the likelihood that individual differences will serve as moderators of the relationship between environment and WPD stating “we contend that if personality plays a role, it is more likely as an [sic] indirect one, as a moderator of the relationship between situational influences and the deviant response to that situation” (p. 258).

Due to the conceptual similarity between WPD and UPBs, it is likely, therefore that the same applies to UPBs.

Following Trevino’s (1986) person-situation interactionist model and the advice of personality researchers to better understand both the direct and indirect effect of personality on behavior (Cullen & Sackett, 2004), the third question addressed by this research is: *Are there individual characteristics that serve to either constrain or enhance the likelihood that an individual will engage in UPBs?*

Initial empirical work regarding the role of individual differences in predicting UPBs was conducted by Umphress, Bingham and Mitchell (2010) who studied the effects of organizational identification and positive reciprocity beliefs on UPBs. Later, Herchen, Cox and Davis (2012) added need for cognition to the individual difference variables examined in relation to UPBs. In both cases, the research conducted hypothesized a direct relationship
between the individual difference variables and UPB. This is in line with past research which tended to study either the situation or the individual’s characteristics, but as prior researchers have noted, a full understanding requires examining both domains (Colbert, Mount, Harter, Witt, & Barrick, 2004; Sackett & Devore, 2001; Trevino, 1986). Therefore, to build on prior research and to add to our knowledge regarding UPBs, I have chosen three individual difference variables to be studied as moderators of the relationship between the situation and an individual’s behavior including 1) the propensity to morally disengage, 2) prosocial personality and 3) need for cognition.

In line with the person-situation interactionist model advocated by Trevino (1986), I propose that while situational elements may either encourage or discourage unethical prosocial behavior, individual differences may either heighten or suppress this effect. As noted by Colbert et al. (2004), “when personality traits are highly relevant to criteria being investigated, they can constrain or moderate the relationship between perceptions of the work situation and the criteria” (p. 607). The individual difference variables chosen in this study are highly relevant to an individual’s choice of whether or not to engage in unethical behavior that is intended to help another and should therefore serve to either exacerbate or constrain the individual’s choice of behavior. Each of the three individual difference variables included in the study are examined in detail in the following sections followed in each case by the associated hypotheses to be tested.

**Moral disengagement.** Moral disengagement is “defined as a set of cognitive mechanisms that deactivate moral self-regulatory processes and thereby help to explain why individuals often make unethical decisions without apparent guilt or self-censure” (Detert et al.,
2008, p. 374). There appear to be three different views of moral disengagement depicted in the literature; 1) the traditional view of moral disengagement as a mediator, 2) the more recent acknowledgement that the propensity to morally disengage is a relatively stable individual difference and, 3) most recently, the view that moral disengagement may actually be a consequence of unethical behavior. Each of these views will be described in turn.

According to the traditional view “moral disengagement mediates the relationship between the moral principles individuals hold and their behavioral transgressions” (Shu, Gino & Bazerman, 2011, p.330.) This is in line with the moral disengagement concept as first described by Albert Bandura as an extension of his social cognitive theory (Bandura 1986; Bandura, Barbaranelli, Capra & Pastorelli, 1996; Bandura, Caprara & Zsolnai, 2000). In this vein of research, moral disengagement is used to explain how individuals are able to engage in misbehavior ranging from military violence to corporate corruption without cognitive distress by disengaging the links between misbehavior and self-sanction that would normally prevent such acts.

More recently, scholars have described the propensity to morally disengage as a dispositional trait. Moore and her colleagues describe the propensity to morally disengage as “an individual difference in the way that people cognitively process decisions and behavior with ethical import that allows those inclined to morally disengage to behave unethically without feeling distress” (Moore et al., 2012, p. 2). The authors describe it as an individual difference “that represents a generalized cognitive orientation to the world” (p. 37). Further, these authors developed and validated a scale to measure this individual difference in the propensity to morally disengage (Moore et al., 2012). They showed that propensity to morally disengage
predicts self-reported unethical behavior, a decision to commit fraud, a self-serving decision in the workplace and unethical behavior reported by co-workers and supervisors in the workplace. While the majority of the research has focused on self-serving unethical behaviors, this same individual difference should also predict whether an individual will engage in unethical behavior to benefit others within the organization. Because the propensity to morally disengage should predict whether or not a person will engage in unethical acts, I propose that it will moderate the effects of the situational variables such that:

**Hypothesis 3a:** Propensity to morally disengage moderates the effect of self-interest reward structures on the likelihood of unethical prosocial behavior. Self-interest reward structure will have a stronger effect on the likelihood of UPB for individuals with a greater propensity to morally disengage.

**Hypothesis 3b:** Propensity to morally disengage moderates the effect of in-group salience on the likelihood of unethical prosocial behavior. In-group salience will have a stronger effect on the likelihood of UPB for individuals with a greater propensity to morally disengage.

While Moore et al. (2012) sought to measure the propensity to morally disengage as an individual difference, they acknowledged that “disengaging self-sanctions may also be triggered by specific contextual factors, suggesting moral disengagement may also have a state instantiation” (p. 38). This is consistent with the most recent research on moral disengagement which suggests that it may be a consequence of unethical behavior. In a recent experimental
study, Shu, Gino and Bazerman (2011) showed that moral disengagement can be a
consequence of both unethical behavior and of simply being in a morally permissive
environment. The authors showed that the decision to cheat changes the levels of moral
disengagement vs. those who decided not to cheat. This may explain why those who engage in
minor acts of deviance or criminal behavior “may become disinhibited from engaging in more
serious forms of deviance in the future” (Robinson & Greenberg, 1998, p.22).This is consistent
with work by Bandura and his colleagues who suggest that when actors minimize the
consequences of their actions via moral disengagement that they are more likely to behave
aggressively in future encounters (Bandura, 1990; Bandura, Barbaraneli, Caprara, & Pastorelli,
1996).

While the Shu et al. (2011) focused on selfishly motivated unethical behavior, they
acknowledge that unethical behavior undertaken to benefit another person would mostly likely
result in the same outcome. Shu et al. (2011) note “we would expect that when... dishonesty
may benefit others (i.e. they are focused on the potential helpful consequences of their actions
to others), moral disengagement may be more likely to occur after unethical actions instead of
before” (p. 345). Following this logic those who engage in UPBs should be more likely to
morally disengage. In fact, since the decision to act unethically benefits a party outside the self,
it seems likely that this relationship should be stronger for UPBs than for self-serving unethical
behavior. Engaging in unethical behavior to benefit another person should make it even easier
for an individual to disengage their moral self-sanctioning mechanisms and justify the unethical
act.
Hypothesis 4: Engaging in UPB is positively related to moral disengagement after the fact.

Prosocial Personality. In the management literature, the search for a stable individual difference in the propensity to help others stretches back to the early work of Hartshorne and May (1928) who concluded that prosocial acts were largely motivated by the situation surrounding the individual and not to an enduring personal trait. Later researchers in the social sciences questioned this assumption and began to report that there was a stable individual difference in one’s empathy for others and predisposition towards altruistic or prosocial actions (Davis, 1980, 1983; Gergen, Gergen & Meter, 1972; Penner, Escarrez & Ellis, 1983; Rushton, 1980; Rushton, Chrisjohn & Fekken, 1981). In an effort to settle the debate, Eisenberg and her colleagues (1999) conducted a longitudinal study following subjects from childhood to early adulthood and showed that “there are stable individual differences in prosocial responding that have their origins in early childhood” (p. 1360).

The desire to capture this stable individual difference for use in management research lead to the development and validation of a scale to measure prosocial personality orientation - the Prosocial Personality Battery (Penner, Fritzsche, Craiger and Freifeld, 1995). Penner et al (1997) define prosocial personality orientation as “an enduring predisposition to feel concern about the welfare of other people, to think about their best interests, and to engage in actions on their behalf” (p. 121). The prosocial personality battery consists of two factors. The other oriented empathy factor identifies individuals who are predisposed to experience both cognitive and affective empathy and to feel responsibility for and concern about the well-being of others. The authors describe this as “prosocial thoughts and feelings” (Penner et al, 1997, p.
The helpfulness factor measures an individual’s history of helping behaviors along with the level of distress an individual experiences when another person is in need of assistance. The authors describe this factor as “prosocial actions” (Penner et al, 1997, p. 122).

Prosocial personality orientation has been empirically linked to OCBs (Borman, Penner, Allen & Motowidlo, 2001; Penner, Midili & Kegelmeyer, 1997; Wright & Sablynsky, 2008). In a review of work on the topic, Borman, et al (2001) conclude that the likely corrected correlation between the other the oriented empathy dimension of prosocial personality and OCB is .33 and between the helpfulness dimension and OCB is .27. Because the intent that drives both citizenship behaviors and UPBs is to help others, it is likely that individuals who are predisposed toward prosocial behaviors would be more likely to engage in UPBs when rewarded for doing so. In addition, because of the perception of similarity between the actor and the recipient of UPBs when both are members of a common group, when actors are more prosocially oriented, they are even more likely to engage in prosocial acts that benefit a fellow group member.

**Hypothesis 5a:** Prosocial personality moderates the effect of reward structure on the likelihood of UPB. Self-interest reward structures will have a stronger effect on the likelihood of UPB for individuals who are more prosocial.

**Hypothesis 5b:** Prosocial personality moderates the effect of in-group salience on the likelihood of unethical prosocial behavior. In-group salience will have a stronger effect on the likelihood of UPB for individuals who are more prosocial.

**Need for cognition.** Need for cognition was formally defined by Cohen, Stotland & Wolfe (1955) as “a need to structure relevant situations in meaningful, integrated ways. It is a
need to understand and make reasonable the experiential world” (p.291). Based on this early work, Cacioppo and Petty (1982) sought to identify individual differences in “people’s tendency to engage in and enjoy thinking” (p.116) and developed and validated a scale to measure this individual difference variable. Further studies showed that there is, in fact, a reliable difference in individual’s tendency to gather information from and build on external messages (Cacioppo, Petty & Morris, 1983).

In the earliest social experiments on this topic, Cohen et al (1955) hypothesized that need for cognition would act as a moderating variable with those high in need for cognition more likely to become frustrated with ambiguous situations and more likely to put forth effort to impose structure than those low in need for cognition. The tradition of studying need for cognition as a moderator continued, especially among marketing scholars. Because need for cognition is viewed as a moderator in the process of persuasion, marketing scholars have looked at is moderating effects on the relationship between different types of advertising and consumer attitudes/purchase intentions (Haugtvedt, Petty & Cacioppo, 1992; Petty, Cacioppo, Strathman & Priester, 2005; Zhang, 1996; Zhang & Buda, 1999). In addition, researchers in the area of decision making have explored the role of need for cognition as a moderator of the relationship between framing effects and choice (LeBoeuf & Shafir, 2003; Smith & Levin, 1996) and as a source of bias in ethical judgments (Boyle, Dahlstrom & Kellaris, 1998).

I seek to extend this line of research by testing need for cognition as a moderator of the relationship between an individual’s situation and their decision to engage in UPBs. Individuals with a higher need for cognition tend to be more cognitively engaged than those low in need for cognition. This heightened cognitive functioning should make it less likely that those high in
need for cognition will use heuristics to disengage their moral compass and act unethically, even in the service of others. Those high in need for cognition are more likely to self-censure and therefore less likely to engage in UPBs than those who are low in need for cognition. The notion that need for cognition impacts UPBs was originally tested by Herchen, Cox and Davis (2012) who found that individuals high in need for cognition were less likely than those low in need for cognition to engage in UPBs, regardless of whether ethical leadership was present. I seek to extend this research to encompass other situational factors (i.e. opportunity to cheat, in-group/out-group identification and reward structure).

**Hypothesis 6a:** Need for cognition moderates the effect of self-interest reward structure on the likelihood of unethical prosocial behavior. Self-interest reward structure will have a weaker effect on UPB for those individuals with a greater need for cognition.

**Hypothesis 6b:** Need for cognition moderates the effect of in-group salience on the likelihood of UPB. In-group salience will have a weaker effect on the likelihood of UPB for individuals with a greater need for cognition.

The hypotheses outlined in the preceding paragraphs are summarized in Figure 5.
Figure 5: Summary of Hypothesized Relationships

Individual Differences

- Prosocial Personality
- Propensity to Morally Disengage
- Need For Cognition

- Reward Structure
- In-Group Salience

Unethical Prosocial Behavior

Propensity to Morally Disengage
The hypotheses were tested via a laboratory experiment where actual behavior was observed. According to Katz and Kahn (1978) adults are able to infer role expectations with very few cues. They call this “role readiness” and explain that individuals come to a setting with a readiness to accept legitimate authority and compliance with its requests. The concept of role readiness indicates that participants who schedule a session to participate in a laboratory experiment expect that they will receive instructions with which they will comply. Katz and Kahn (1978) use this phenomenon to describe why participants in Milgram’s (1965) famous experiments obeyed the explicit instruction to administer what they believed were extremely painful electrical shocks to participants who appeared to suffer greatly from these shocks. The researchers in that case provided explicit instructions (role expectations) to participants (focal persons) who were “role-ready” when they entered the experimental setting.

In addition to the role readiness experienced by participants, Katz and Kahn (1978) describe the elements of a “role episode” that provide a useful framework for designing this experiment. A “role episode” is one interchange that involves four elements: 1) role expectations, which are the behavioral standards applied to any person who occupies a given position; 2) sent role, which are the communications stemming from role expectations and are sent in order to influence the focal person; 3) received role, which is the focal person’s perception of the sent role, including any role expectations that the focal person “sends” to himself or herself; and the 4) role behavior, which is the response of the focal person to the information and attempts to influence that have been received.
Using this framework as the basis of the experimental design, the participant will enter the experimental setting with a degree of role readiness, will receive both role expectations and the sent role via the instructions provided and will perceive these role-sendings in a manner congruent with his/her perceptions and cognitions regarding the sent role expectation and then respond by either engaging in or not engaging in UPBs, the role behavior.

As indicated by Katz and Kahn (1978), this exchange does not happen in a vacuum, but is rather influenced by contextual factors, namely the attributes of the focal person, the organizational context and the interpersonal factors at play. In this experiment I begin by measuring individual differences (attributes of the focal person), I then manipulate the context by varying the reward structure and last I manipulate the interpersonal factor by inducing either in-group or out-group salience. In an ongoing organization, these factors would be expected to influence not only the focal person but the role sender as well. While I do not have an ongoing organization in this setting, the participant is likely to assume that the role sent is congruent with the environment in which he/she is placed, since that would be the case in other social situations with which the participant is familiar. Therefore, the instructions (role expectations communicated to the participant) are likely to be interpreted in light of the 3 manipulated elements.

Sample

Students in 4 undergraduate classes with a total enrollment of 508 at a large university in the Southwestern United States were offered the chance to participate in this experiment in exchange for extra credit offered by their instructors and the chance to win one of three visa
gift cards valued at $100, $75 and $50. There were 161 subjects who completed the task (response rate 32%). Their ages ranged from 18 to 51 with an average age of 20. The sample included 94 females (58%) and 67 males (42%).

Procedure

Subjects in the four classes each received a recruiting flyer (see Exhibit 1 for an example) that promulgated the cover story. Subjects were told that the purpose of the study was to learn more about 1) virtual work relationships where co-workers never meet in person and 2) the effects of one-way communication on those relationships. If they chose to participate in the experiment, subjects completed an online questionnaire that they were told would be used to match them with an appropriate teammate. In actuality, the online questionnaire measured the individual difference variables and gathered demographic data on the subjects (see Exhibit 2.) Upon completion of the questionnaire, subjects were asked to choose their top three preferred times to complete the in-lab portion of this task.

Following completion of the pre-task questionnaire subjects were e-mailed their scheduled lab time, given a link for more information regarding a technology they are told we will be using (wireless electrodermal activity monitoring (EDA) devices), and given directions to find the lab. Each one hour lab session was limited to a maximum of 4 participants. There were 4 experimental scenarios, so no two subjects had the same scenario in any lab session.

Upon arriving at the lab, students signed in to a logbook to receive extra credit and were directed to the appropriate work station. At their station was a computer that had been loaded with the appropriate experimental scenario, a numbered wristband that they were told would
monitor their electrodermal activity throughout the task, a sheet with some suggested feedback strategies in case they drew a blank while giving their virtual teammate feedback and a pen. Subjects were asked to place the wristband on their wrist and follow all instructions on the screen. They were also told where to find the experimenter if they had any technical issues such as a paper jam in the printer. After these brief instructions, the experimenter left the room and the subjects followed the on-screen instructions to complete the task. Prior to leaving the lab, subjects were instructed to pick up a debrief statement that was left inside a folder near the door (see Exhibit 4.)

Because many employees in the workforce are delegated day-to-day responsibility for achieving tasks with minimal oversight, this task was designed to give subjects the perception that they were not being closely monitored. To achieve this, participants were told that the computer randomly selects the questions for each round and that no data is saved that shows which questions were selected. Further, it is emphasized that it is important to print out both the correct answer sheet and the responses provided by their teammate. Subjects are told that if they do not print the information, there is no way to retrieve it since each round is randomly generated. This leaves the strong impression that there is no way to track electronically what particular set of words showed up in each round.

Lending further to the idea that there is very little oversight of this task, participants are told to report their teammate’s score via the computer and to shred all printed sheets before leaving the lab to “help keep the lab clean for the next participants” (Shu et al, 2011). Because they believe that the word sets were randomly generated with no electronic trail and they
shred the paper trail, they are led to believe that the experimenter would not know if they cheated or not.

In addition, subjects are told that the computer will allocate drawing tickets based on third round results and that the drawing data is kept in a separate system. Subjects are asked to enter an e-mail address or phone number where they can be reached should they win and are not asked to share their names for this purpose. To complete the impression of minimal oversight, the experimenter left the room after the subjects in each session were successfully signed on and participants were told that they were free to go when they completed the task.

Task

The participants in the study were told that their role is to help their virtual teammate achieve the best score possible on a word association task. The experiment consists of three rounds. The first two rounds are practice rounds and participants are tasked with giving their virtual teammate online feedback to help improve performance for the final round. They are told that only the final round “counts” so the goal is for the participants to help their teammate achieve the highest third round score possible. The task is based on the Random Associates Test using select items generated by Bowden and Jung-Beeman (2003). In this task, three word clues are delivered to the subject and the subject must fill in the correct fourth word. For example, subjects may receive the three word cues “cream, skate and water” and are asked to supply the correct response, which, in this case is “ice”. While this task does not simulate a business experience, according to prior research, “solving RAT-like items appears to involve the same component processes critical for, and the same phenomenological experience of, insight
solutions to more complex problems” (Bowden & Jung-Beeman, 2003, p. 634) which makes it well suited to business research.

The 144 RAT items generated by Bowden and Jung-Beeman (2003) are ranked by level of difficulty which allows me to deliver increasingly difficult problem sets in each of the three rounds. This provides a good cover story for the two practice rounds which increase in difficulty with the final round being the most difficult. This task is well suited to this experiment because scoring is unambiguous (i.e. you either state the correct response or you do not) and the task itself does not require any sort of specialized knowledge making it easily accessible to different populations.

Independent Variables

**In-group/out-group salience manipulation.** To induce participants to feel either part of the in-group or out-group they are led to believe that they are either very similar to their virtual teammate (in-group) or very dissimilar from their virtual teammate (out-group). This manipulation is based on self-categorization theory (e.g. Oakes, 1987; Turner, Hogg, Oakes, Reicher & Wetherell, 1987) that posits that individuals categorize themselves into groups and that “at certain times the self is defined and experienced as ... similar to a social class of people in contrast to some other class” (Turner, Oakes, Haslam & McGarty, 1994, p. 454). Before volunteering for the experiment, participants are told that they will be paired with a teammate based on their responses to the pre-task questionnaire. Upon entering the lab, the instructions the participant reads indicate that they are either very similar to or very different from their teammate. Similar to prior studies that manipulate in-group/out-group membership based on
In sum, in order to incite feelings of similarity, those in the in-group condition are told that 1) their responses to the pre-task questionnaire were very similar to their virtual teammate’s responses, 2) their virtual teammate is also a student at their university and 3) throughout the task they are given feedback that their EDA is a close match to their teammate’s EDA, with the match gaining in similarity over the three rounds. Participants in the out-group condition are told 1) their responses to the pre-task questionnaire were very different from their virtual teammate’s responses, 2) their virtual teammate is a student at the other local university. In addition to being told they are similar to / dissimilar from their teammate, participants are also told that we are monitoring their electrodermal activity (EDA) and that prior research has shown that when individuals are similar their EDA numbers will be close together and that when individuals are dissimilar their EDA numbers will be far apart from one another. This procedure is based on the Bogus Pipeline procedure introduced by Jones and Sigall (1971). While this procedure is often used to improve the veracity of self-report data and reduce social desirability bias (see Roese & Jamieson, 1993 for a review and meta-analysis), it was used here to lend credence to the cover story that participants were either similar to or dissimilar from their virtual teammate.
university, and 3) throughout the task they are given feedback that their EDA is very dissimilar from their teammate’s EDA, becoming more and more dissimilar over the three rounds.

**Reward Structure Manipulation.** To study the effects of providing a reward, there are two reward structures included in this study. All participants are told that they will receive one drawing ticket simply for completing the exercise. In addition, there is a performance based reward which depends solely on the virtual teammate’s score in the final round of the task. The two different performance-based rewards are 1) a performance-based reward solely for the virtual teammate where the subject receives no additional drawing tickets (the no-reward condition) and 2) an equally split performance-based reward (the shared reward condition.) In the no-reward condition, participants are told that if the teammate scores above 8 in the final round, the teammate will receive 10 extra drawing tickets. In the shared reward condition, participants are told that if the teammate scores above 8 in the final round, the participant and the teammate will each receive 5 extra drawing tickets.

**Moderating Variables**

**Propensity to Morally Disengage.** Propensity to morally disengage was measured both prior to the task and after the task using the scale developed and validated by Moore, Detert, Trevino, Baker and Mayer (2012). The scale includes 8 items that measure an individual’s predisposition to disengage their moral self-sanctions. The scale includes items such as “People who get mistreated have usually done something to bring it on themselves” and “People can’t be blamed for doing things that are technically wrong when all their friends are doing it too.”
Chronbach’s alpha was .80 when measured pre-task (time 1) and .73 when measured post-task (time 2).

**Prosocial Personality.** Prosocial personality orientation was measured using the Prosocial Personality Battery (PSB) developed by Penner and his colleagues (1995). The battery contains 56 items that load on two factors. The first factor, other-oriented empathy, measures individual’s prosocial thoughts and feelings and includes items such as “I often have tender, concerned feelings for people less fortunate than me” and “I choose alternatives that minimize the negative consequences to other people”. The second factor, helpfulness, measures individual’s prosocial actions and includes items such as “I have delayed an elevator and held the door open for a stranger” and “I have let a neighbor whom I didn’t know well borrow an item of some value (e.g. tools, a dish, etc.)”. Chronbach’s alpha was .84.

**Need for Cognition.** Need for cognition was measured using the 18 item short form of the need for cognition scale that was derived from the original 34 item long form scale (Cacioppo & Petty, 1982; Cacioppo, Petty & Kao, 1984). This short form version was shown to strongly correlate with the long form (r=+0.95, p<.001) and includes items such as “Thinking is not my idea of fun” (reverse coded) and “I would prefer a task that is intellectual, difficult and important to one that is somewhat important but does not require much thought.” Chronbach’s alpha was .87.

**Dependent Variable**

**Unethical prosocial behavior.** Unethical prosocial behavior is determined by the score the participant records for their virtual teammate. The answer sheet provided to subjects
clearly indicates that the final score should be 7 out of 10, however participants may choose to record any number between 0 and 10 for the final score. Participants are unaware that the answer sheet is consistent for every participant, therefore scoring in this task is unambiguous. When comparing the two sheets (the correct answer sheet provided and the virtual teammate’s answer sheet) the only legitimate score is 7 out of 10. Those who report a score of 8 or above are deemed to have exhibited unethical prosocial behavior, those who report the legitimate score of 7 are not. (See the post hoc analysis section for a discussion regarding recorded scores below 7.)
CHAPTER 4 RESULTS

Table 1 presents the means, standard deviations and correlations between the study variables. It is important to note that the UPB mean value (.05) signifies a low event frequency for this behavior.

Table 1: Means, Standard Deviations and Intercorrelations of Study Variables

<table>
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<tr>
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<tr>
<td>1.UPB</td>
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<td>.22</td>
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<td>2. Gendera</td>
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<td>.49</td>
<td>.077</td>
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<tr>
<td>3.Group Salienceb</td>
<td>.50</td>
<td>.50</td>
<td>.113*</td>
<td>.093</td>
<td>---</td>
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<tr>
<td>4.Rewardc</td>
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<td>.50</td>
<td>.061</td>
<td>.072</td>
<td>.006</td>
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<td>5.P. to Morally Disengage</td>
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<td>.83</td>
<td>.144***</td>
<td>.340*</td>
<td>-.063</td>
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<td>6.Prosocial Personality</td>
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<td>.031</td>
<td>.252*</td>
<td>-.012</td>
<td>.066</td>
<td>-.415*</td>
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<td>7.Need For Cognition</td>
<td>4.50</td>
<td>.87</td>
<td>.036</td>
<td>-.107</td>
<td>.056</td>
<td>.137***</td>
<td>-.186**</td>
<td>.351*</td>
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<tr>
<td>8. P. to Morally Disengage T2</td>
<td>2.02</td>
<td>.73</td>
<td>.099</td>
<td>-.229*</td>
<td>-.054</td>
<td>-.174**</td>
<td>.473*</td>
<td>-.303*</td>
<td>-.237*</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.01 level
**Correlation is significant at the 0.05 level
*** Correlation is significant at the 0.10 level
a Gender = 1 for male, 2 for female
b Group Salience = 0 for out-group, 1 for in-group
c Reward = 0 for no reward, 1 for shared reward
t Correlation is significant at the 0.10 level (1-tailed)

Manipulation Checks

In order to assess whether the two manipulations had the intended effect, manipulation check questions were asked after all other post-task questions had been answered. Six questions were asked related to group salience. Sample items measuring the impact of the in-group/out-group manipulation included “On a scale of 1 (not at all) to 7 (very much), during the task, to what extent did you feel like you and [Teammate Name] were on the same team?” and “On a scale of 1 (not at all) to 7 (very much), during the task, to what extent did you feel
separate from [Teammate Name]?” (reverse coded). An independent samples t-test was conducted to see if those in the in-group scored significantly differently from those in the out-group on these items. The results indicated that the mean differences were significant (p<.01) for 5 of the 6 manipulation check items related to group salience indicating that subjects were influenced by the group manipulation.

Two items were asked in order to assess whether participants understood the reward structure. Participants were asked the extent they agreed or disagreed on a scale of 1 to 7 with the following items: “Whether or not I will get additional drawing tickets depended on [Teammate Name]’s performance in the final round.” and “If [Teammate Name] scored 8 or above in the final round, we both got additional drawing tickets.” An independent samples test was once again conducted to see if those subjects in the shared reward condition differed from those in the no reward condition. The results indicated that the mean differences were statistically significant (p<.000) in both cases indicating that subjects understood the reward conditions.

Hypotheses Testing

The 2x2 experimental design was tested using binary logistic regression in IBM SPSS Statistics 22. Because the dependent variable, UPB, is dichotomous (the behavior is either present or absent) and because there were both dichotomous and continuous independent variables, binary logistic regression using maximum likelihood estimation was the most useful tool for analyzing this data. Before proceeding with logistic regression, I examined collinearity among the independent variables because logistic regression can be sensitive to high correlations among the predictor variables. The tolerance levels for all independent variables
were greater than 0.1 indicating that there were acceptably low levels of intercorrelation to proceed with logistic regression. Given the low frequency of the target behavior examined in this study (5%), sample size requirements for detecting a minimal effect were unattainable. Hence, to increase the power of statistical testing I adopted an alpha level of .10 for hypothesized effects. In addition, reported results used one-tailed p-values for all directional hypotheses and two-tailed p-values otherwise. Finally, logistic regression for rare events can suffer from small sample bias. As an alternative to conventional logistic regression, Allison (2012) recommends using penalized likelihood estimation to reduce small-sample bias. In this case, the results for maximum likelihood and penalized likelihood estimation were equivalent. Therefore, only the maximum likelihood estimates are reported here.

Hypothesis 1 and 2 predicted that shared reward and in-group salience increase the likelihood of UPB. Hypotheses 3, 5, and 6 posited that propensity to morally disengage, prosocial personality, and need for cognition moderate the effects of shared reward and in-group salience. With gender as a covariate, I used a hierarchical approach for hypothesis testing. Table 2 reports the results of maximum likelihood binary regression applied to each model.
Table 2: Results of Maximum likelihood binary regression analysis: Control Variable, Experimental Conditions and Moderators Effect on UPB

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
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<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
<td>B</td>
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<td><strong>Control Variable</strong></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Gender(a)</td>
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<td>.75</td>
<td>.67</td>
<td>1.49***</td>
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<td><strong>Conditions</strong></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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<td>.74</td>
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<tr>
<td>Prosocial Personality x Group</td>
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<td>Prosocial Personality x Reward</td>
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<tr>
<td>Need for Cognition x Reward</td>
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<td>Cox &amp; Snell R Square</td>
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<td>.040</td>
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<td>Nagelkerke R Square</td>
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<td>.016</td>
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<tr>
<td>Change in N R Square from Model 1</td>
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<td>.049</td>
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<td>Step/Block</td>
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<td>(X^2(3)=5.21, p=.16)</td>
<td>(X^2(3)=3.13, p=.37)</td>
<td>(X^2(3)=2.66, p=.45)</td>
<td>(X^2(9)=13.17, p=.16)</td>
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<tr>
<td>Model</td>
<td>(X^2(3)=3.49, p=.32)</td>
<td>(X^2(6)=8.71, p=.19)</td>
<td>(X^2(6)=6.62, p=.36)</td>
<td>(X^2(6)=6.15, p=.41)</td>
<td>(X^2(12)=16.66, p=.16)</td>
</tr>
</tbody>
</table>

* Significant at the 0.01 level one-tailed  
** Significant at the 0.05 level one-tailed  
*** Significant at the 0.10 level one-tailed  
\(a\) Gender = 1 for male, 2 for female 
\(b\) Group Salience = 0 for out-group, 1 for in-group 
\(c\) Reward = 0 for no reward, 1 for shared reward

Model 1 includes the effects of gender and the hypothesized effects of in-group/out-group salience and reward structure. The overall model is not significant (\(X^2 = 3.49, p > .10\)), and the pseudo R\(^2\) term indicates that less than 7% of the variability in UPB is accounted for by these variables. Moreover, neither group salience (\(B= 1.10, p > .10\)) nor reward structure (\(B= -.56, p > .10\)) are statistically significant.
Model 2 includes the effects of gender, in-group/out-group salience, reward structure and propensity to morally disengage along with the two hypothesized interaction effects related to propensity to morally disengage (propensity to morally disengage x reward and propensity to morally disengage x group). The overall model is not significant ($X^2 = 8.71, p > .10$) and the pseudo $R^2$ terms indicate that the model explains up to 16% of the variability in UPB. Again in this model neither group salience ($B = 1.19, p > .10$) nor reward structure ($B = -.67, p > .10$) are statistically significant. Moreover, neither projected interaction effect related to propensity to morally disengage is significant ($B = .21, p > .10$ and $B = .63, p > .10$ respectively.)

Model 3 includes the effects of gender, in-group/out-group salience, reward structure and prosocial personality along with the two hypothesized interaction effects related to prosocial personality (prosocial personality x reward and prosocial personality x group). The overall model is not significant ($X^2 = 6.62, p > .10$) and the pseudo $R^2$ terms indicate that the model explains up to 12% of the variability in UPB. Unlike the first two models, in Model 3 group salience is a significant predictor of UPB ($B = 1.25, p = .08$). In addition, the interaction of prosocial personality and reward structure is a significant predictor of UPB ($B = 2.04, p = .06$). Similar to the first two models, however, reward structure is not significant ($B = -.67, p > .10$). Moreover, the projected interaction effect of prosocial personality and group salience on UPB is also not statistically significant ($B = .23, p > .10$).

Model 4 includes the effects of gender, in-group/out-group salience, reward structure and need for cognition along with the two hypothesized interaction effects related to need for cognition (need for cognition x reward and need for cognition x group). The overall model is not significant ($X^2 = 6.15, p > .10$) and the pseudo $R^2$ terms indicate that the model explains up
to 12% of the variability in UPB. Similar to Model 3, in Model 4 group salience is a statistically significant predictor of UPB ($B=1.38$, $p=.08$). However, neither reward structure ($B=-.84$, $p>.10$) or the projected interactions of need for cognition and group or need for cognition and reward ($B=-.84$, $p>.10$ and $B=.81$, $p>.10$ respectively) are significant.

For Model 5, the full model, I entered gender, in-group/out-group salience, reward structure, and all remaining variables along with their hypothesized interactions. The overall model is not significant ($X^2 = 16.66$, $p > .10$) and the pseudo $R^2$ terms indicate that up to 30% of the variance in UPB is explained by these variables. In the full model both group salience ($B=1.99$, $p=.09$) and reward structure ($B=-2.03$, $p=.09$) are statistically significant predictors of UPB. Among the interaction effects tested, only the interaction of propensity to morally disengage and reward ($b=1.70$, $p=.08$) and the interaction of prosocial personality and reward ($b=2.50$, $p=.08$) are statistically significant.

In this study, the hypothesized effects of reward structure and group salience constitute planned comparisons. Thus, assessing the omnibus null hypothesis (i.e., significance of the full model) in this factorial experiment is unnecessary for assessing those effects (Kirk, 1994). Nonetheless, given nonsignificant results for the full model, the significance of individual coefficients should be viewed with caution. With that caveat, table 3 presents a detailed view of Model 5 that includes regression coefficients, standard errors, Wald statistics, significance levels, and odds ratios for each effect.
**Table 3: Results of Maximum Likelihood Binary Regression Analysis: Control Variables, Conditions and Moderators Effect on UPB in Full Model (Model 5)**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E</th>
<th>Wald</th>
<th>df</th>
<th>Sig</th>
<th>Odds Ratio</th>
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<td>1</td>
<td>.088***</td>
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<tr>
<td>Reward</td>
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<td>.13</td>
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<tr>
<td>Group Salience</td>
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<td>1.79</td>
<td>1</td>
<td>.091***</td>
<td>7.33</td>
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<td></td>
</tr>
<tr>
<td>Propensity to Morally Disengage</td>
<td>.74</td>
<td>1.73</td>
<td>.40</td>
<td>1</td>
<td>.264</td>
<td>.34</td>
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<tr>
<td>P. to Morally Disengage x Reward</td>
<td>1.70</td>
<td>1.21</td>
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<td>.082***</td>
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<td>.264</td>
<td>.34</td>
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<tr>
<td>Prosocial Personality x Reward</td>
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<td>.087***</td>
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<td>.333</td>
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<td>Need for Cognition x Reward</td>
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<td>.01</td>
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<tr>
<td>Need for Cognition x Group</td>
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<td>1.15</td>
<td>.37</td>
<td>1</td>
<td>.197</td>
<td>2.00</td>
</tr>
</tbody>
</table>

* Significant at the 0.01 level one-tailed
** Significant at the 0.05 level one-tailed
*** Significant at the 0.10 level one-tailed

a Gender = 1 for male, 2 for female
b Group Salience = 0 for out-group, 1 for in-group
c Reward = 0 for no reward, 1 for shared reward

Both manipulated variables, reward structure and group salience, were significantly related to the likelihood of engaging in UPB at the p<.10 level using a one-tailed test. Although the impact of reward structure was significant using these parameters, subjects in the no reward condition rather than the shared reward condition were more likely to engage in UPB. Therefore, Hypothesis 1 was not supported and, in fact, the results were in the opposite direction. With regard to group salience, the odds ratio of 7.33 (p<.10) indicates that subjects in the in-group condition were over 7 times more likely to engage in UPB than those in the out-group condition. This supports Hypothesis 2.
Hypothesis 3a predicted a moderating influence of propensity to morally disengage on the relationship between reward structure and UPB. Likewise, hypothesis 3b posited a moderating effect of propensity to morally disengage on the relationship between group salience and UPB. Results from Table 3 provide support for hypothesis 3a, but fail to support hypothesis 3b. To better interpret the interaction hypothesized in 3a, I graphed the effects using conditional probabilities in lieu of odds ratios (Osborne, 2012). Plotted values for reward structure and propensity to morally disengage are shown in Figure 5.

**Figure 6: The Interaction Effect of Reward Condition and Propensity to Morally Disengage on UPB**

The predicted effect posited that an increased propensity to morally disengage would strengthen the relationship between reward structure and UPB. As shown in the graph, there is a significant positive relationship between reward structure and UPB for subjects high in propensity to morally disengage. Further, subjects who scored high in propensity to morally disengage...
disengage were, in fact, most likely to engage in UPB under conditions of shared rather than no reward. This pattern is consistent with hypothesis 3a.

Hypothesis 5(a) predicted a moderating effect of prosocial personality on the relationship between reward structure and UPB. Results from table 3 reveal a significant moderating influence of prosocial personality. A graph of the interaction appears in Figure 6. As noted above, and contrary to hypothesis 2, subjects in the shared reward condition were less rather than more likely to engage in UPB. This unexpected relationship was stronger among low prosocial subjects. By comparison, the effect of reward structure on the likelihood of UPB was attenuated among high prosocial subjects. Ultimately, this pattern of results fails to support hypothesis 5a. Hypothesis 5b predicted a moderating effect of prosocial personality on the relationship between group salience and UPB. The coefficient associated with this moderating influence was not statistically significant. Hence, hypothesis 5b is not supported.

*Figure 7: The interaction Effect of Reward Condition and Prosocial Personality on UPB*
Hypothesis 6a posited that need for cognition would moderate the relationship between reward structure and UPB. Likewise, hypothesis 6b predicted a moderating effect of need for cognition on the relationship between group salience and UPB. Neither of the coefficients reflecting the moderating influence of need for cognition were significant. Therefore, hypotheses 6a and 6b are not supported.

Hypothesis 4 considers the impact of engaging in UPB on subsequent propensity to morally disengage. Specifically, the prediction posited a positive relationship between engaging in UPB and moral disengagement. I tested hypothesis 4 by regressing Propensity to Morally Disengage at time 2 (post task) on UPB. UPB was not significantly correlated with propensity to morally disengage measured at time 2 (B.333, p>.10). Thus, Hypothesis 4 was not supported.

Supplemental Analysis

Due to the nature of the task and the data collected, it was possible to operationalize UPB as a continuous measure as well as a dichotomous event (UPB/no UPB) using reported score as a proxy for UPB. In all cases, the objective score achieved by the virtual teammate was 7. The original dependent variable was coded such that all scores above 7 constituted UPB since subjects had artificially inflated the score above that which was objectively achieved. Given the complete absence of incentives or penalties for underreporting the teammate’s score, scores below 7 were not anticipated. Yet, an examination of the data revealed that just as many subjects under reported their teammate’s score as over reported the score.

Consequently, a supplemental analysis was performed to see if the study variables significantly impacted the actual score reported by subjects. The potential range of values on
this interval-level measure was 0 to 10. Accordingly, using the identical set of independent variables, I performed an ordinary least squares (OLS) regression analysis with subjects’ reported score as the dependent variable. Results of the OLS regression analysis are summarized in Table 4.
Table 4: Results of Linear Least Squares Regression Analysis: Control Variable, Conditions and Moderators Effect on Score

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
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<th>Model 4</th>
<th>Model 5</th>
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<td>Gendera</td>
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<td>.279**</td>
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<td>-.224***</td>
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<tr>
<td>Moderators</td>
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<td></td>
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<td>Propensity to Morally Disengage</td>
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<tr>
<td>Model</td>
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<td>p=.011**</td>
<td>p=.007*</td>
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</table>

* Significant at the 0.01 level one-tailed
** Significant at the 0.05 level one-tailed
*** Significant at the 0.10 level one-tailed

a Gender = 1 for male, 2 for female
b Group Salience = 0 for out-group, 1 for in-group
c Reward = 0 for no reward, 1 for shared reward

Similar to the full logistic regression model in which both manipulated variables significantly predicted the likelihood of UPB; in the full OLS regression model both manipulated variables, reward structure and group salience, were significantly related to the reported teammate score. Contrary to Hypothesis 1 (and consistent with logistic regression results), subjects in the shared reward condition reported lower scores for their teammates than those in the no reward condition (b=.232, p=.077). Consistent with Hypothesis 2, subjects in the in-group condition reported higher scores for their virtual teammates than did subjects in the out-group condition (b=.277, p=.035).
Hypotheses 3a and 3b predicted a moderating influence of propensity to morally disengage on the relationship between reward structure and UPB and between group salience and UPB. Unlike the logistic regression, the results of the OLS regression indicate that the effect of reward structure on score is not moderated by the propensity to morally disengage ($b = -.021, p = .906$). However, the effect of in-group salience on score is moderated by the propensity to morally disengage ($b = .333, p = .065$) such that the higher the subject’s propensity to morally disengage, the higher the score they were likely to report for a virtual teammate when that teammate was perceived to be a fellow in-grouper (vs. out-grouper). Figure 7 shows this relationship graphically. Further, the analysis shows that not only do subjects tend to over report the scores for fellow in-group members, but they also tend to underreport scores for out-group members. Hence, underreporting, information that is discarded when employing the dichotomous UPB measure, leads to a significant finding in the OLS regression because the analysis uses the continuous dependent variable, reported score.
Hypotheses 5(a) and 5(b) predicted a moderating effect of prosocial personality on the relationship between reward structure and group salience and UPB. While the logistic regression revealed that prosocial personality moderates the relationship between reward structure and UPB, no such effects were observed with the OLS regression analysis.

Hypotheses 6(a) and 6(b) predicted a moderating effect of need for cognition on the relationship between reward structure and group salience and UPB. Neither the logistic regression nor the OLS regression revealed any moderating effects of need for cognition.
CHAPTER 5 DISCUSSION

Findings

As expected, in-group salience influenced subject’s choice to engage in UPB. It appears that individuals will help fellow in-groupers, even when that help comes via engaging in unethical acts. Surprisingly, when I used the continuous variable (score ranging from 1 – 10) to measure UPB the relationship was even stronger (p<.05 vs. p<.10). This is because there were individuals who chose to underreport the score for out-group teammates. In other words, participants not only sought to help their fellow in-group members by over reporting their scores, but they seemingly sought to hurt out-group members by underreporting their scores even though there was no tangible penalty to the out-group for doing so. Recall that the group salience manipulation only stipulated that results of students at their own university would be compared to results of students at another local university. There was no mention of what this comparison would entail or any possible consequences of the comparison. Based on this limited amount of information, subjects underreported scores for out-group members as often as they over reported scores for in-group members, strengthening the statistical impact when the continuous variable was used as the dependent variable in this supplemental analysis.

Another surprising finding in the study was those who would have received a reward were less rather than more likely to engage in UPB. This finding was contrary to the original hypothesis and contradicts economic theories that predict that individuals will engage more in actions when a reward is provided for doing so. The reason for this finding could be methodological or it could be theoretical.
From a methodological standpoint, there are at least two possible explanations. First, the majority of subjects in the experiment were enrolled in a class with other subjects. While the experiment was conducted in the shortest amount of time possible (approximately 2 weeks) it is possible that the participants who had completed the task communicated with those who had not yet participated and informed future participants that everyone had an equal chance at receiving a reward even though the instructions indicated otherwise. The debrief statement provided to subjects upon leaving the lab stated “No matter what the instructions indicated, each person who participated in this study will receive a total of 11 drawing tickets so that each participant will have an equal chance of winning one of the three prizes.” If participants were aware of this information, the reward structure manipulation may not have had the intended effect.

An additional methodological explanation is supplied by Campbell and Stanley (1963). It is possible that the unexpected result was due to a “reactive effect” of the experimental arrangement. Reactive arrangements occur because subjects in an experiment actively try to divine the experimenter’s intent and may not behave as they would if a similar situation arose outside of an experimental setting. In this case, it is possible that subjects in the lab who were specifically told of the potential rewards for engaging in UPB did not act the same way they might act when faced with a “real life” situation in which there are rewards for engaging in unethical acts intended to benefit a teammate.

Moving on to theoretical explanations for this contrary finding, it is possible that subjects engaged in psychological reactance (Brehm, 1966). Psychological reactance occurs when an individual feels pressured to engage in an act that they already felt free to engage in and reacts
by choosing a different behavior in order to maintain their autonomy. The example given by Brehm (1966) is of a man who typically spends Sundays playing golf. When he is not playing golf, he typically watches television or putters in his workshop. If the man’s wife tells him to go golf on a particular Sunday because she is having people over to the house and doesn’t want him there, the man may protest that he wanted to watch television, even if he originally intended to play golf that day. This protest restores his autonomy to decide his own actions. This concept may apply to the experimental manipulation regarding rewards for engaging in UPB. Subjects who may have intended to engage in UPB may have reacted to the pressure supplied by the reward structure by re-establishing their freedom to choose (i.e. by choosing not to engage in the behavior.)

This type of reactance is further supported by self-presentational motivations (Baumeister, 1982). When it comes to altruistic helping behavior (i.e. that which is not rewarded) Baumeister states “altruistic behavior is at least in part motivated by the desire to be recognized as a charitable and generous person” (1982, p. 5). He goes on to say that psychological reactance may well derive from the conscious or unconscious self-presentational motivation to construct one’s public self so that it is congruent to one’s ideal self. If one’s ideal self is guided by the desire to be viewed as charitable and generous, then accepting a reward for engaging in helping behavior would threaten this ideal self-view. In order to preserve their ideal self-view as charitable and generous individuals, subjects in this experiment may have reacted by not engaging in UPB when a reward was provided. This reactance behavior may have been driven by the desire to remain independent and autonomous as described by Brehm
and/or by the desire to maintain their ideal self-view as charitable, generous persons as described by Baumeister.

The unexpected relationship between reward and UPB was stronger among low prosocial subjects. By comparison, reward structure had virtually no impact on the likelihood of UPB among high prosocial subjects. While this effect was statistically significant at the $p<.10$ level, the magnitude of the change in conditional probabilities was low. For low prosocial subjects, the probability of engaging in UPB was .05 when no reward was offered which shrunk to virtually zero when a shared reward was offered. For high prosocial subjects the conditional probability remained close to .02 regardless of reward condition. This interaction effect, like the main effect of reward structure, may be attributed to either methodological or theoretical causes. It is possible that some subjects were aware that rewards would be apportioned evenly, despite the instructions to the contrary as cited above. This could have disproportionate impacts depending on the number of high/low prosocial subjects who were appraised of this information. From a theoretical standpoint, it is also possible that the low prosocial participants were less likely to help in the reward condition due to self-presentational motivations to appear more altruistic (their ideal state).

While the overall effect of reward structure on UPB was in the opposite direction from that which was anticipated, propensity to morally disengage had the anticipated moderating effect on the relationship between rewards and UPB. Those high in propensity to morally disengage were more likely to engage in UPB when a shared reward was offered (vs. no reward). This result is in line with the theory that those higher in propensity to morally disengage will find it easier to switch off their moral self-sanctions in order to engage in unethical acts when a
reward is offered for doing so. In addition to this moderating effect, those with a propensity to morally disengage were more likely to engage in UPB regardless of condition (i.e. a direct correlation between propensity to morally disengage and UPB was noted in the study even though none was hypothesized.) This may be explained by the fact that the unethical act in this case was also prosocial, presumably making it even easier for those more predisposed to do so to switch off moral self-sanctions. In other words, those with a propensity to morally disengage likely find it even easier to justify unethical acts when they are engaging in these acts with the intent to help a third party.

Contributions and Future Work

The main contribution of this study concerns the effects of group salience. The finding that group salience impacts not only UPB, but also potentially impacts harming behaviors is worthy of further study. This finding is particularly noteworthy, because the group salience manipulation was somewhat “shallow” in that the only known facts about the virtual teammate were his/her name and school affiliation. It is very possible that the effect of group membership on UPB would be even stronger when actual workplace relationships are involved. Future researchers may endeavor to find a correlation between the “depth” of group identity salience and the incidence of UPB. Further, it would be interesting to divine if the same relationship extends to harming behaviors aimed at out-group members.

The second major contribution of this work comes from studying actual behavior versus self-reports. The experimental method used in this study provided an opportunity to observe the occurrence of UPB in response to group salience and offered rewards whereas self-reports
involve personal judgment regarding the likelihood of engaging in UPB or personal recollection about engaging in UPB. Both these types of self-report are subject to bias. Participants may or may not choose to report their actual intent. What is more, we know that individuals are frequently not aware that their decisions have an ethical component (Butterfield, Trevino & Weaver, 2000) which may lead them to underreport past engagement in UPB. While using self-reports is a valid tool for social science research, it is strengthened considerably when actual behavior is observed. Future research involving observed UPB behavior in the field would further strengthen the field of work regarding this nascent construct.

The last noteworthy contribution of this paper comes via theoretical development regarding the UPB construct. The definition provided herein may be applied both inside and outside the workplace and may be applied to targets at various organizational levels (i.e. colleague, leader, group members, or organization as a whole.) This provides a framework for future work to delineate the different variables that may impact UPB enacted to help a co-worker from UPBs enacted to help the organization or a leader. This distinction is important for future researchers, particularly when it comes to linking identification to UPB. A prior study (Umphress & Bingham, 2010) found that organizational identification was a predictor of UPB when coupled with positive reciprocity beliefs. In this study I found that group identification was an important predictor of UPB targeted toward a fellow in-group member. This lays the foundation for future researchers to better understand what aspects of identification may lead to unethical helping behaviors both inside and outside the workplace.

While the contributions of this work were hindered by the fact that UPB appears to be a low base rate phenomenon requiring large samples to achieve desired power, this study does
lay the foundation for future work in this burgeoning area of research. Future researchers may find it fruitful to delve into why individuals might seek not only to help in-group members via unethical acts, but what mechanisms also seem to be driving them to “hurt” out-group members. In the supplemental analysis, the relationship between group identity salience and helping/harming was more pronounced among subjects higher in propensity to morally disengage, suggesting that selectively disengaging moral self-sanctions is a fertile area for further research.

Future researchers may also find it fruitful to delve into additional individual difference variables that have previously been shown to correlate with helping behaviors (OCB, prosocial behaviors) and/or unethical or harmful behaviors (CWB, antisocial behavior). For instance, Machiavellianism has been shown to correlate with self-interested unethical behavior (e.g. Kish-Gephart, Harrison & Trevino, 2010; Hegarty & Sims, 1979; Reichard & Slane, 1987; Jones & Kavanagh, 1996) but theoretically Machiavellianism should negatively correlate with UPB. Because the intent of UPB is other-focused and Machiavellianism is about seeking power through opportunism and self-interest, this trait should be negatively related to UPB. Future researchers could do more work on this and many more individual difference variables to assess and measure their relationship to UPB.
Limitations

As with any study, there are limitations to this study that should be noted. First, UPB appears to be a low base rate phenomenon making it difficult to attain sufficient sample size to produce enough power to draw statistically significant conclusions. In this study only 5% of the sample engaged in UPB (operationalized as over reporting a teammate’s score). Because the UPB construct is nascent, there are no prior studies that I am aware of that have used observations of UPB as the dependent variable. All prior studies have relied on self-reports of UPB. Consequently, the actual base rate for UPB is indeterminate.

Assuming that episodes of UPB reflect a low base rate phenomenon, these results should be interpreted with caution. There is a risk that the statistical conclusions that were drawn were not valid due to lower than desired statistical power (Cook & Campbell, 1979). Furthermore, to compensate for the low base rate, the significance criterion was relaxed in the analysis of UPB (p<.10 rather than p<.05). While there was justification for this choice, the conclusions drawn from the study would have been stronger had I been able to demonstrate significance at the p<.05 level. It should be noted, however, that substituting the continuous dependent variable “score” for the dichotomous variable “UPB” did result in statistically significant results (p<.05) for the group salience manipulation. Because 5% of the sample underreported their teammate’s score (the same percent that over reported) use of the continuous dependent variable proved to be useful in supplemental analysis.

The final limitation that I would like to call attention to is that the omnibus logistical models were not statistically significant. While I believe it is valid in this case to interpret the
significance of individual variables within these models, the conclusions drawn should be viewed with this caution in mind.

Conclusion

In summary, this study has provided a foundation upon which further research may be based. By providing a definition of UPB that may be applied both inside and outside the workplace to beneficiaries that range from individuals to groups, this work has provided a more holistic framework for future study. In addition, this study has strengthened the validity of the UPB construct that was previously measured solely via self-report by observing actual unethical prosocial behavior in a controlled setting. Lastly, the finding that in-group salience significantly impacts the incidence of UPB is noteworthy and should lead to interesting future work regarding identification and UPB.
REFERENCES


Umphress, E.E. (2003). In the name of the company: Unethical behaviors perpetrated by employees in response to accountability and fair treatment. [Dissertation.]


EXHIBIT 1 RECRUITING FLYER

Research Participation Opportunity

This study is designed to understand more about two things 1) the effectiveness of virtual work relationships when the two parties never meet face to face and 2) the effects of one-way communication on these relationships. There are two parts to this opportunity and you must complete both parts to receive credit.

I. **Fill out an on-line survey that should take approximately 15 minutes to complete.**

   The survey must be complete by **Friday, [Date] at 5:00pm** in order to provide us enough time to pair you appropriately with a virtual teammate.

   The survey link is: [https://unt.az1.qualtrics.com/SE/?SID=SV_6u4NlpMrSjxDvBX](https://unt.az1.qualtrics.com/SE/?SID=SV_6u4NlpMrSjxDvBX)

II. **Participate in a lab session in BLB 277.**

   You will be paired with a virtual teammate to complete an activity via computer.

   Because we will be pairing you with a teammate in another location, it is essential that you be on time for the lab session so that you and your teammate can start on time and have ample time to complete the activity. The session generally takes about 30 – 45 minutes to complete.
At the end of the online survey described in part I above, you will chose the lab sessions that best meet your schedule. The times for each session are listed below so that you can check your calendar before you make your choices at the end of the survey. You will be asked to rank your top three choices. By ranking your top three choices, you are agreeing to be available to participate at those times.

- Tuesday, [Date], 10:00am
- Tuesday, [Date], 11:00am
- Tuesday, [Date], 12:00pm
- Wednesday, [Date], 10:00am
- Wednesday, [Date], 11:00am
- Wednesday, [Date], 1:00pm

If you have any questions, please contact me via e-mail at Julia.herchen@unt.edu
EXHIBIT 2 PRE-TASK QUESTIONNAIRE

**Moral Disengagement (Moore et al., 2012)**

- It is okay to spread rumors to defend those you care about
- Taking something without the owner’s permission is okay as long as you’re just borrowing it
- Considering the ways people grossly misrepresent themselves, it’s hardly a sin to inflate your own credentials a bit
- People shouldn’t be held accountable for doing questionable things when they were just doing what an authority figure told them to do
- People can’t be blamed for doing things that are technically wrong when all their friends are doing it too
- Taking personal credit for ideas that were not your own is no big deal
- Some people have to be treated roughly because they lack feelings that can be hurt
- People who get mistreated have usually done something to bring it on themselves

**Prosocial Personality Battery (PSB) (Penner et. Al, 1995)**

PART 1:

Below are a number of statements which may or may not describe you, your feelings or your behavior. Please read each statement carefully and indicate the extent to which you agree or disagree with the

- When people are nasty to me, I feel very little responsibility to treat them well. (R)
- I would feel less bothered about leaving litter in a dirty park than in a clean one. (R)
• No matter what a person has done to us, there is no excuse for taking advantage of them.

• With the pressure for grades and the widespread cheating in school nowadays, the individual who cheats occasionally is not really as much at fault. (R)

• It doesn't make much sense to be very concerned about how we act when we are sick and feeling miserable. (R)

• If I broke a machine through mishandling, I would feel less guilty if it was already damaged before I used it. (R)

• When you have a job to do, it is impossible to look out for everybody's best interest. (R)

• I sometimes find it difficult to see things from the "other person's" point of view. (R)

• When I see someone being taken advantage of, I feel kind of protective towards them.

• I sometimes try to understand my friends better by imagining how things look from their perspective.

• Other people's misfortunes do not usually disturb me a great deal. (R)

• If I'm sure I'm right about something, I don't waste much time listening to other people's arguments. (R)

• When I see someone being treated unfairly, I sometimes don’t feel very much pity for them. (R)

• I am often quite touched by things that I see happen.

• I believe that there are two sides to every question and try to look at them both.

• I tend to lose control during emergencies.

• When I'm upset at someone, I usually try to "put myself in their shoes" for a while.

• When I see someone who badly needs help in an emergency, go to pieces.
PART 2:

Below are a set of statements which may or may not describe how you make decisions when you have to choose between two courses of action or alternatives when there is no clear right way or wrong way to act. Some examples of such situations are: being asked to lend something to a close friend who often forgets to return things; deciding whether you should keep something you have won for yourself or share it with a friend; and choosing between studying for an important exam and visiting a sick relative. Please read each statement carefully and indicate the extent to which you agree or disagree with the statement.

- My decisions are usually based on my concern for other people.
- My decisions are usually based on what is the most fair and just way to act.
- I choose alternatives that are intended to meet everybody's needs.
- I choose a course of action that maximizes the help other people receive.
- I choose a course of action that considers the rights of all people involved.
- My decisions are usually based on concern for the welfare of others.

PART 3:

Below are several different actions in which people sometimes engage. Read each of them and decide how frequently you have carried it out in the past. Please read each statement carefully and chose the number that best corresponds to your past behavior.

- I have helped carry a stranger's belongings (e.g., books, parcels, etc.).
- I have allowed someone to go ahead of me in a line (e.g., supermarket, copying machine, etc.)
• I have let a neighbor whom I didn't know too well borrow an item of some value (e.g., tools, a dish, etc.).

• I have, before being asked, voluntarily looked after a neighbor's pets or children without being paid for it.

• I have offered to help a handicapped or elderly stranger across a street.

*Need for Cognition (Cacioppo, Petty & Kao, 1984)*

• I would prefer complex to simple problems

• I like to have the responsibility of handling a situation that requires a lot of thinking

• Thinking is not my idea of fun

• I would rather do something that requires little thought than something that is sure to challenge my thinking abilities

• I try to anticipate and avoid situations where there is a likely chance that I will have to think in depth about something

• I find satisfaction in deliberating hard and for long hours

• I only think as hard as I have to

• I prefer to think about small daily projects rather than long-term ones

• I like tasks that require little thought once I have learned them

• The idea of relying on thought to make my way to the top appeals to me

• I really enjoy a task that involves coming up with new solutions to problems

• Learning new ways to think doesn’t excite me very much
• I prefer my life to be filled with puzzles that I must solve

• The notion of thinking abstractly is appealing to me

• I would prefer a task that is intellectual, difficult and important to one that is somewhat important but does not require much thought

• I feel relief rather than satisfaction after completing a task that required a lot of mental effort

• It’s enough for me that something gets the job done; I don’t care how or why it works

• I usually end up deliberating about issues even when they do not affect me personally
EXHIBIT 3  EXPERIMENTAL TASK SCRIPT

Task Instructions

Thank you for agreeing to participate in this task! We are trying to determine if similarity to a virtual teammate makes a difference in task performance. As such, you will be working with another person via computer who we refer to as your “teammate”.

Your virtual teammate will be responsible for completing the task and you will be responsible for helping your teammate to achieve the highest possible level of performance.

You most likely do not know your teammate and you will not see your teammate at any time during this task or after this task. Your only communication with your teammate will be via the computer. Because we are interested in better understanding virtual work relationships, we have purposely placed our computer labs in separate buildings to reduce the chance that you will meet your teammate in person.

In addition to understanding the effects of virtual teammate similarity on performance, we are interested in the effects of one-way communication on performance. To better understand these effects, you will be able to send any comments you like to your teammate during this exercise but your teammate will not be able to communicate with you in any way. Your teammate will be asked to read the communication you send them and will be given time to do so during this exercise.

Some of your fellow students at UNT will be completing this task as well as students from UT Arlington. Performance of students at UNT will be compared to the performance of students at UTA. At the end of the task you will be eligible for drawing tickets toward one of
three prizes: 1) a $100 visa gift card, 2) a $75 visa gift card and 3) a $50 visa gift card that will be awarded in addition to any extra credit points allotted by your instructor.

**Information about Your Teammate**

(4 Names: Morgan, Taylor, Peyton, Reagan)

Your teammate is **Morgan**. You and your teammate **Morgan** have been paired based on the answers you each provided to the pre-task questionnaire. You will communicate with **Morgan** via instant messaging (IM) but **Morgan** will not be able to communicate with you.

**Salience of Identification Manipulation:**

- **IG In-group condition:** **Morgan** is a fellow college student at UNT. You and **Morgan** have been paired for this exercise based on the similarity of the answers you provided to the pre-task questionnaire that each of you completed.

- **OG Out-group condition:** **Morgan** is a college student at UT Arlington. You and Morgan have been paired for this exercise based on the dissimilarity of the answers you provided to the pre-questionnaire that each of you completed.

Prior research has shown that Electrodermal Activity or EDA (sometimes called Galvanic Skin Response) should correlate with the answers you provided to the pre-task questionnaire. We will be monitoring both you and _Morgan_ throughout the exercise to measure your EDA.
• **IG In-group condition:** If your EDA number and Morgan’s EDA number are very comparable throughout the exercise that will confirm our initial assessment that you and Morgan are very similar to one another.

• **OG Out-group condition:** If your EDA number and Morgan’s EDA number are very different throughout the exercise that will confirm our initial assessment that you and Morgan are very different from one another.

It is very important that you understand the instructions for this task thoroughly. Periodically throughout the task we will ask you a few true/false questions regarding the instructions so that you have all the information you need to complete this task successfully. If you do not answer one of these true/false questions correctly, the correct information will be presented to you.

Let’s try a few of these questions now based on the instructions you have already been given.

True or False? Students at UNT and UTA will be compared based on the results of this task? (answers the same for all conditions)

- **If answered incorrectly:** The correct answer was “True”. Students at UNT and UTA will be compared based on the results of this task.

- **If answered correctly:** Great Job! That was the correct answer.

True or False? My teammate Morgan is from the University of North Texas.

**IG In-group condition:**
• If answered incorrectly: The correct answer was “True”. Your teammate is Morgan, a fellow college student at UNT.

• If answered correctly: Great Job! That was the correct answer.

OG Out-group condition:

• If answered incorrectly: The correct answer was “False”. Morgan is a college student at UT Arlington.

• If answered correctly: Great Job! That was the correct answer.

True or False? I was paired with Morgan because our responses to the pre-task questionnaire were very similar.

IG In-group condition:

• If answered incorrectly: The correct answer was “True”. You and Morgan have been paired for this exercise based on the similarity of the answers you provided to the pre-task questionnaire that each of you completed.

• If answered correctly: Great Job! That was the correct answer.

OG Out-group condition:

• If answered incorrectly: The correct answer was “False”. You and Morgan have been paired for this exercise based on the dissimilarity of the answers you provided to the pre-task questionnaire that each of you completed.

• If answered correctly: Great Job! That was the correct answer.
Now that you understand how the true/false questions will be presented, we will continue with the instructions, including some information about the Electrodermal Activity (EDA) monitoring that we will be conducting throughout this task.

As explained at the end of your pre-task questionnaire, we are using technology developed at MIT to measure EDA throughout the task today. We are interested in two things.

First, we want to confirm that teammate similarity/dissimilarity in the answers to the pre-task questionnaire is reflected throughout the task by similarity/dissimilarity in teammate EDA numbers. Based on prior research, we expect that if you and your teammate Morgan answered similarly, your EDA numbers will be very similar to one another and if you answered dissimilarly, your EDA numbers will be very different from one another.

Second, we want to see if this similarity/dissimilarity between you and a virtual teammate will impact performance on the task. In essence, we want to see if similarity between teammates that have not met face-to-face, and will likely never meet, makes a difference in task performance. Given the number of employees working virtually these days, this question is highly relevant to business scholars.

The EDA monitoring technology is embedded in the wristband you received upon entering the lab. If you did not have a chance to read the article that explains this technology prior to coming to the lab and you would like to do so now, please let the monitor know and a copy of the article will be supplied to you.

This procedure is entirely safe and approved by the University. You merely need to keep the wristband on throughout the exercise – no special care of precautions are required.
Each time your teammate Morgan’s responses are shown to you on the screen, you will also see both your current EDA number and Morgan’s current EDA number.

The system we are using provides EDA numbers on a scale of 1 to 10. If your number and Morgan’s number are close to one another, that indicates to us that you and Morgan are very similar to one another. If your numbers are very distant from one another that indicates to us that you and Morgan are very different from one another.

The task consists of three rounds. Round three is the critical round. Only your teammate’s score in the final round counts for this task. Your job is to help your teammate achieve the highest possible score in the final round.

The first two rounds are merely practice rounds. Upon completion of the final round, drawing tickets will be allotted based on the results of that third critical round. The first two rounds are merely practice rounds that allow you to help your teammate improve their performance in the third and final round.

The task is a word association task. Your teammate will receive three words and will then provide a fourth word that is associated with the three words they have been given. For instance, your teammate might receive the three words cottage, swiss, & cake. The correct 4th word to be supplied in this example is “cheese” because it may be associated with all three of the given words (i.e. cottage cheese, swiss cheese & cheesecake).

Your teammate will be given 10 sets of word association problems to solve per round and will have 3 minutes in each round to solve all 10. This task has been shown to highly correlate with creative problem solving in the workplace.
Prior to each round, you will be given the correct answers for that round so that you can provide the best possible feedback to your teammate in a short amount of time. Remember, your job is to help your teammate to achieve the highest possible score in the final round. Only the scores in the final round count for this task.

Please print the page with the correct answers when it is supplied to you via the computer. You will use the “print screen” button located on the upper right hand side of the keyboard to print. Simply press the button when you see the screen you would like to print. Please pick up your printouts immediately after printing so that your sheets are not mixed up with any other participants in the lab.

When your teammate has completed the first round you will receive their responses via the computer and you will need to print this page as well.

Because each round of the exercise is randomly generated and no data is saved in the computer system IT IS VERY IMPORTANT THAT YOU PRINT BOTH THE CORRECT ANSWER SHEET AND YOUR TEAMMATES’ RESPONSE SHEET IN ORDER TO PROVIDE FEEDBACK. If you do not print these pages as they appear we have no way to retrieve them. Due to the software we use to randomly generate the word set, you cannot go back to the previous page once you have left it.

When you have finished reviewing your teammate’s responses, you will move to the next screen. Once there, you will have 3 minutes to write a message to your teammate with your feedback.

Your job is to help your teammate improve their performance so that their score in the final round is as high as possible. Your teammate will not have direct access to the correct
answers for each of the practice rounds, but you can provide your teammate the correct answers via your feedback message if you believe it will help their performance in the final round.

The first and second rounds will follow the same procedure.

First, you and your teammate will get a set of 10 randomly generated word association puzzles. You will get the correct answers to these puzzles and your teammate will have three minutes in which to solve these puzzles.

Once complete, the computer will show you your teammate’s responses and you will provide feedback to help your teammate improve their performance for the final round.

Remember, the first two rounds are practice rounds only. Use this time to provide the best possible feedback to your teammate. Your goal is to help your teammate achieve the highest score possible in the final round.

Let's try a few true/false questions about the information you just read. Press continue when you are ready for them.

True or False? Once I start the task I can go back at any time to see the prior page.

(answers the same for all conditions).

- **If answered incorrectly:** The correct answer was “False”. Due to the software we use to randomly generate the word set, you cannot go back to the previous page once you have left it. This is why it is so important that you PRINT the task sheets as you receive them.

- **If answered correctly:** Great Job! That was the correct answer.
True or False? The scores for all three rounds of the task count toward the final score. 
(answers the same for all conditions)

- If answered incorrectly: The correct answer was “False”. The task consists of three rounds. Only your teammate’s score in the final round counts for this task. The first two rounds are merely practice rounds that allow you to help your teammate improve their performance in the final round.

- If answered correctly: Great Job! That was the correct answer.

Thanks for putting up with a few true/false questions so we can be sure you understand the task before you start. Let's continue now with the instructions.

For the final round you will not provide feedback. Instead you will be responsible for scoring your teammate’s work so that the computer system knows how many drawing tickets to allocate to you and to your teammate _Morgan_.

As in the prior rounds, you will be given a sheet with the correct answers to Round 3. You will use this sheet to score your teammate’s work. Remember, only your teammate’s responses in the final round count toward receiving drawing tickets.

As a reward for your participation, everyone will receive one (1) drawing ticket toward the prize.

**Reward Structure Manipulation:**

- **OR Other Reward condition:** In addition, if your teammate gets 8 or more correct in the final round your teammate will receive ten (10) extra drawing tickets toward the prize.
• **ER Equal Reward condition:** In addition, if your teammate gets 8 or more correct in the final round you and your teammate will each receive five (5) extra drawing tickets toward the prize.

Following completion of the task you will answer a short set of additional questions about how you felt about the task, how you felt about your teammate and how you feel about working with others in general.

Because we run sessions back to back in this lab, it is very important that we keep the lab clean and ready for the next group to use it. PLEASE HELP US KEEP THE LAB CLEAN BY SHREDDING ALL DOCUMENTS that you printed before you leave the room.

That was it for the instructions. Just two more true/false questions to make sure you understand the task and we will get started! Here is the next true/false question:

True or False? If my teammate does well in the final round we can both earn more than one drawing ticket toward the prize.

• If answered incorrectly:
  o **ER Equal Reward condition:** The correct answer was “True”. As a reward for your participation, everyone will receive one (1) drawing ticket toward the prize. In addition, if your teammate, __Morgan__, gets 8 or more correct in the final round you and __Morgan__ will each receive five (5) extra drawing tickets toward the prize.
OR Other Reward condition: The correct answer was “False”. As a reward for your participation, everyone will receive one (1) drawing ticket toward the prize. In addition, if your teammate, __Morgan__, gets 8 or more correct in the final round __Morgan__ will receive ten (10) extra drawing tickets toward the prize.

- If answered correctly: Great Job! That was the correct answer.

True or False? I need to turn in everything I printed during the exercise.

- If answered incorrectly: The correct answer was “False”. You do not need to give anyone any of your printouts, instead, PLEASE HELP US KEEP THE LAB CLEAN BY SHREDDING ALL PRINTED ITEMS before you leave the lab.

- If answered correctly: Great Job! That was the correct answer.

Thank you for being patient and reading the instructions. We are ready to start the task!

When you are ready, please press the continue button and the correct answer sheet for the first practice round will appear. Remember, you need to print this randomly generated sheet before you move on. You will not be able to come back to the correct answer sheet after you click the “continue” button on that page and you will want this sheet in order to provide the best possible feedback to your teammate, __Morgan__ during the first practice round.

The participant receives the “Round 1 Correct Answers” File, Followed by the “Round 1 Responses for OG” or “Round 1 Responses for IG” file depending on condition and given a
timed screen in which to send feedback to the teammate. This process continues for three rounds, except in Round 3, there is no feedback. Task sheets are included in Exhibit 3.

Following the Round 3 response sheet, the script continues:

Thank you for working with your teammate ___Morgan___ to complete the task. As you know, based on ___Morgan___ 's performance in the final round, you and ___Morgan___ are each eligible to receive drawing tickets toward the three visa gift cards valued at $100, $75 and $50.

The computer system will keep track of the drawing tickets and will randomly choose a winner. All information related to the drawing will be automatically generated by the computer and will be kept separate and apart from the files we use to analyze task performance. If you would like to be entered into the drawing, please supply either a phone number or e-mail where you would like to be contacted on the next page so that we may contact you if you win. Your teammate will be doing the same.

Please enter your contact information in the box below so that we may contact you if you win one of the gift cards. The computer will automatically generate the correct number of drawing tickets based on ___Morgan___ 's final score. You will record ___Morgan___ 's score on the next screen.

Final Score Sheet for ___Morgan___

In Round 3 ONLY, how many of the 10 did your teammate ___Morgan___ get correct?
Please click the “continue” button to answer some post task questions regarding your teammate _Morgan_, regarding the task you just completed together and regarding how you feel in general about working with a teammate.

**Except where noted, all items: 1=strongly disagree to 7= strongly agree**

- This task was too difficult.
- It is okay to spread rumors to defend those your care about.
- People can't be blamed for doing things that are technically wrong when all their friends are doing it too.
- Taking something without the owner's permission is okay as long as you're just borrowing it.
- This task was complex.
- Considering the ways people grossly misrepresent themselves, it's hardly a sin to inflate your own credentials a bit.
- I enjoyed this task.
- People shouldn't be held accountable for doing questionable things when they were just doing what an authority figure told them to do.
- Taking personal credit for ideas that were not your own is no big deal.
- I felt bad that __Morgan__ had to try to figure out those problems.
- Do you think your teammate __Morgan__ is a male or a female (there are no right or wrong answers, we are just asking for what impression you had throughout the exercise
since you never got to see __Morgan__ or receive any communication from __Morgan__)

- Some people have to be treated roughly because they lack feelings that can be hurt.
- I did a good job giving __Morgan__ feedback all the way through the task.
- People who get mistreated have usually done something to bring it on themselves.
- The task was too easy.
- I have a lot in common with _Morgan_.
- I felt a sense of camaraderie with _Morgan_.
- _Morgan_ and I have little in common with each other.
- During the task, to what extent did you feel like you and _Morgan_ were on the same team?
  - 1 = not at all, 7 = very much
- During the task, to what extent did you feel that you and _Morgan_ were members of different groups?
  - 1 = not at all, 7 = very much
- During the task, to what extent did you feel separate from _Morgan_?
  - 1 = not at all, 7 = very much
- How many drawing tickets will you get? [drop down 0 – 10]
- How many drawing tickets will _Morgan_ get? [drop down 0 – 10]
- _Morgan_’s performance in the final round impacted the number of drawing tickets I was able to get.
• Whether or not I got drawing additional drawing tickets depended on _Morgan_’s performance in the final round.

• If _Morgan_ scored 8 or above in the final round, we both got additional drawing tickets.

• If _Morgan_ scored 8 or above in the final round, _Morgan_ got additional drawing tickets.

• I had the opportunity to report a score that was different from the one that _Morgan_ actually earned.

• I could have reported a higher or lower score for _Morgan_ without anyone knowing.

• If they were in the same situation that you were in, what is the likelihood that your peers would have reported a score for _Morgan_ that was different from the one _Morgan_ actually earned?
  
  o 1=Not at all likely, 7=Very likely

• If the roles were reversed and [name] was in your role as “coach” and you were in _Morgan_’s role completing the task, what is the likelihood that _Morgan_ would have reported a score for you that was different from the one you actually earned?
  
  o 1=Not at all likely, 7=Very likely

• I considered reporting a score for _Morgan_ that was different from the one _Morgan_ actually earned.
  
  o 1= Never considered, 7=strongly considered

• Given the circumstances, I felt an obligation to report a score for _Morgan_ that was different from the one that _Morgan_ actually earned.
• 1=No obligation, 7 = strong obligation

• How much did the fact that _Morgan_ could receive additional drawing tickets influence your actions?
  o 1= no influence, 7= strong influence

Thank you for participating in today’s task. You are all done! Please remember to shred any pages you printed during the task before you leave.

There is a brief statement that describes today’s activity sitting on the table by the door that we are required to give to you. Please gather your things and pick up that sheet on your way out of the lab.

Have a GREAT day and thank you again for your time today!
### EXHIBIT 4 TASK

**Round 1 Correct Answers:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Correct Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>cream</td>
<td>skate</td>
<td>water</td>
<td>ice</td>
</tr>
<tr>
<td>2</td>
<td>loser</td>
<td>throat</td>
<td>spot</td>
<td>sore</td>
</tr>
<tr>
<td>3</td>
<td>show</td>
<td>life</td>
<td>row</td>
<td>boat</td>
</tr>
<tr>
<td>4</td>
<td>night</td>
<td>wrist</td>
<td>stop</td>
<td>watch</td>
</tr>
<tr>
<td>5</td>
<td>duck</td>
<td>fold</td>
<td>dollar</td>
<td>bill</td>
</tr>
<tr>
<td>6</td>
<td>rocking</td>
<td>wheel</td>
<td>high</td>
<td>chair</td>
</tr>
<tr>
<td>7</td>
<td>dew</td>
<td>comb</td>
<td>bee</td>
<td>honey</td>
</tr>
<tr>
<td>8</td>
<td>fountain</td>
<td>baking</td>
<td>pop</td>
<td>soda</td>
</tr>
<tr>
<td>9</td>
<td>preserve</td>
<td>ranger</td>
<td>tropical</td>
<td>forest</td>
</tr>
<tr>
<td>10</td>
<td>aid</td>
<td>rubber</td>
<td>wagon</td>
<td>band</td>
</tr>
</tbody>
</table>

**Round 1 teammate response:** (all teammate response sheets are the same for every participant in each round except for the EDA Feedback which differs for in-group vs. out-group.)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Teammate’s Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>cream</td>
<td>skate</td>
<td>water</td>
<td>ice</td>
</tr>
<tr>
<td>2</td>
<td>loser</td>
<td>throat</td>
<td>spot</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>show</td>
<td>life</td>
<td>row</td>
<td>drama</td>
</tr>
<tr>
<td>4</td>
<td>night</td>
<td>wrist</td>
<td>stop</td>
<td>sign</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Correct Response</td>
</tr>
<tr>
<td>---</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------------------</td>
</tr>
<tr>
<td>5</td>
<td>duck</td>
<td>fold</td>
<td>dollar</td>
<td>bill</td>
</tr>
<tr>
<td>6</td>
<td>rocking</td>
<td>wheel</td>
<td>high</td>
<td>chair</td>
</tr>
<tr>
<td>7</td>
<td>dew</td>
<td>comb</td>
<td>bee</td>
<td>water</td>
</tr>
<tr>
<td>8</td>
<td>fountain</td>
<td>baking</td>
<td>pop</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>preserve</td>
<td>ranger</td>
<td>tropical</td>
<td>forest</td>
</tr>
<tr>
<td>10</td>
<td>aid</td>
<td>rubber</td>
<td>wagon</td>
<td></td>
</tr>
</tbody>
</table>

The teammate gets 4 out of 10 correct. (The shaded boxes are the ones the teammate either didn’t answer or got incorrect. They are shaded here for ease of understanding; however the participant does not see this shading).

Round 2 Correct Answers:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Correct Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>flake</td>
<td>mobile</td>
<td>cone</td>
<td>snow</td>
</tr>
<tr>
<td>2</td>
<td>cracker</td>
<td>fly</td>
<td>fighter</td>
<td>fire</td>
</tr>
<tr>
<td>3</td>
<td>safety</td>
<td>cushion</td>
<td>point</td>
<td>pin</td>
</tr>
<tr>
<td>4</td>
<td>cane</td>
<td>daddy</td>
<td>plum</td>
<td>sugar</td>
</tr>
<tr>
<td>5</td>
<td>dream</td>
<td>break</td>
<td>light</td>
<td>day</td>
</tr>
<tr>
<td>6</td>
<td>fish</td>
<td>mine</td>
<td>rush</td>
<td>gold</td>
</tr>
<tr>
<td>7</td>
<td>political</td>
<td>surprise</td>
<td>line</td>
<td>party</td>
</tr>
<tr>
<td>8</td>
<td>measure</td>
<td>worm</td>
<td>video</td>
<td>tape</td>
</tr>
<tr>
<td></td>
<td>sense</td>
<td>courtesy</td>
<td>place</td>
<td>common</td>
</tr>
<tr>
<td>---</td>
<td>-------</td>
<td>----------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>10</td>
<td>worm</td>
<td>shelf</td>
<td>end</td>
<td>book</td>
</tr>
</tbody>
</table>

Round 2 teammate response:

<table>
<thead>
<tr>
<th></th>
<th>flake</th>
<th>mobile</th>
<th>cone</th>
<th>snow</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>cracker</td>
<td>fly</td>
<td>fighter</td>
<td>fire</td>
</tr>
<tr>
<td>2</td>
<td>safety</td>
<td>cushion</td>
<td>point</td>
<td>chair</td>
</tr>
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<td>3</td>
<td>cane</td>
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<td>independent</td>
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<tr>
<td>7</td>
<td>measure</td>
<td>worm</td>
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<td>sense</td>
<td>courtesy</td>
<td>place</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>worm</td>
<td>shelf</td>
<td>end</td>
<td>casing</td>
</tr>
</tbody>
</table>

The teammate gets 6 out of 10 correct in this round. The goal for the next round is for the teammate to get 8 out of 10 correct.

Round 3 correct answers:
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>Correct Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>piece</td>
<td>mind</td>
<td>dating</td>
</tr>
<tr>
<td>2</td>
<td>flower</td>
<td>friend</td>
<td>scout</td>
</tr>
<tr>
<td>3</td>
<td>river</td>
<td>note</td>
<td>account</td>
</tr>
<tr>
<td>4</td>
<td>print</td>
<td>berry</td>
<td>bird</td>
</tr>
<tr>
<td>5</td>
<td>pie</td>
<td>luck</td>
<td>belly</td>
</tr>
<tr>
<td>6</td>
<td>date</td>
<td>alley</td>
<td>fold</td>
</tr>
<tr>
<td>7</td>
<td>opera</td>
<td>hand</td>
<td>dish</td>
</tr>
<tr>
<td>8</td>
<td>cadet</td>
<td>capsule</td>
<td>ship</td>
</tr>
<tr>
<td>9</td>
<td>fur</td>
<td>rack</td>
<td>tail</td>
</tr>
<tr>
<td>10</td>
<td>stick</td>
<td>maker</td>
<td>point</td>
</tr>
</tbody>
</table>

Round 3 teammate response:

<table>
<thead>
<tr>
<th></th>
<th></th>
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<td>6</td>
<td>date</td>
<td>alley</td>
<td>fold</td>
</tr>
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<td>opera</td>
<td>hand</td>
<td>dish</td>
</tr>
</tbody>
</table>
The teammate gets 7 out of 10 correct (the goal was 8 out of 10). One response is blatantly wrong (overflow), one is pretty close (boy vs. the correct answer girl) and one is associated with the three given words, but does not follow the appropriate rule (i.e. lambs have fur and a tail and you could have rack of lamb, but this can’t be the correct solution because the correct responses follow the same pattern to create a compound word.)
Thank you for participating in this research project. The purpose of this research is to determine how far individuals will go to help a teammate. In addition, the study looks at whether an individual’s decisions to help a teammate are related to their similarity/dissimilarity with that teammate, the permissiveness of the environment in which individuals complete a task, and whether or not rewards (extra drawing tickets) are awarded for helping a teammate. No matter what the instructions indicated, each person who participated in this study will receive a total of 11 drawing tickets so that each participant will have an equal chance of winning one of the three prizes.

If you have any additional questions about this study, you may contact the primary researcher at Julia.herchen@unt.edu.