NONCONSCIOUS GOAL ACTIVATION AND UNETHICAL BEHAVIOR:
EXAMINING THE EFFECT OF STATUS THREAT CUES
ON OVER-REPORTING PERFORMANCE

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by

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ABSTRACT

Understanding (un)ethical decision-making has significant implications for the practices and initiatives of organizations. Yet, while researchers have learned much about deliberative and rational ethical decision-making, our understanding of the nonconscious processes behind unethical behavior is limited. Contributing to this literature, then, this dissertation attempts to help answer the general question: Do nonconscious processes influence unethical behavior in the workplace and if so, how? I consider nonconscious goal activation to be an underlying cognitive mechanism that influences unethical behavior, arguing that characteristics of an organization’s environment can inadvertently trigger goals that nonconsciously influence employee’s unethical behavior. In particular, I hypothesize that status threats may automatically elicit a nonconscious goal to maintain status and in certain circumstances, lead to unethical behavior. In addition, I suggest two individual-level moderators -- self-monitoring and narcissism -- that may exacerbate the effect of status threats on employee unethical behavior. To test these hypotheses, I conducted two experiments. In the first experiment, participants were exposed to a supraliminal prime designed to trigger status threat and a status protection goal. In the second study, participants’ status was threatened via poor performance feedback that suggested lower status membership in an upcoming group activity. After the priming manipulations, participants were provided with an opportunity to over-report their performance (and protect their status) on a final activity. Results from multiple statistical analyses did not provide support for the hypotheses. However, given the infancy of this area of research, many insights and opportunities for future research are discussed.
# TABLE OF CONTENTS

List of Tables........................................................................................................ vi
Acknowledgements................................................................................................. vii

Chapter 1. INTRODUCTION.................................................................................. 1
  Nonconscious Goal Activation............................................................................. 2
  Status Threats and Nonconscious Goal Activation......................................... 4

Chapter 2. BACKGROUND AND THEORY.......................................................... 6
  Ethical Decision Making..................................................................................... 6
  Automaticity........................................................................................................ 10
  Conscious Goals and Goal-Setting Theory....................................................... 14
  Nonconscious Goal Activation........................................................................... 17
    Learned Origins................................................................................................ 19
    Evolutionary Origins....................................................................................... 20
    Empirical Support for Nonconscious Goal Activation................................ 21
  “Automatic” Unethical Behavior....................................................................... 25
    Language as Triggers...................................................................................... 27
    Pictures as Triggers......................................................................................... 28
    People as Triggers........................................................................................... 29

Chapter 3. FORMAL HYPOTHESES..................................................................... 33
  Introduction to Status......................................................................................... 33
  Direct Relationship: Status Threat and Unethical Behavior............................ 35
    Status Threats and Status Maintenance Goals............................................. 35
    Status Threats and Unethical Behavior......................................................... 38
  Individual Difference Moderators.................................................................... 41
    Self-Monitoring.............................................................................................. 42
    Narcissism....................................................................................................... 44

Chapter 4. METHODS AND RESULTS............................................................... 47
  Study 1 – Supraliminal Status Threat Priming.................................................. 48
    Pilot Study....................................................................................................... 49
    Primary Study.................................................................................................. 57
  First Wave: Survey Data Collection............................................................... 58
  Second Wave: Laboratory Experiment........................................................... 59
  Results................................................................................................................ 62
### Table of Contents

#### Chapter 5. DISCUSSION

- Hypothesis Testing: Status Threats and Unethical Behavior ......................................................... 90
  - Study 1: Supraliminal Priming .................................................................................................. 91
  - Study 2: Context, Context, Context ......................................................................................... 98
  - Moderator Relationships .......................................................................................................... 104
- Is Status Threat related to Unethical Behavior in the Workplace? ........................................... 105
- Additional Research Opportunities ............................................................................................ 110
- Conclusion .................................................................................................................................. 111

#### References .............................................................................................................................. 112

#### Appendix A: Survey Items ..................................................................................................... 128

#### Appendix B: Study 1 Materials ............................................................................................... 132

#### Appendix C: Study 2 Materials ............................................................................................... 140
LIST OF TABLES

Study 1:
Table 1. Means, Standard Deviations, and Correlations for Variables in Study 1…………….. 64
Table 2. Results of Regression Analyses Testing Direct and Moderating Effects…………… 66
Table 3. Results of Supplemental Regression Analyses Testing Moderating Effects…….. 68

Study 2:
Table 4. Means, Standard Deviations, and Correlations for Study 2 Variables…………….. 86
Table 5. Results of Regression Analyses Testing Direct and Moderating Effects…………… 87
Table 6. Results of Supplemental Regression Analyses Testing Moderating Effects…….. 89
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CHAPTER 1
INTRODUCTION

“People don’t wake up and say, ‘I think I’ll become a criminal today.’” –Cynthia Cooper, WorldCom

As stories of corporate scandals and employee crime proliferate, practitioners and researchers alike look to understand and prevent unethical behavior in the workplace. Prior research has suggested a multitude of variables that might influence employee malfeasance, including individual differences (see Kohlberg, 1969 for exceptions; Reynolds, 2006; Treviño, 1986), ethical climates (e.g., Victor & Cullen, 1987, 1988), and characteristics of the ethical dilemma itself (e.g., Jones, 1991). But, this work has primarily conceptualized unethical choice as a conscious and deliberative process (Reynolds, 2006), providing little explanation of the (un)ethical behaviors that require minimal, if any, conscious consideration (Kish-Gephart, Harrison, & Treviño, 2010). This is an important (albeit largely absent) piece of the puzzle (for exceptions, see Haidt, 2001; Reynolds, 2006) because “automatic” unethical behavior may influence not only researchers’ models of unethical behavior, but it may also have practical implications for organizations. Therefore, this dissertation attempts to help answer the following overarching question: Do nonconscious processes influence unethical behavior in the workplace and if so, how?

Unethical behavior has primarily been conceptualized as a deliberative decision making process (Haidt, 2001; Reynolds, 2006). According to this conception, once individuals become aware that they are facing an ethical dilemma, they reason through the possible right and wrong courses of action. Then, a decision is made, an intention is formed, and an action is taken in deliberative fashion (Rest, 1986). This perspective provides important insight into how some
unethical behavior occurs. For example, a manager may have confidential knowledge that her good friend is being laid off. She knows it can compromise her own job to say something, but also feels a strong loyalty to this friend/employee. Given the complexity and novelty of the situation, the manager is likely to consciously wrestle with the “best” way to respond (e.g., by weighing the costs and benefits, weighing whether loyalty to her friend or the organization should take priority, etc.). In contrast, some unethical behaviors may be more intuitive or reflexive (Kish-Gephart et al., 2010; Reynolds, 2006). Prior research theorizes that the brain automatically organizes past experiences into prototypes (similar to schemas) (Gioia, 1992) and these prototypes are applied to relevant situations without conscious thought (Reynolds, 2006). As an example, an individual may automatically (without conscious deliberation) react in the moment by withholding information or lying to an abusive supervisor to avoid a perceived “no-win confrontation.” Although both automatic and deliberative decision making help explain unethical behavior (Reynolds, 2006; Salvador & Folger, 2009), “automatic” unethical behavior may be related to a different set of antecedents and mechanisms. Thus, researchers could gain new insights into preventing employee malfeasance by examining nonconscious processes. Nonconscious goal activation (Bargh, 1990) provides one potential way to gain new insights into these processes.

**Nonconscious Goal Activation**

A FORTUNE magazine, a fine silver fountain pen, a Gucci leather briefcase, and a New York Stock Exchange (NYSE) ticker tape. Most people would be able to identify these items as symbols of business and arguably, the American dream—success. But, what might these and other symbols found in organizations communicate (intentionally or unintentionally) to
employees and customers? Social psychology research suggests that subtle environmental cues can activate goals that have the power to influence one’s perceptions, judgments, and behavior—without an individual’s conscious awareness (see Bargh & Chartrand, 1999 for a detailed review). Indeed, empirical research has supported the effect of this unconscious awareness on multiple behaviors including achievement (e.g., Eitam, Hassin, & Schul, 2008), competitiveness (e.g., Aarts et al., 2005; Kay, Wheeler, Bargh, & Ross, 2004), and creativity (e.g., Fitzsimons, Chartrand, & Fitzsimons, 2008). Even simple power cues can help explain the incidence of sexual harassment (Bargh & Raymond, 1995). Similar to conscious goals (e.g., Locke & Latham, 1990), these nonconscious goals motivate action despite obstacles, and can lead to negative affect when the goals are unmet (Bargh, Chaikan, Raymond, & Hymes, 1996a; Chartrand & Bargh, 2002; Oettingen, Grant, Smith, Skinner, & Gollwitzer, 2006; Stajkovic, Locke, & Blair, 2006).

According to Bargh’s (1990) auto-motive model, nonconscious goal activation operates via mental representations stored in long-term memory. These mental representations are created over recurring learned experiences in which an individual begins to associate a word, object, or even a person with a specific goal. Cues can also become related via evolutionary origins (as described further below). Over time, the mere (nonconscious) perception of a particular cue can activate the related mental representation. This mental representation includes not only an associated goal, but also the means to achieve that goal (recognizing that there are multiple means to achieve the same goal). By making the goal accessible to working memory (i.e., triggering the goal via perception of a related cue), the individual is likely to pursue means to achieve that goal.
Although nonconscious goal activation is likely an evolutionary adaptation designed to aid in human survival (Bargh, 1990; Moskowitz & Gesundheit, 2009), this process may also have maladaptive consequences, including encouraging the incidence of unethical behavior at work. Employees may associate certain words, objects, and even people with goals that once activated, can encourage unethical behavior. For example, organizations that use war euphemisms (e.g., “take a body count”) may inadvertently trigger competitive goals that encourage unethical behavior. While the individual may be aware of the end result (behavior), he or she is not aware of the source of the nonconscious goal or its effect on behavior (Bargh, 1990). Indeed, research demonstrates that the mere presence of a briefcase (as opposed to a backpack) in a room can increase competitiveness among study participants and reduce the amount of money offered in an Ultimatum game (e.g., Kay et al., 2004). In contrast, individuals subliminally (outside of conscious awareness)(Bargh & Chartrand, 2000) exposed to the Disney logo (versus a neutral logo) demonstrated higher rates of honesty, suggesting the powerful—and unintended—influence of brand priming on consumer associations (Fitzsimons et al., 2008).

**Status Threats and Nonconscious Goal Activation**

Although there are likely many types of cues that can lead to unethical behavior, I focus in particular on the role of status and status threats. Most work organizations are status hierarchies, and recent theory suggests that status may provide one explanation for unethical behavior in organizational environments (e.g., Magee & Galinsky, 2008; Nieuwenboer, 2008; Owens & Sutton, 2001; Sivanathan, 2008). From an evolutionary perspective, this proposed link is not surprising because social status was crucial for early humans’ survival and fitness (i.e., ability to reproduce and care for one’s kin)(Schaller, Park, & Kenrick, 2007). Indeed, over time,
humans developed cognitive adaptations to deal with status threats. For example, individuals are highly attuned to social status (de Waal, 2005; Schaller et al., 2007), can accurately identify others into status ranks (Cummins, 2005), and respond with automatic physiological arousal when their status is threatened (Bugental, 2000; Cummins, 2005). Moreover, early humans learned to use deception and cheating to maintain or increase their social status (Cummins, 1999).

Based on its evolutionary origins and importance in modern times, I argue that the presence of status threat cues will automatically (outside of an individual’s awareness or intention) trigger the goal to protect one’s status. This protection may come in the form of trying to regain lost status (given the perception of a status loss) or to maintain current status (given the perception of the potential to lose status). One means to attain a status protection goal is by engaging in unethical behavior—especially in situations where no other legitimate means to maintain one’s status is available (e.g., Walsh, 2006). For example, in the heat of the moment, an individual may lie to his or her boss about the performance of a project to “save face” (i.e., to maintain status). A successful employee may withhold information or claim credit for another’s work to avoid status loss. The effect of status protection goals on unethical behavior may also be strengthened by individual differences with chronic status-related concerns. I will propose that high self-monitors (Gangstead & Snyder, 2000; Snyder, 1974) and narcissists (Morf & Rhodewalt, 2001)—with their heightened attention to social cues and heightened concern for status—will be especially likely to engage in unethical behavior to protect their status when that status is threatened.
CHAPTER 2

BACKGROUND & THEORY

In this chapter, I begin by reviewing prior empirical and theoretical work in the areas of unethical behavior, automaticity, (consciously-set) goals, and nonconscious goal activation. I then present theory regarding the influence of certain environmental cues (e.g., words, objects, and people) on unethical behavior via nonconscious goal activation. In Chapter 3, I present specific hypotheses related to this theory and in particular, focus on the influence of status threats on unethical behavior via nonconscious goal activation.

Ethical Decision Making

Following prior work (e.g., Kaptein, 2008; Treviño, Weaver, & Reynolds, 2006), unethical behavior can be defined as “any organizational member action that violates widely accepted (societal) moral norms” (Kish-Gephart et al., 2010: 2, italics mine). Thus, a behavior is not determined to be “unethical” based on any one individual’s or organization’s definition. Rather, this definition is focused on those behaviors that society widely agrees are “unethical” (e.g., stealing from the workplace or misrepresenting financial numbers). Indeed, although some variation exists within any society with regards to beliefs about right and wrong (e.g., should abortion be legal?), behavioral ethics researchers have typically focused on those behaviors that are less controversial and may overlap with behaviors covered under the law (i.e., society’s minimum standards of acceptable behavior). In this dissertation, I focus specifically on lying to misrepresent one’s task performance.
The traditional approach in ethical decision making research has been to regard unethical behavior as cognitive and deliberative, operating under the spotlight of conscious attention (Gaudine & Thorne, 2001; Reynolds, 2006). Although several ethical decision-making models have been proposed (e.g., Ferrell & Gresham, 1985; Hunt & Vitell, 1986; Treviño, 1986), one of the most widely used cognitive frameworks remains Rest’s (1986) process model. According to this model, an individual passes through four stages in the ethical decision making process before engaging in (unethical) behavior: (1) **moral awareness**, or the recognition of a moral dilemma; (2) **moral judgment**, or the consideration of the right and wrong courses of action that may be taken by the individual; (3) **moral intent**, or the decision to take action on a particular option; and (4) **moral action**, or the perseverance against distractions to act on the intended behavior itself. Following this logic, once an individual is aware that the issue has moral overtones, the remaining process is presumed to be intentional, conscious, and deliberative.

Referred to as the “ethical calculus” perspective (Kish-Gephart et al., 2010), this paradigm has served as the foundation for many theoretical developments and extensions in the field. For example, Jones (1991) and Jones and Ryan (1997) used the four-step sequence as a backdrop for understanding the influence of the moral intensity of the ethical issue on each ethical decision making step, and for understanding the process of moral approbation, respectively. Additionally, many empirical studies and literature reviews situate themselves in one of the four stages, or use them as an organizing framework (e.g., Kish-Gephart et al., 2010; Loe, Ferrell, & Mansfield, 2000; O'Fallon & Butterfield, 2005; Treviño et al., 2006). Empirical studies often focus on moral awareness, moral judgment, or moral action as dependent variables (O'Fallon & Butterfield, 2005).
Recently, researchers have suggested the need to consider that ethical decision making (including ethical behavior) may not be as calculated and intentional as previously conceptualized (e.g., Chugh, Bazerman, & Banaji, 2005; Haidt, 2001; Moore & Lowenstein, 2004; Reynolds, 2006; Sonenshein, 2007; Sunstein, 2005). For example, Salvador and Folger (2009: 11) reviewed empirical research in neuroethics (research using case studies of individuals with brain damage and brain imaging technology, for example) and concluded that moral judgment appears to have “an intuitive dimension.” Likewise, a recent meta-analysis (Kish-Gephart et al., 2010) found empirical evidence that measures of behavior were more strongly correlated with most of the focal antecedents when compared with measures of intention and the same antecedents. These findings were especially unexpected given the progression of Rest’s decision making model (consistent with Ajzen, 1991; Fishbein & Ajzen, 1975) in which intention precedes behavior. The researchers interpreted these findings as suggesting the likely existence of a more intuitive or impulsive approach to unethical behavior.

In particular, two articles provide comprehensive theory to help explain this emerging “ethical impulse” perspective (Kish-Gephart et al., 2010). In the first article, Haidt (2001) presents a “moral intuitionist approach.” More specifically, moral judgment (step two in Rest’s ethical decision making model) had been primarily conceptualized as a highly rational process (e.g., Kohlberg, 1969; Rest, 1986) wherein “moral knowledge and moral judgment is reached primarily by a process of reasoning and reflection” (Haidt, 2001: 814). As an example, individuals may weigh the costs and benefits of a particular decision and apply a utilitarian approach (weighing of harms and benefits) to determine the “appropriate” course of action. However, Haidt (2001) argues that moral judgment is often not the result of careful consideration and reasoning. Rather, individuals draw on automatic moral intuitions (for example, feelings of
disgust) to guide what they think is right or wrong. To demonstrate his point, he asked subjects to read provocative vignettes (e.g., an individual cleaning a toilet with the American flag, a family accidentally running over the family dog and then choosing to eat it). Most individuals reacted with immediate, automatic disgust and condemnation for the actions. When pressed to explain why they believed the actions were unethical, individuals struggled to find a reason and engaged in post hoc analysis to “support an already-made judgment” (Haidt, 2001: 818). Thus, Haidt (2001: 818) argued that “[moral] intuition occurs quickly, effortlessly, and automatically, such that the outcome but not the process is accessible to consciousness.” Then, if an explanation for their judgment is necessary (as is required with vignette methodology often used to study ethical decision making), individuals will engage in conscious reasoning to attempt to explain their automatic intuitive judgment and to provide the appearance of a priori reasoning.

Second, similar to moral judgments, (un)ethical behavior may also be more automatic (less deliberative). Drawing from research in neurobiology, Reynolds (2006) argued that the human brain creates prototypes based on previous experiences and learning. These prototypes—similar to schemas (Gioia, 1992) in how they are applied—represent “base patterns that literally (i.e., electrochemically) represent sounds, language, objects, and the like that constitute an imprint of the external world” (Salvador & Folger, 2009: 8; italics mine). When faced with a particular situation, the brain automatically (without conscious thought) attempts to match a stored prototype to the situation. If a match is found, the behavior linked with the prototype becomes unthinking, emanating from an automatic, “reflexive” process. In contrast, when no match is found, the brain triggers higher-order, conscious (“reflective”) processing. The individual is prompted to consciously consider the situation, make judgments, and engage in the appropriate course of action. This reflective processing is especially likely to occur in situations
of novelty (Haidt, 2001) or extreme consequences (e.g., Jones, 1991). However, the human brain is also programmed to create (or modify) a prototype so that any future encounters with the same situation can become more automatic or reflexive with experience. Therefore, this model suggests that employees likely default to unethical behavior that is less deliberative unless something about the situation (e.g., complexity or novelty) triggers conscious, reflective processing.

Although the work by Haidt (2001) and Reynolds (2006) represents important in-roads into understanding individual-level malfeasance, more work is necessary to explain how and under what circumstances this less deliberative unethical behavior is likely to occur (c.f., Salvador & Folger, 2009). For example, Reynolds’ model points to the importance of prior experience in creating automatic, reflexive actions. However, are certain situations more likely than others to trigger less deliberative unethical behavior? What is the role of evolutionary forces in developing these automatic associations? In this dissertation, I draw from social and evolutionary psychology research to expand on these earlier models and suggest that unethical behavior may emanate from goal-related motivations. In particular, I argue that status threats may represent one type of situation that is particularly likely to lead to unethical behavior via nonconscious goal activation.

**Automaticity**

While behavioral ethics researchers are beginning to acknowledge the potentially automatic nature of unethical behavior, social psychology literature has provided “substantial evidence that we are in fact often not aware of our own mental processes or of what is guiding our daily moods, thoughts, and behavior” (Chartrand & Bargh, 2002: 14). As described further
below, research demonstrates that subtle environmental cues can influence information processing, judgments, and even behavior automatically and without conscious awareness. Indeed, “most of a person’s everyday life is determined not by their conscious intentions and deliberate choices but by mental processes that are put into motion by features of the environment and that operate outside of conscious awareness and guidance” (Bargh & Chartrand, 1999: 462).

Across mainstream psychology, researchers generally agree on the existence of automatic and controlled processes and behavior (Bargh & Chartrand, 1999; Salvador & Folger, 2009). However, before defining automatic and controlled processes, it is important to note that automatic processes—or “automaticity” (Bargh, 1989) (hereafter these terms are used interchangeably)—can describe either the behavior or the processes underlying the behavior (Moors & De Houwer, 2007). As Moors and DeHouwer (2007: 11) point out, “when the performance [behavior] is classified as automatic, so can the process underlying the performance [behavior]” and vice-versa. Therefore, in this dissertation, while I begin by defining automatic processes (automaticity) in more general terms, my primary focus is on automatic (unethical) behavior, with the understanding that this behavior is sometimes referred to as “automatic” because of the underlying automatic (nonconscious and unintentional) processes (i.e., nonconscious goal activation).

Controlled and automatic processes are often defined as opposites. That is, controlled processes are those “mental acts of which we are aware, that we intend (i.e., that we start by an act of will), that require effort, and that we can control (i.e., we can stop them and go on to something else if we choose)” (Bargh & Chartrand, 1999: 463). In contrast, automatic processes have been defined as unintentional, involuntary, effortless (i.e., does not consume one’s
processing capacity), autonomous (i.e., continues without guidance to completion), and nonconscious (Bargh, 1989; Bargh & Chartrand, 1999). However, Bargh (1989) cautions against drawing too stark a distinction between automatic and controlled processing, as is often seen in dual-processing models (see Moors & De Houwer, 2007 for a detailed review). For example, many dual process models argue for an “all-or-none view” in which controlled and automatic are the only two kinds of mental processes, and they are mutually exclusive (Moors & De Houwer, 2007). In this way, an “automatic” process cannot have any of the characteristics of a “controlled” process, and vice-versa.

Bargh (1989: 8), however, argues that this perspective is too limited, as “all automaticity is conditional.” In other words, automaticity is not a single unitary concept and can include various combinations of the aforementioned features. For instance, some behaviors (such as driving a car or typing on a keyboard) begin with a conscious decision, but can continue to operate without awareness or effort. Thus, this type of behavior has characteristics of both controlled and automatic processes—it begins with a conscious decision, but the remaining behavior is nonconscious and effortless (i.e., postconscious automaticity; Bargh, 1989). In contrast, some behaviors—such as habits or reflexes—simply require “a triggering proximal stimulus event, and occur prior to or in the absence of any conscious awareness of the event” (Bargh, 1989: 11). Bargh (1989) labeled this type of behavior, preconscious automaticity. Consequently, rather than rely on an all-or-none view, researchers should examine and identify the specific features that characterize an “automatic” behavior and the multiple ways in which the automatic behavior might occur (Bargh, 1989; Bargh & Chartrand, 2000; Moors & De Houwer, 2007).
The study of the ethical impulse perspective is arguably still in its infancy and much can be learned from the idea of conditional automaticity (Bargh, 1989). In particular, unethical behavior can likely be categorized as “automatic” (less deliberative) in multiple ways. As an example, some unethical behaviors (e.g., lying to a customer about a product’s features or delivery date) may become so habituated that the unethical behavior occurs without any conscious decision when an opportunity arises (c.f., Brief, Buttram, & Dukerich, 2001). This follows Reynolds’ (2006) neurocognitive model—if a relevant prototype exists because of past experience with a like situation, the prototype will automatically be chosen and applied to match the situation. In contrast, more elaborate and less common unethical behaviors (e.g., embezzlement) may require an initial conscious choice to decide to engage in the behavior. However, once the decision is made, follow-up behaviors may become more automatic, requiring little conscious decision making or effort after the fact. For instance, Bernie Madoff developed an elaborate Ponzi scheme that likely started as a conscious decision, but follow-up choices (e.g., lie to prospective clients, siphon and ship others’ money) to support that decision may have become more automatic over time.

Another type of “automatic” unethical behavior—and the focus of this dissertation—may result from nonconscious goal activation. That is, certain goals (e.g., to win, to protect one’s status) may be activated outside of one’s awareness and may motivate individuals to engage in unethical behavior to meet the goal. In this type of preconscious automaticity (Bargh, 1989), the individual is generally not consciously aware of the environmental stimulus that triggers the corresponding goal; nor is he or she aware of the stimulus’ effects on his or her behavior. This does not, however, preclude the individual from awareness of the final outcome (i.e., his or her unethical behavior), but only the motivating source of that outcome.
Before elaborating further on how nonconscious goals are activated and influence behavior, I begin by reviewing research that demonstrates the power of conscious goals on (unethical) behavior. Then, I describe how nonconscious goal activation may inform our current understanding of unethical behavior at work.

**Conscious Goals and Goal-Setting Theory**

Goals can be defined as “positively valenced behavioral end states” (Dijksterhuis, Chartrand, & Aarts, 2007: 57) that serve to energize and guide behavior (Locke & Latham, 2002). These end states can be tangible (e.g., to sell 50 widgets) or more abstract (e.g., to achieve, to compete, to be creative) (Fishbach & Ferguson, 2007). Goals are a powerful and motivating force on human behavior (Chartrand & Bargh, 1999). Research has demonstrated that goals influence task performance, persistence (e.g., Locke & Latham, 1990), and even perception (Ordonez, Schweitzer, Galinsky, & Bazerman, 2009a). According to Bargh and Chartrand (1999: 468):

> Much, if not most, of our responses to the environment in the form of judgments, decisions, and behavior are determined not solely by the information available in that environment but rather by how it relates to whatever goal we are currently pursuing.

In one particularly illustrative example of the influence of goals on perception, participants are asked to view a video and count the number of times a basketball is passed among a group of young people (i.e., they are given a goal). During the task, the participants become so focused on the goal that they often miss the person dressed up as a gorilla who *strolls* between the group and pounds his or her chest (Mack, 2003). This example helps illustrate the narrowing perceptual effect of goals on goal-relevant stimuli (Ordonez et al., 2009a). As Bargh and Huang (2009: 139) point out, “the world is filtered through the goal’s ‘eyes.’” In addition, unlike other constructs,
goals continue to influence behavior until they are fulfilled, even in the face of distractions or obstacles (Fishbach & Ferguson, 2007). When a goal is not obtained, individuals often feel negative affect and experience decreased self-esteem (Bandura, 1986; Fishbach & Ferguson, 2007; Locke & Latham, 2006).

Within the management literature, goal setting theory (Locke & Latham, 1990) is considered “one of the most replicated and influential paradigms” for organizational researchers (Ordonez et al., 2009a: 6). Over 25 years of research and 400 lab experiments have demonstrated that difficult and specific goals can lead to greater task performance in comparison to “do your best” or easy goals (Locke & Latham, 1990, 2006). More specifically, “so long as a person is committed to the goal, has the requisite ability to attain it, and does not have conflicting goals, there is a positive, linear relationship between goal difficulty and task performance” (Locke & Latham 2006: 6). The common focus of goal setting theory is on consciously-set goals that are adopted intentionally, and influence specific organizational outcomes (i.e., task performance) (Fishbach & Ferguson, 2007; Locke & Latham, 1990, 2006; Ordonez et al., 2009a).

While goal-setting theory has primarily focused on task performance, recent theoretical and empirical work suggests that goals may also influence less desirable outcomes—including unethical behavior (Ordonez et al., 2009a; Ordonez, Schweitzer, Galinsky, & Bazerman, 2009b)\(^1\). Referring back to the example of a gorilla walking through a group of basketball-tossing young people, goals narrow an individual’s vision on goal-relevant stimuli. According to Barsky (2008), such narrowed focus may encourage unethical behavior because it prevents individuals from recognizing that they are facing a moral dilemma in the first place. Even if a

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\(^1\) It is important to note that, although there has been some debate among authors surrounding the conclusions and approaches taken to advance an argument that goals and unethical behavior may be related, these same authors generally agree that additional research is necessary to understand when and how consciously-set goals may lead to dysfunctional behavior (Latham & Locke, 2009; Locke & Latham, 2009; Ordonez et al., 2009a, 2009b; Schweitzer, Ordonez, & Douma, 2004).
moral dilemma is recognized, goals may increase the likelihood that an individual uses moral disengagement (Bandura, 1986; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996) to rationalize the use of unethical behavior to meet a stated goal (“I’m trying to reach a goal, so this behavior is okay”) (Barsky, 2008). Providing some support for the perspective that goals can lead to unethical behavior, Schweitzer and colleagues (2004) found that undergraduate students lied about their performance on anagram puzzles to “reach” an arbitrary goal set by the experimenter. More importantly, the students lied about their performance regardless of whether or not a monetary incentive was involved. The authors argued that these were “calculated lies” and resulted from a change in the students’ cost-benefit analysis about the targeted goal. That is, because of the psychological incentive of reaching a goal (e.g., positive feelings and increased self-esteem), individuals perceive the potential rewards of reaching the goal as higher and thus, the benefits began to outweigh the costs of engaging in unethical behavior to accomplish the goal.

The aforementioned studies focus on the influence of consciously-set goals on unethical behavior. While this research presents important theoretical and empirical progress for understanding the influence of (conscious) goals on unethical behavior, additional research is necessary to understand the extent to which goals may influence behavior nonconsciously (Bargh & Huang, 2009; Latham, Stajkovic, & Locke, 2010). In the following section, I introduce the concept of nonconscious goal activation (Bargh, 1990). This concept is not new to social psychology researchers (see Fishbach & Ferguson, 2007 for a review), but it has only recently begun to be applied in management science (Latham et al., 2010).
Nonconscious Goal Activation

In a separate stream of literature, social psychologists have “long recognized the power of the current goal state to determine what situational stimuli will be attended to and what meaning they will have for the individual” (Bargh, 1990: 97). In contrast to research that focuses on the consequences of consciously motivated goal setting (Locke & Latham, 1990), this work has primarily focused on how goals can be activated nonconsciously to influence behavior (Bargh & Chartrand, 1999). Indeed, from an evolutionary perspective, the ability for goals to be automatically acted upon is highly adaptive (Chartrand & Bargh, 1999, 2002; Dijksterhuis et al., 2007). Not only is the conscious human mind limited (e.g., Baumeister, Muraven, & Tice, 2000), but consciousness was a late adaptation in human evolutionary history (compared to evolutionary-based emotions such as fear, for example) (LeDoux, 1996), suggesting that nonconscious goal pursuit likely pre-dates conscious goal pursuit and “utilizes the nonconscious structures and processes developed in our evolutionary past” (Moskowitz & Gesundheit, 2009: 204). This perspective is supported by neuroscience research suggesting that the “goal program” and one’s awareness of that program exist in separate brain structures (i.e., parietal cortex and prefrontal cortex, respectively) (see Bargh & Huang, 2009; c.f., Salvador & Folger, 2009).

Reacting to prior research that assumed goals only emerge from the conscious will of the individual, Bargh (1990) proposed his seminal “auto-motive model.” He argued that “much goal-setting activity may not be under ‘executive’ [conscious and willful] control after all, but instead may be initiated by patterns of environmental features” (Bargh, 1990: 99). In addition, the entire process from goal adoption to goal pursuit can operate outside of an individual’s conscious awareness. The person may be aware of the behavioral outcome, but not of the source and influence of the motive (Bargh, 1990).
At the crux of the model, goals are defined as “cognitive representations of a desired endpoint” that exist in memory (Fishbach & Ferguson, 2007: 491). Similar to schemas or scripts, these cognitive representations include not only information about the desired end state (goal), but also about the various behaviors (means) that can be used to reach that end state. When the cognitive representation is activated by external stimuli or internal thought, so, too, is the associated behavior. Thus, the mere perception (or internal thought) of a particular stimulus associated with the cognitive representation can activate the related goal in memory along with the means to obtain that goal (Chartrand & Bargh, 2002; Dijksterhuis et al., 2007). For example, an individual may associate the perception of a Sunday sales ad with the goal “to save money.” When this cognitive representation is activated, it also activates various means in memory that can be used to accomplish this goal (e.g., attend an early bird special, clip coupons, check on-line rates). This is consistent with the idea of spreading activation in associative network models of memory (Andersen, 1983; LeDoux, 1996; Rumelhart, Widrow, & Lehr, 1994): a node (representing a memory) stored in long-term memory can be activated by the mere perception of a related stimulus (also referred to as a cue or prime; Moskowitz & Gesundheit, 2009). This activation then spreads “to connected nodes with little attentional demand” (Moors & De Houwer, 2007: 15) such that the activation of one cognitive representation in memory will influence the activation of connected or related memories (e.g., means to attain a goal) (Fishbach & Ferguson, 2007). When this occurs, the memories become “accessible” (or “primed”)—that is, the long-term memories are “retrieved and placed in short-term (or working) memory” (Moskowitz & Gesundheit, 2009: 205). These connections in memory between environmental stimuli and related goals emanate from two primary sources—learned and evolutionary sources
(Bargh, 1990; Bargh & Huang, 2009; Moskowitz & Gesundheit, 2009)—as discussed in the next sections.

**Learned Origins**

Goals that are regularly activated (via experience) in the presence of a particular cue or situation become linked in memory (Bargh, 1990) to the point where they can be automatically activated when the associated environmental stimuli are perceived. This can happen because the same goal is commonly pursued in a given situation or the goal reflects cultural or societal norms for that situation (i.e., the association is vicariously learned) (Bargh, 1990). Over time, the goal becomes automatically accessible upon perception of cues related to that situation. For example, the scent of cleaning fluid can activate cleaning-related goals. Researchers found that participants in a room filled with a light scent of cleaning fluid (a small container of cleaning fluid was concealed somewhere in the room) were more likely than the control group to “tidy up” their workstation after eating a messy cookie (Holland, Hendriks, & Aarts, 2005). In another example, the nonconscious perception of the Apple Computer logo led to increased creativity by participants, suggesting the power of the media (i.e., learning by watching commercials) to create these stimuli-goal associations (Fitzsimons et al., 2008). Thus, any stimulus has the potential to become associated with related goal representations. Other cues can include sounds, words, or even the sight (via picture or real-life) of a location (e.g., Aarts & Dijksterhuis, 2003) or person (e.g., one's mother or best friend; Fitzsimons & Bargh, 2004; Shah, 2003). Furthermore, it is important to note that “the process of automation is automatic itself” (Chartrand & Bargh, 1999: 469)—a person does not need to engage in *intentional* goal-directed behavior to develop an automatic association with that particular goal. Rather, the association is *automatically* created when the goal and related behavior are linked frequently or consistently
for any reason (Reynolds, 2006). For example, a mother may regularly check her child’s hair and
finger nails to insure that the child is well-groomed. Over time, the mere perception or thought of
the mother can lead to grooming-related goals in the child. Similarly, referring back to the Apple
Computer prime (Fitzsimons et al., 2008), it is highly unlikely that individuals ever intended to
develop an association between the Apple logo and creativity goals.

**Evolutionary Origins**

According to Symons (1992: 138), “human behavior is flexible…but this flexibility is of
means, not ends, and the basic experiential goals that motivate human behavior are both
inflexible and specific” (as cited by Bargh & Huang, 2009). Thus, in addition to learned origins,
certain goals may be related to environmental cues that were important in humans’ evolutionary
past (c.f., Dijksterhuis et al., 2007). For example, for early humans, ostracism often meant certain
death for the ostracized individual (Buss & Kenrick, 1998; Lustenberger & Williams, 2009;
MacDonald & Leary, 2005; Williams, 2001). Individuals who were “cast out” could no longer
count on the group for protection, or for support in resource acquisition. Over time, those who
survived likely evolved a need to belong (Baumeister & Leary, 1995) such that, when confronted
with cues of social exclusion, their goal was to regain inclusion in the group (MacDonald &
Leary, 2005; Sommer & Baumeister, 2002). In support of this perspective, Janes and Olson
(2000) showed participants a video of a comedian being ridiculed by an audience member. In an
ostensibly unrelated second task, those in the video group (versus control group) were more
likely to conform to “another group member’s” opinions when rating a cartoon strip for humor.

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2 Although the creation of this automatic association is arguably similar to the process used in classical conditioning
(Hilgard & Marquis, 1940; Pavlov, 1927), classical conditioning and nonconscious goal activation are not
equivalent. Unlike classical conditioning, nonconscious goal activation refers to the activation of a *motivating* goal
that persists until it is achieved and to which multiple means can be used to achieve the goal. Classical conditioning
refers to simple associative learning that elicits a very specific conditioned response (e.g., eye blink, salivation)
(Lavond & Steinmetz, 2003).
According to Janes and Olson (2000: 478; *italics mine*), “observing ridicule of others increases the *accessibility* of possible rejection for the observer’s own behavior.” Thus, it is possible that the videotaped ridicule triggered an inclusion-related goal that was fulfilled by conforming in the subsequent activity. Indeed, research suggests that mimicry is an evolutionary-based response (means) often used to satisfy affiliation (inclusion) goals (Cheng & Chartrand, 2003; Dijksterhuis et al., 2007; Lakin, Jefferis, Cheng, & Chartrand, 2003). Similar to ostracism, I argue below that status threats may automatically trigger goals to protect one’s social status based on a long-held evolutionary adaptation.

With evolutionary origins, it is important to point out that evolution predisposes or prepares individuals to respond in certain ways to situations that represented threats to humans’ evolutionary ancestors (e.g., Seligman, 1971). These tendencies, though, are reinforced by experience. For example, in the case of ostracism, children learn as early as the elementary school playground about the hardship of social exclusion (Cummins, 2005); for some children, these early experiences likely increase the accessibility of inclusion-related goals when faced with such situations in the future.

**Empirical Support for Nonconscious Goal Activation**

Since the introduction of the auto-motive model (Bargh, 1990), empirical work on nonconscious goal activation has flourished and the results have been supportive. In a recent review of the literature, Dijksterhuis and colleagues (2007: 51-52) wrote: “if the editor would have asked us to write about automaticity in social behavior 25 years ago, he would have met a blank stare…Needless to say, things have changed…the picture of a free willing social agent has been crumbling down, quickly and surely.” Indeed, numerous studies have demonstrated that goals can be nonconsciously activated via various environmental stimuli and subsequently,
influence judgment, information processing, and behavior (see Dijksterhuis et al., 2007 for a review). In addition, comparing conscious and nonconscious goals side-by-side reveals similar outcomes (e.g., Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trotschel, 2001; Latham et al., 2010; Shah & Kruglanski, 2002; Stajkovic et al., 2006), providing support that “how a goal representation becomes activated—whether consciously or nonconsciously—has no effect on whether it operates and produces its effects” (Chartrand & Bargh, 2002: 15).

To demonstrate the process of nonconscious goal activation, researchers have examined goal accessibility and behavior as outcome variables. Related to goal accessibility, Holland and colleagues (2005) discreetly exposed individuals to the presence of a light scent of cleaning fluid while they participated in the experiment. When asked the top five activities the individuals plan to do during the day, those in the cleaning fluid condition (versus control group) were more likely to list cleaning as one of those activities. These results suggest that the mere presence of a stimulus (e.g., odor of cleaning fluid) was able to trigger stimulus-related goals (to clean) without the participants being aware of the effects of the cue on their choices. Furthermore, to test the influence of nonconscious goals on behavior, Bargh and colleagues (2001; experiment 1) primed the goal “to perform well” by asking participants to locate achievement-related words (e.g., win, succeed, strive, achieve) in a word-search puzzle. Compared to the control condition (neutral words), those in the “do well” condition performed significantly better on a subsequent task.

In both of the aforementioned studies, the researchers utilized supraliminal priming techniques to cue the goal. In other words, participants were “exposed to the priming stimulus as part of a conscious task” (Bargh & Chartrand, 2000: 259). Although the exposure to the prime-related words occurred during a conscious task, the researchers found no evidence that the
participants were consciously aware of the priming stimulus or of its effects on their behavior. Bargh and colleagues (2001: 1017) even noted that “most [participants] seemed perplexed by the suggestion during debriefing that the priming task might have influenced their behavior and were surprised when they learned of the experimental hypotheses.” This is, in part, due to the narrowing-focus of the manipulation’s activity (e.g., recall the gorilla exercise; Mack, 2003). Indeed, in Bargh and colleagues’ study, participants were given the goal “to complete a word-search puzzle.” Moskowitz and Gesundheit (2009) point out that people are often unaware of their perception of environmental stimuli in normal everyday life, though they react to them (e.g., cleaning fluid example; Holland et al, 2005; briefcase prime example, Kay et al., 2004).

While supraliminal priming provides initial evidence of the effects of nonconscious goal activation, an even stronger test that helps to rule out the possibility of conscious awareness is subliminal priming, or priming that occurs completely outside of one’s conscious awareness (Bargh & Chartrand, 2000; Moskowitz & Gesundheit, 2009). Consistent with the results from supraliminal priming, prior research has demonstrated the effects of subliminal primes on goal-motivated behavior (e.g., Chartrand & Bargh, 1996). Fitzsimons and colleagues (2008) found that participants who valued creativity and who were subliminally primed with the Apple computer logo (often associated with creativity) generated more ideas for creative ways to use a brick. The authors also found that people subliminally primed with the Disney logo answered a social desirability scale (Crowne & Marlowe, 1960) more honestly than those primed with an E! logo. Consequently, these results serve to triangulate the previously discussed findings that use supraliminal primes, though these latter results arguably more closely mimic real world experiences (Moskowitz & Gesundheit, 2009).
Using a variety of creative priming techniques (supra- and subliminal), research has demonstrated the far-reaching effects of nonconscious goal activation on many different behaviors, including achievement (e.g., Eitam et al., 2008), competitiveness (e.g., Aarts et al., 2005; Kay et al., 2004), creativity (e.g., Fitzsimons et al., 2008), helpfulness (e.g., Aarts et al., 2005; Nelson & Norton, 2005), hostility (e.g., Carver, Ganellin, Froming, & Chambers, 1983), rudeness (e.g., Bargh, Chen, & Burrows, 1996b), and social responsibility (e.g., Chen, Lee-Chai, & Bargh, 2001). In addition, consistent with Bargh’s (1990) auto-motive model, nonconscious goals have been shown to have similar behavioral outcomes as consciously-set goals (e.g., Chartrand & Bargh, 1996; Fitzsimons & Bargh, 2004; Oettingen et al., 2006; Stajkovic et al., 2006). In one of the few studies that directly compares conscious and nonconscious goals Stajkovic and colleagues (2006) found that the behavioral effect of a nonconscious achievement goal on task performance was similar to the behavioral effect of a conscious achievement-related goal on task performance, though the effect of the nonconscious goal was weaker ($d = .45$) than the effect of the conscious goal ($d = .63$). Shantz and Latham (2009) also reported similar behavioral results across conscious goals ($d = .49$) and nonconscious goals ($d = .43$) on task performance. Furthermore, Bargh et al (2001; experiments 4 and 5) found that participants primed with a nonconscious goal (in comparison to the no-prime control group) persisted to fulfill their goal despite a time delay or obstacle, suggesting similarities with the energizing function of consciously-set goals (Locke & Latham, 1990). Finally, as with consciously-set goals (Locke & Latham, 1990), reaching (or not) a nonconscious goal has been found to influence participants’ mood (e.g., Chartrand & Bargh, 2002; Riketta & Dauenheimer, 2003).
“Automatic” Unethical Behavior

As described above, two separate streams of behavioral ethics research suggest that (1) unethical behavior may occur more automatically than previously conceptualized (e.g., Reynolds, 2006) and (2) consciously-set goals may inadvertently lead to unethical behavior (e.g., Barsky, 2008; Ordonez et al., 2009a; Schweitzer et al., 2004). Bringing these streams together, I suggest that one means by which unethical behavior may occur is via nonconscious goal activation.

Through learned and evolutionary origins, certain situations and stimuli in an organization’s environment may become associated in memory with related goals (Chartrand & Bargh, 1999, 2002; Moskowitz & Gesundheit, 2009). Once accessible, I argue that nonconscious goals can influence unethical behavior. As demonstrated by Schweitzer et al (2004), task-related goals (e.g., solve 9 anagrams) may inadvertently lead individuals to lie to meet those goals. Unlike consciously-set task goals, however, nonconscious goals are likely to be more abstract targets (e.g., to be competitive, to cooperate, to achieve) that can be accomplished via various means stored in memory as part of the goal representation (Bargh, 1990). Depending on the content of the goal, individuals may be more or less likely to engage in unethical behavior. For example, competition-related goals activated nonconsciously are more likely to lead to unethical behavior than cooperation or care-related goals. This is supported by the recent study by Kay and colleagues (2004), demonstrating that various symbols related to business increased the likelihood that participants acted competitively on subsequent tasks. In one variation using the Ultimatum Game, the participants were given the opportunity to determine how to split $10 between themselves and another “participant” (actually a confederate). The researchers found that participants exposed to pictures of business-related objects earlier (e.g., boardroom tables,
briefcases, business suits, dress shoes, etc.) offered less money to the confederate than those participants exposed to neutral pictures (e.g., kites, turkeys, whales, sheet music, etc.). These results suggest that business-related objects can become associated with related goals that are activated upon mere perception and outside of one’s conscious awareness.

According to Bargh’s (1990) auto-motive model, individuals are aware of the outcome, but not the effects of the stimuli or the goal on their behavior. In this way, the individual may bypass moral awareness completely (c.f., Barsky, 2008)—that is, not recognize that one is facing a moral dilemma—when engaging in unethical behavior via nonconscious goal activation (unless the stimulus is related to ethics in memory—for example, seeing a nun may trigger the goal to appear pious; Reynolds, 2006). This is consistent with the idea that moral awareness is dependent on one’s “decision frame” used in decision-making (Messick, 1999; Tenbrunsel & Messick, 1999, 2004):

How decision makers construe the dilemmas before them is critical to whether decision makers achieve moral awareness or not. Under the influence of an ethics frame, decision makers are morally aware. Under the influence of other frames (e.g., a business frame or a legal frame), however, decision makers are not morally aware. (Tenbrunsel & Smith-Crowe, 2008: 552-553)

Thus, individuals with a competition-related goal may not frame the current situation as an “ethics decision” as much as a game or exchange decision in which one competes “to win.” Indeed, goals characteristically direct attention to goal relevant stimuli and increase one’s positive evaluation of those stimuli (Bargh, 1989; Locke & Latham, 1990). Individuals primed with a competitive goal, for example, would be even less likely to label a situation as ethics-related because they are positively evaluating whatever means best serve the attainment of the goal at hand.
Given that nonconscious goals are activated and influence unethical behavior upon the mere perception of relevant environmental cues, a follow-up question includes: what kinds of cues or stimuli in an organization can become associated with a goal and subsequent unethical behavior? In addition to cues related to a particular situation (e.g., ostracism or social exclusion), research suggests that goals can be nonconsciously activated by a variety of very simple environmental stimuli, including language, pictures, and people. A few of these were mentioned in the introduction (e.g., FORTUNE magazine, fountain pen, NYSE ticker, or the Wall Street Journal). These stimuli have the potential to activate a cognitive representation in long-term memory that includes both the goal and means to attain that goal. Below, I briefly consider several categories (and examples) of cues that may lead to unethical behavior via nonconscious goal activation.

**Language as Triggers**

Prior research has demonstrated that word choice can impact how individuals approach a task (e.g., Larrick & Blount, 1997; Samuelson & Allison, 1994; Tenbrunsel & Smith-Crowe, 2008). This may also be the case with activating certain nonconscious goals. For example, organizations often use war euphemisms to motivate employee support for initiatives -- “Take a body count”; “The war on tenure” (Jenkins, 2009); “Leading the Charge: Leadership Lessons from the Battlefield to the Boardroom”; (Zinni & Koltz, 2009). Loch, Yaziji and Langen (2001) recount several “solidarity against the enemy” campaigns that were run by well-known consumers goods and airline companies (e.g., Pepsi and Northwest Airlines, respectively). While such language may inspire action (such as increased perseverance in “battle”), it may also lead to unethical action by nonconsciously triggering competitive goals and a desire to do whatever it takes to “win.” In a related study, Carver and colleagues (1983) found that individuals exposed
to words related to hostility (e.g., hostile, aggressive) displayed more hostile behavior towards “learners” in a version of the classic Milgram experiments (Milgram, 1974). In contrast, some companies refer to their employees as “crew members”; similar terms may activate goals of cooperation and teamwork. Once again, research supports the influence of cooperation-related words on behavior (e.g., Bargh et al, 2001). In this way, words can trigger nonconscious goals and direct behavior.

Pictures as Triggers

Goals may also be nonconsciously triggered by pictures—whether logos or photographs of particular objects or places. In work organizations, for example, logos are used to communicate messages about the type of company one works for or does business with. Indeed, many organizations pride themselves on creating logos that are highly recognized (e.g., Aflac, McDonalds, and Starbucks). As described earlier, Fitzsimons and colleagues (2008) found that participants subliminally primed with the Apple Computer logo were more creative on a subsequent task than those primed with an IBM logo. Similarly, employees in work organizations may associate their team or company’s logo with a particular goal. For example, Allstate Insurance uses a logo of two hands, generally accompanied by the tagline, “You’re in good hands.” Upon seeing this logo, employees’ goal of providing caring customer service may become more accessible. In contrast, given the cut-throat policies and atmosphere created at Enron, insiders may have come to implicitly associate the Enron logo with competition and self-interest (McLean & Elkind, 2003).

In addition to advertising logos, prior research has demonstrated that even simple photographs of objects or locations can trigger a related goal. For example, Kay and colleagues (2004) found that pictures of professional office objects (e.g., briefcase or boardroom table)
increased competitive goals. Similarly, Aarts and Dijksterhuis (2003) found that individuals primed with pictures of a library and the potential to visit the library in the near future automatically took on a softer tone, ostensibly after the goal “to be quiet” (often associated with libraries) was activated. This study suggests that work organizations as a location may also, over time, become associated with specific goals. For example, an employee in a competitive work environment may begin to associate reminders of that organization with competitive goals. Thus, future research might find that specific organization-related primes (e.g., picture of one’s workplace) might elicit goals consistent with the organization’s ethical climate.

People as Triggers

Finally, particular people can also become associated with goals. When individuals consistently pursue the same goals with a specific person, these goals begin to become automatically elicited in that person’s presence (Dijksterhuis et al., 2007; Shah, 2003):

The most active part of the environment of man, and the part most consequential to him, consists of living organisms, particularly other men. Hence, a large part of the complexity of goals arises from the need, while accomplishing tasks, to attend to the response of other human beings and to do this in real time. (Simon, 1967: 37 as quoted by Bargh, 1990)

Recent research supports this perspective by demonstrating that individuals pursued related goals associated with a close friend or significant other (e.g., Fitzsimons & Bargh, 2004; Shah, 2003). The goals pursued might be what the focal individual thought the other person expected of them, or the goals that the focal individual often pursued in the other person’s presence. In work organizations, goals may become attached to long-time coworkers, or more importantly, to specific managers or team leaders (Moskowitz & Gesundheit, 2009). Research demonstrates that subordinates are highly attuned to the actions, mannerisms, and expectations of their superior (e.g., Keltner, Gruenfeld, & Andersen, 2003; Magee & Galinsky, 2008). Subordinates often
develop implicit theories about what superiors expect from them (e.g., Detert & Edmondson, 2005) that may become automatically associated with certain goals (Dweck, 1996). For example, ethical leaders (Brown, Treviño, & Harrison, 2005) may elicit goals related to care, honesty, or doing what’s right by others. Abusive supervisors (Tepper, 2000), on the other hand, may elicit goals such as CYA (to “cover your ass”), leading to unethical behavior including lying or cheating to make the mark. This goal association might also occur with important (though perhaps disliked) coworkers (Moskowitz & Gesundheit, 2009). According to Moskowitz and Gesundheit (2009: 214), “goals can originate from external pressures put on us by significant others [including coworkers]…until gradually we come to internalize the goals they have for us.” Consistent with the idea that automation occurs automatically (Bargh & Chartrand, 1999), individuals may not even be aware that, over time, the other person’s goals for them become accessible when in the presence of this person. This is consistent with the previously described example in which grooming related goals may be invoked in a child simply by the presence of his or her mother. Similarly, leaders or coworkers in organizations may become unintentionally linked to certain goals by the pressures they elicit on the focal individual’s behavior at work (Moskowitz & Gesundheit, 2009).

Another means by which a person might trigger a particular goal is via goal contagion, or “the automatic adoption and pursuit of goals that others are perceived to strive for” (Aarts, Gollwitzer, & Hassin, 2004: 24; Aarts & Hassin, 2005; Bargh, 1990). Drawing from evolutionary and neuroscientific research, the authors argue that human beings have an innate tendency to mimic other humans (Dijksterhuis, 2005), especially in the pursuit of inclusion or affiliation goals (Chartrand & Bargh, 1999; Lakin et al., 2003). Indeed, neuroscience research has identified the presence of mirror neurons: “when we observe someone perform a behavior,
we activate the same premotor areas in our brain that were active when we perform that action ourselves” (Dijksterhuis, 2005; Dijksterhuis, Smith, van Baaren, & Wigboldus, 2005). In addition, human beings naturally infer goals from others’ behavior (e.g., Bargh, 1990; Heider, 1958). Seeing another person enacting a behavior and inferring the goal increases the accessibility of that goal in one’s mind. If the inferred goal represents a desired end state for the observer, the focal individual may “catch” the other person’s goal and subsequently, strive to obtain that goal (Dijksterhuis et al., 2005). Aarts and colleagues (Aarts et al., 2004) found evidence of this after individuals read short vignettes depicting a person pursuing a particular goal (e.g., to make money; to have casual sex). Consistent with their hypotheses, individuals exposed to the goal-stimuli in the vignettes were more likely to enact behaviors consistent with the actor in the story (e.g., act quicker to earn money in the experiment or to meet a female experimenter).

In work organizations, therefore, goal contagion may help explain unethical behavior. That is, by observing co-workers pursue certain goals (e.g., to be competitive; to obtain status; to avoid punishment), the goal may become accessible to working memory. This is especially likely when the goal is a desirable end state (Aarts et al., 2004). If the goal is accessible and an opportunity arises to fulfill it, the individual may engage in similar goal-directed behavior as the person being observed (of course, recognizing that there are multiple means to achieve the same goal). This may help explain findings that new employees conform to the behavior of coworkers (e.g., Robinson & O'Leary-Kelly, 1998). Perhaps some of this conforming is done without much conscious awareness, especially given the heightened attention of individuals learning a new job.

In sum, research points to several types of triggers that may activate nonconscious goal pursuit in the work environment. In particular, any stimulus that is related to a cognitive representation of one’s work environment (including people, logos, and the office itself) has the
potential to nonconsciously trigger work-related goals. In the following chapter, I move beyond specific stimuli to argue that status threat situations trigger nonconscious goals and lead to unethical behavior.
CHAPTER 3

FORMAL HYPOTHESES

As described in Chapter 2, goals can be triggered outside of conscious awareness by situations or specific environmental stimuli that become associated in long-term memory. These associations develop primarily via two origins—experience or evolutionary origins (Bargh, 1990; Moskowitz & Gesundheit, 2009). I examine status threats as one type of situation that is likely to trigger the goal to protect one’s status. I also argue that this activated goal can result in unethical behavior as a means to achieve the desired end state (to protect status). Furthermore, to the extent that unethical behavior can occur nonconsciously, I consider the following question: what individual variables may exacerbate or lessen this hypothesized effect? I suggest that certain characteristics of the individual related to social status (e.g., self-monitoring and narcissism) moderate the environmental cue – unethical behavior relationship.

Introduction to Status

Status can be defined as “one’s standing in a social hierarchy as determined by respect, deference, and social influence” (Ridgeway & Walker, 1995: 251). That is, it represents “the extent to which an individual or group is respected or admired by others” (Magee & Galinsky, 2008: 359). Unlike power that is defined by one’s asymmetric control over resources, status is based on one’s reputation in the eyes of others (e.g., Kemper, 1968; Weber, 1946). In work organizations, this reputation can be formed on various dimensions such as task performance, prior experience, or demographic variables (Magee & Galinsky, 2008; Owens & Sutton, 2001; Phillips, Rothbard, & Dumas, 2009).
Because of its evolutionary benefits, status seeking is widely considered to be a fundamental human motive (Barkow, 1975, 1989; Emler, 1990; Erdal & Whiten, 1994; Kanazawa, 2009; Kenrick, Maner, & Li, 2005; Knauff, 1994; Nagi, 1963; Waldron, 1998; Walsh, 2006). For early humans, status seeking was necessary to ensure the highest probability of reproductive success: individuals with higher status had greater access to resources and reproductive opportunities (Cummins, 2005; Kenrick et al., 2005). Status determined “who will sow his seed far and wide and who will sow no seed at all” (de Waal, 2005: 48). Indeed, in today’s organizational environment, evidence of the importance of status is omnipresent (Loch et al., 2001). Not only is status an indicator of one’s abilities or competence (Berger, Conner, & Fisek, 1974; Huberman, Loch, & Onculer, 2004; Rege, 2008; Ridgeway, Berger, & Smith, 1985), but individuals with higher status have more access to power and resources (Huberman et al., 2004) and have an easier time developing quality relationships (Blau, 1977; Phillips et al., 2009). Status also increases one’s opportunity to contribute to a group’s task, receive positive evaluations for their contributions, be influential in group decisions, and be less influenced by others (Berger et al., 1974; Ridgeway et al., 1985). Higher status is even related to higher self esteem (Barkow, 1989) and positive emotions (Kemper, 1968, 1991).

In both evolutionary and modern times, status represents a significant advantage, in part because of what it means for one’s access to resources. However, recent research suggests that even beyond monetary gain, individuals are motivated to seek status as an end in itself (e.g., Barkow, 1989; Huberman et al., 2004; Loch et al., 2001; Pettit, Yong, & Spataro, 2009). Huberman and colleagues (2004), for instance, found that individuals were willing to forgo a monetary incentive to increase their chances to receive elevated status (consisting merely of a public acknowledgement, applause, and a “winner” button) that had no long-term, tangible
benefits. These results were found in a cross-cultural sample, suggesting that status is valued across cultures (though its relative importance may vary) (Huberman et al., 2004). As stated by Barkow (1989: 196), “what does a billionaire need a second billion for? To be of higher rank than a fellow billionaire who only has a single billion.”

**Direct Relationship: Status Threats and Unethical Behavior**

A status threat occurs when an individual perceives that his or her status aspirations (e.g., to improve status) are being blocked, or that he or she faces (or experiences) a reduction in an existing status position (Nagi, 1963). This perception of status threat can be based on an immediate status loss or the potential of a status loss in the future (Nagi, 1963). As argued above, status is important in human interaction and survival—it is a means to an end and an end in itself (e.g., Huberman et al., 2004). Knowing this, the logical next question is: what happens when one’s status is threatened? In this section, I argue that status threats trigger a nonconscious goal to protect one’s status and in certain situations, may lead an individual to engage in unethical behavior.

**Status Threats and Status Maintenance Goals**

According to Bargh (1990: 115), “a person’s role and status in a situation induce both constraints to his or her behavior and also appropriate goals to pursue within the situation.” As an example, Bargh suggests that subordinates pursue a deference goal in the presence of superior others (e.g., Milgram, 1974). Similarly, perceptions of threats to one’s status—status blockage or status loss (Nagi, 1963)—may automatically (outside of conscious awareness) trigger goals to protect that status. In modern work environments, losing status means losing influence, opportunities, access to resources, and perhaps certain valued relationships (e.g., Berger et al.,
At some point prior to (e.g., on the playground) or during their employment (e.g., in a meeting; Owens & Sutton, 2001), employees have likely either directly experienced the pain and deficit that accompanies status loss, or they have witnessed others experience this position (via vicarious learning) (Bandura, 1986). Over time, these experiences may have led to an automatic and nonconscious link between status threat cues and status maintenance goals (Bargh, 1990).

Supporting this perspective, evolutionary psychologists argue that human beings have developed several cognitive adaptations designed specifically to deal with status-related issues (e.g., Ohman, Dimberg, & Ost, 1985; Schaller et al., 2007). In particular, modern humans are especially sensitive to various cues “indicating one’s own position in a hierarchy” (Schaller et al., 2007: 494). Research demonstrates that young children and adults alike are able to accurately locate themselves and others in a status hierarchy (e.g., Andersen, Srivastava, Beer, Spataro, & Chatman, 2006; Cummins, 2005; de Waal, 2005; Mast & Hall, 2004; Waldron, 1998). Furthermore, when an individual is threatened with status loss, the human body is hardwired to automatically react with “an alarm signal [sent] directly to our physiology” (Cummins, 2005: 678). Threatened individuals often experience high amounts of stress (Kemper, 1968) and react with automatic physiological responses such as increased cortisol levels (a stress-related hormone) (Cummins, 2005; Schaller et al., 2007). Loss of status can also cause feelings of deep shame, anxiety, depression, and envy (Cummins, 2005; Kemper, 1968; Nagi, 1963). Thus, “once their social status is identified, people expend great energy trying to maintain or improve their status” (Porath, Overbeck, & Pearson, 2008: 1945). Additionally, given its roots in evolution, this process is likely nonconscious (e.g., Berger et al., 1974; Kanazawa, 2009; Loch et al., 2001; Nieuwenboer, 2008; Ridgeway et al., 1985; Waldron, 1998; Webster, 2003).
In addition to situations that communicate status threats (e.g., situations where status loss is possible; Nagi, 1963), mere status symbols—a ubiquitous part of most modern organizations—may also trigger status protection goals. In particular, organizations regularly confer symbols or tokens of superior achievement (e.g., exotic vacations, plaques, and lavish pens) on employees that are readily apparent to and recognized by others. Other status cues may include status-related words (e.g., titles that signal rank, reputation, or importance) or elements of an organization’s environment (e.g., premium offices, special parking spaces) (Berger, Webster, Ridgeway, & Rosenholtz, 1986; Waldron, 1998). Even a company-issued laptop or iPhone—only given to select employees—may signal an employee’s status (i.e., this employee is important and must have the best technology) (Owens & Sutton, 2001). These types of “status props” serve to “garner attention and signify status” (Owens & Sutton, 2001: 312), but may also inadvertently trigger protective goals in others. That is, “power and status encourage people to pay particular attention to their relative standing, with employees motivated to focus on the self in comparison to others in terms of their wages, their status, and their power” (Magee & Galinsky, 2008: 368). As a result, markers of status trigger competitive behaviors (Magee & Galinsky, 2008; Owens & Sutton, 2001) and perhaps the goal to protect one’s status—even if the status is not being directly threatened at the time (i.e., that status prop represents a potential status threat; Nagi, 1963). In part, this may be because status cues threaten the observer’s relative status such that the status props create a perceived discrepancy (or the potential for a discrepancy) between one’s current state and one’s ideal state (Moskowitz & Gesundheit, 2009). This is especially likely in organizational environments that thrive on status as markers of success and power (e.g., Enron). All else being equal, the status of two individuals will be changed if one is awarded a status prop while the other is not.
**Status Threats and Unethical Behavior**

Although status threats may nonconsciously trigger the goal to protect one’s status, an individual can achieve the activated goal via multiple means (Bargh, 1990; Kruglanski, 1996). For instance, when one’s status is threatened or a potential discrepancy is detected, individuals may engage in avoidance behavior. Janes and Olson (2000) found that individuals who watched a videotape of a stand-up comedian being ridiculed (losing status) were less likely to later engage in risky behavior that could lead to failure. Similarly, Maner and colleagues (Maner, Gailliot, Butz, & Peruche, 2007) found that individuals with unstable power were more likely to make conservative decisions to avoid losing that power. In both cases, status had the potential to be lost and avoidance prevented the status loss.

Although individuals are willing to use avoidance behavior to avoid status loss, are they also willing to engage in unethical behavior to ensure that they protect their current status state? Prior research suggests that status seeking in general can be destructive and inefficient (e.g., Loch et al., 2001; Rege, 2008; Waldron, 1998). Loch and colleagues (Loch, Huberman, & Stout, 2000), for example, argue that employees’ time at work is torn between work tasks and “social activities” designed for status enhancement (such as networking, gossiping, exchanging favors, etc.). Status concerns may also cause employees to withhold important information from coworkers or to focus on status-gaining activities (e.g., getting the bigger office or thicker carpet) (Loch et al., 2001).

While the aforementioned research suggests that status seeking can lead to inefficient activities by employees, little research has considered the influence of status loss or status threat on employee behavior (c.f., Pettit et al., 2009), and more specifically, on unethical behavior. Some theoretical research exists to suggest that status threat situations can lead to unethical
behavior as well. In a call for behavioral ethics researchers to examine the influence of and to develop a comprehensive theory of the effects of status on employee deviance, Nieuwenboer (2008) argues that status concerns may help explain why unethical behavior is rampant in work organizations. For example, she suggests that status may be one reason why already-wealthy CEOs are willing to risk their livelihoods and freedom to increase the company’s stock price via “creative accounting” and other unethical means, especially when CEOs face the threat of losing their status. This sentiment is echoed by Hobson and Resutek (2008: 10) who argue that CEOs have earned “superstar status” from the widespread public and media attention, such that reporting earnings have become a type of competition “to garner social status over peer managers” and may lead to unethical behavior (i.e., misrepresentation of financial performance). Similarly, Phillips and colleagues (2009) argue that employees may conceal information from coworkers to prevent status decreases. Goffman (1963) also suggests that individuals use “covering,” or putting on a “front,” for impression management purposes. Finally, Owens and Sutton (2001) suggest that individuals in organizations use a variety of manipulative techniques to secure or achieve status. The authors conceptualize meetings as one type of venue in which these “status contests” and “status management” strategies take place. Although the authors do not specifically label these status management behaviors as unethical, they do provide suggestive examples. For instance, some individuals may purposefully announce the “need” to leave early from the meeting (e.g., lying) as a means to gain the group’s attention and to signal the person’s importance (i.e., busyness). Additionally, similar to claiming credit for another’s work, others might attribute ideas developed by the group to the highest ranking member in the room as a means to improve their own status (via lying and ingratiation).
Recent empirical work also implies the effects of status threats on unethical behavior. Porath et al (2008) found that some individuals reported engaging in aggression (including verbally threaten, physically attack, or retaliate against another) when they perceived that their status was being challenged (via simple incivility such as “silent treatment” or insults) by another coworker. In recent marketing research, Argo and colleagues (Argo, White, & Dahl, 2006) found that consumers are willing to lie to a coworker (as opposed to a stranger) if they paid more than that coworker for a particular product, suggesting that consumers are also concerned about status threats (e.g., appearing to be a naïve customer). Furthermore, focusing on criminal delinquency, Van Duuren and DiGiacomo (1996) revealed that students who received negative feedback on a creative exercise were more likely to go along with a confederate’s suggestion and steal train tickets from a confederate. According to the authors, “the delinquent act is ‘socially useful’ for the actor and expresses a wish to acquire or maintain a status in their peers’ eyes” (Van Duuren & Di Giacomo, 1996: 769). Results from a study by Jensen and colleagues (Jensen, Conlon, Humphrey, & Moon, In press) suggest that groups and individuals close to the end of a project are more willing “to engage in sins of omission and conceal negative information” as a means of face-saving (17). Consequently, each of these empirical studies supports the proposition that situations involving status threats may lead to unethical behavior.

I expand on this prior theoretical and empirical research to suggest that status threats trigger a nonconscious goal to maintain one’s status. Although a status maintenance goal may be reached via various means, I suggest that unethical behavior is most likely to occur in situations where the individual has no other means to prevent status loss and the risk of being caught is low. This is supported by criminology theories: individuals who are unable to obtain status via legitimate means are likely to resort to unethical behavior (e.g., Agnew, 2006; Short &
Strodtbeck, 1963; Walsh, 2006). Status protection behaviors may include trying to overcome a perceived status loss or trying to maintain one’s current status because of the potential for loss. Unethical behaviors that may help to achieve status protection goals might include concealing mistakes, claiming credit for others’ work, sabotaging others (e.g., by withholding key information), or lying or cheating to look good in the eyes of others (e.g., Jensen et al., In press; Owens & Sutton, 2001).

Given the importance of status for evolutionary humans and modern individuals, I hypothesize that a threat to one’s social status will trigger a nonconscious goal to protect that status (via either gain or maintenance behaviors). These status protection goals will increase the likelihood of unethical behavior.

**Hypothesis 1:** Status threat cues increase the likelihood of unethical behavior.

**Individual Difference Moderators**

Certain individuals are more likely to respond to status threats with unethical behavior. In particular, individual differences related to status concerns are likely to strengthen the status threat – unethical behavior relationship. Goals vary in level of accessibility, in part, because individual differences are related to chronic goals (Bargh, 1990; Fishbach & Ferguson, 2007; Higgins, 1990; Roberts & Robins, 2000). For example, a highly anxious (neurotic) person often perceives danger in situations and regularly pursues safety-related goals (e.g., Kish-Gephart, Detert, Treviño, & Edmondson, 2009; LeDoux, 1996). Likewise, individuals with a prevention-focus have a chronic goal to avoid mismatches in their ought and actual self (Higgins, 1997); and narcissistic individuals have a chronic goal for self-affirmation (Roberts & Robins, 2000). Over time, goals that are consistently and regularly pursued by an individual across situations become
“ever more strongly linked in memory” (Bargh, 1990: 111). In comparison to people without a relevant chronic goal, people with chronic goals relevant to a situation are more likely to automatically respond to goal-related environmental cues because of heightened sensitivity to those cues (Bargh, 1990; Roberts & Robins, 2000). Indeed, chronic goals suggest that these goals represent some type of desirable outcome for the individual, a necessary component to nonconscious goal activation (Fitzsimons & Bargh, 2004). Thus, chronic goals may moderate the effect of environmental cues on unethical behavior (via nonconscious goal activation): there will be a stronger relationship between the status threat cue and unethical behavior when an individual is prone to pursuing goals consistent with protecting status. In contrast, individual differences that are incompatible with the goal to protect status will weaken the relationship between status threat cues and unethical behavior.

**Self-Monitoring**

Self-monitoring may be an important moderating variable because it focuses on awareness (or lack thereof) of social cues and concern for social status. Originally proposed by Snyder (1974), self-monitoring refers to the extent to which individuals watch over and manage their expressive behavior for self-presentation purposes. At one end of the continuum, high self-monitors “monitor their expressive behavior and accordingly regulate their self-presentation for the sake of desired public appearances” (Gangstead & Snyder, 2000: 530). At the other extreme, low self-monitors are more concerned with the honest expression of inner attitudes and feelings, and thus, are less engaged in self-presentation based on expectations of others in social interactions.

Due to their concern for appropriate self-presentation, high self-monitors are especially attuned to social cues in the environment (e.g., Costanzo & Archer, 1989). In addition, theory
and research suggest high self-monitors are concerned about social status. For example, Gangstead and Snyder (2000) argued that high self-monitors are particularly status-oriented, concerned with status enhancement and status negotiation. In support, empirical studies demonstrate that high self-monitors are concerned with physical appearance of romantic partners (Snyder, Berscheid, & Glick, 1985) and value certain consumer products (e.g., luxury car or name brand clothing) because of their ability to connote status (e.g., DeBono & Snyder, 1989). In a recent study, Cheng and Chartrand (2003) found that high social monitors are more likely to use mimicry—an evolutionary-based strategy to affiliate or to gain liking—when assigned the “worker” role (rather than the “leader” role). The authors suggest this behavior may be a type of ingratiation to improve one’s status with the “superior”: high self-monitors are “chronically attentive to information in the social context that serves as relevant cues for affiliation (e.g., when their interaction partner is someone with whom it would be beneficial to affiliate)” (Cheng & Chartrand, 2003: 1171 italics mine). Furthermore, Flynn, Reagans, Amanatullah, and Ames (2006) found that self-monitoring was positively correlated with self-reported need for status. The authors also demonstrated that high self-monitors were less willing to help others, ostensibly to maintain a superior status over others who ask for their help. Finally, Klein, Snyder and Livingston (2004) demonstrated that high self-monitors (as opposed to low self-monitors) were willing to express prejudicial views if that is what they believed the audience wanted to hear.

This evidence suggests that high self-monitors are not only highly attuned to “appropriate” social cues, but also chronically activate self-presentation and status-related goals. As such, being high on self-monitoring likely moderates the status threat—unethical behavior relationship. Because of the chronic accessibility of status-related goals, high self-monitors will be more likely to perceive status threat cues and more likely to respond to them than low self-
Monitors. They will engage in “habitual self-promotion whenever a situation indicates some advantage to positive self-presentation” (Robins & Paulhus, 2001: 198), and may even be willing to lie or deceive to achieve their self-presentational goals (e.g., Klein et al., 2004).

**Hypothesis 2:** Self-monitoring will moderate the influence of status threat cues on unethical behavior such that the relationship between environmental cues and unethical behavior will be stronger for high self monitors.

**Narcissism**

Another potential moderator of the status threat—unethical behavior relationship is narcissism. Similar to self-monitoring, narcissism is an enduring individual difference that has at its core a concern for gaining and maintaining status in the eyes of others. Narcissism is derived from Greek mythology and the story of a beautiful young man (Narcissus) who falls in love with his own reflection in a pond and later dies because he is unable to pull himself from its beauty (Wallace & Baumeister, 2002). Based on this story, narcissists have been described as having a “grandiose sense of self-importance” coupled with “a tendency to exaggerate achievements and talents and an expectation to be recognized as superior without commensurate achievements” (Robins & Paulhus, 2001: 200). Although originally conceptualized as a personality disorder (Freud, 1914/1953), narcissism has more recently been studied as a normal personality trait (“normal narcissism”) (e.g., Campbell, Goodie, & Foster, 2004; Chatterjee & Hambrick, 2007; Raskin & Hall, 1979; Raskin & Terry, 1988; Wallace & Baumeister, 2002), defined as “the degree to which an individual has an inflated sense of self and is preoccupied with having that self-view continually reinforced” (Chatterjee & Hambrick, 2007: 353). From this perspective, narcissism exists on a continuum from normality to abnormality with only extreme high
narcissism reflecting a mental disorder (Morf & Rhodewalt, 2001; Soyer, Rovenpor, & Kopelman, 1999).

Narcissism represents an interesting paradox of inflated self-views and a deep-seated need for self-affirmation—a combination that often leads to maladaptive behavior and exploitation of others (Campbell et al., 2004; Morf & Rhodewalt, 2001; Robins, Tracy, & Shaver, 2001; Wallace & Baumeister, 2002). According to Morf and Rhodewalt (2001: 179):

The very fact that the narcissistic self is such a grandiose and bloated structure builds on inherent vulnerability. It is a self that cannot stand on its own, as it is not grounded in an objective reality, thus it needs constant shoring up and reinforcement.

As such, narcissists have a constant goal of self-affirmation (Roberts & Robins, 2000). They are automatically highly attuned to how they rate in comparison to others; and are vigilant in detecting opportunities to maintain or enhance their much desired (needed) positive self-view from others (Morf & Rhodewalt, 2001). However, because of their self-absorption and need for high regard, narcissists are also willing to engage in self-enhancing behaviors at the expense of others. According to Robins and colleagues (Robins & Paulhus, 2001: 233), narcissists have developed a general “strategy to gain social status by ‘getting ahead’ rather than ‘getting along.’” In other words, “winning is not only everything, but the only thing”—regardless of the interpersonal costs (Morf & Rhodewalt, 2001: 189; italics original). Indeed, Soyer and colleagues (1999) found that narcissism was positively correlated with self-reported ethically questionable sales behavior (i.e., being a con-artist and not having high ethical standards). Furthermore, prior research shows that when narcissists’ self-worth is threatened, they respond with hostility (Bushman & Baumeister, 1998), and by denigrating others and engaging in impulsive, risky behaviors (Campbell et al., 2004; Morf & Rhodewalt, 2001; Vazire & Funder, 2006).
Normal narcissists not only crave status and seek to constantly obtain self-affirmation, but they are also willing to go to extreme lengths to ensure that these goals are met. Thus, I hypothesize that narcissism will strengthen the relationship between status threats and unethical behavior. Specifically, narcissists are more likely to perceive status threats, and their status protection goals are likely to be more accessible than for non-narcissists. In addition, narcissists have likely responded with self-serving, unethical behavior to meet the status protection goals in the past, suggesting that this type of “means” will also be more accessible in memory.

*Hypothesis 3:* Narcissism will moderate the influence of status threat cues on unethical behavior such that the relationship between environmental cues and unethical behavior will be stronger for individuals characterized by high narcissism.
CHAPTER 4

METHODS AND RESULTS

To test my hypotheses, I used laboratory experiment methodology to allow for maximum control of the environment (McGrath, 1982) and to allow for collection of the dependent variable, unethical behavior. More specifically, I conducted two studies. First, in Study 1, I used a supraliminal priming technique to trigger status protection goals outside of an individual’s intention or conscious awareness. This common methodology in nonconscious goal activation research (Bargh & Chartrand, 2000) relies on language triggers and asks participants to complete a Scrambled Sentence Task (Bargh et al., 1996a; Srull & Wyer, 1979) in which status-related words (status threat condition) or neutral words (control condition) are strategically embedded in the activity. Although the participants were conscious of performing the activity, they should not be aware that the embedded words are activating a cognitive representation of status threat and triggering the goal to protect one’s status. After the status threat prime, the participants engaged in a second activity that provided the opportunity to fulfill the primed goal. In particular, participants were asked to complete an anagram task in which they must unscramble letters to form words (Schweitzer et al., 2004). Unbeknownst to the participants, the activity was designed so that it was very difficult to achieve superior performance. If a status protection goal was activated, participants would be looking to prevent status loss by performing well on the activity. Because this was not possible, however, the only way to prevent status loss would be to report a higher score on the activity than was actually attained. Participants were given just such an opportunity to self-grade and self-report their performance.

In Study 2, I primed status threat using a more realistic scenario. Participants engaged in a series of three “selection tests” to determine either their status role in a group activity (pilot
study) or their group (with membership to a particular group representing status levels; main study) that they were told would take place later in the lab session. This cover story was created so that subjects believed their “status” (via their performance on the selection tests) would be known to other participants in the session. After each selection test, participants received “performance feedback” that provided information about how the individual participant performed in comparison to his/her peers. In reality, all feedback from the first two selection tests was false. Some participants received feedback designed to prime status threat (above average feedback followed by below average feedback) while others received feedback for a control condition (above average feedback for both selection tests one and two). Finally, after receiving the feedback on the first two selection tests, subjects had the opportunity to exaggerate or over-report their performance on the third selection test (“number matrix puzzle”) to achieve superior performance.

**Study 1 – Supraliminal Status Threat Priming**

The first study was designed to determine if status protection goals can be activated via the mere presence of status-related words covertly included in an activity (i.e., supraliminal priming). As described earlier, supraliminal priming occurs when a person is “exposed to the priming stimulus as part of a conscious task” (Bargh & Chartrand, 2000: 259). This is a method commonly used to investigate nonconscious goal activation (e.g., Bargh, 1994; Bargh et al., 1996b; Chartrand & Bargh, 1996; Sommer & Baumeister, 2002). Although the participant is consciously aware of completing a task, he or she is not aware of the stimulus prime or the influence of that prime on activating a goal-related mental representation and subsequently motivating behavior. Thus, this study was designed to test that subtle language cues—including
words one might encounter in a work environment—are able to trigger status protection goals and subsequently, unethical behavior.

**Pilot Study**

Before running the main study, a pilot study was completed on an independent sample of undergraduate students. The primary purpose of the pilot study was to confirm the appropriateness of the processes and activities planned for the main study. Students were recruited from upper-level management classes (for management majors only). Thirty-eight students participated in the pilot laboratory study. On average, the students were 21.30 years old (SD = .46) and male (59.46%). No other individual differences data was collected from this sample.

**Procedures.** Participants arrived in groups of three to twelve students and were asked to sit in one of the twelve seats at tables arranged in a small conference room. After being seated, participants received an information handout and an activity packet (i.e., activities for the experiment were placed in a large sealed brown envelope). Students were immediately instructed to complete the information handout with their names and e-mail addresses, and then to hand the information handout back to the experimenter. This was done to provide the appearance of anonymity on the lab activities. The information on the handout was later used to assign extra credit and to e-mail the Restaurant.com gift certificates subjects received for participating.

Students were randomly assigned to conditions (Cook & Campbell, 1976) via the activity packets. That is, some subjects received the status threat manipulation activity and others received the neutral condition activity (both activities will be described in further detail below). Thus, during any given session, the experimenter was not aware of a specific participant’s condition. In addition, unbeknownst to the subjects, all of the activities and answer sheets
contained in the brown envelope were marked with an invisible number viewable only under a black ultraviolet light (c.f., Detert, Treviño, & Sweitzer, 2008). This was done so that subjects’ actual performance on the activities could later be linked to their reported performance on the activities (as participants would be instructed to “recycle” their activity packets as trash at the end of the session) (Schweitzer et al., 2004; Shu, Gino, & Bazerman, 2009).

The experimenter began by explaining that the research was focused on understanding employees’ experiences with selection tests: participants were told that they were participating in “a series of tasks modeled after popular selection tests used by major organizations to select employees for jobs.” They were also instructed that these selection tests were being pre-tested for use in a future study. The former portion of the cover story was designed to add an element of real world implication to the activities by tying the “selection tests” to what students may be exposed to in the near future.

In the first activity, participants completed the manipulation task (status threat vs. neutral conditions). This task was based on the Scrambled Sentence Task (Bargh et al., 1996b; Srull & Wyer, 1979) in which individuals unscramble a string of five words to create a four-word sentence (for example, “he it hides instantly finds” can become “he finds it instantly”). The scrambled sentence task was chosen as a supraliminal prime for two reasons. First, this activity is one of the most widely used priming activities in the nonconscious goal activation research (Bargh & Chartrand, 2000). Based on published studies, researchers are often successful in priming the focal goal using this technique. Second, to support the cover story, the scrambled sentence task was a believable “selection test.” For example, after pretesting with a small group of students, the participants reported that they enjoyed the task and that they felt it tested their
creativity by focusing on how they arranged the sentences. Therefore, the activity appeared to conform to the cover story and not raise any “red flags” about its actual purpose.

Each scrambled sentence task consisted of 28 scrambles. Following prior convention (Bargh & Chartrand, 2000), a small portion (9) of the 28 scrambles were identical across the control and manipulation conditions. In the manipulation condition, the other 19 word strings represented the priming manipulation and included words related to status (e.g., distinction, position, status, prestige, rank). Eight of these scrambles also included threat-related language (e.g., questioned, challenge, loss). For example, one string of words appeared as: shoes distinction the are lost. In the control condition, the status-related words were replaced with neutral words. For example, “shoes distinction the are lost” was written as “shoes home the are lost” (Bargh & Chartrand, 2000).

In prior nonconscious goal activation research, participants are instructed to complete the sentences as quickly as possible; this is one means to prevent participants from consciously noticing any patterns in the words (Bargh & Chartrand, 2000; Bargh et al., 2001). Following this convention, participants in the pilot study were instructed to complete this activity as quickly as possible. Participants were also asked to write down their start time and end time (using the large clock at the front of the room) in the spaces provided. This was done to support the cover story and to prevent any suspicion later in the session. More specifically, at the end of the session, participants were asked to “recycle” the packet and report their performance on selection test two (the anagram activity described below) on a final handout. If participants recycled selection test one (the scrambled sentence task) and reported no information from the activity, they would question the true purpose of the experiment. Thus, participants were instructed to use the times written down during the scrambled sentence task to report (on the final handout) how long it took
them to complete the activity. This action also supported the cover story that these activities were being “pre-tested” for future use. Finally, once participants completed activity one, they were instructed as follows: “To signal to the experimenter that you have completed this activity, please put down your writing utensil and wait for further instructions.” Once all participants complete activity one, the group was instructed to move to activity two, or the second selection test.

In the second activity, participants completed an anagram task following Schweitzer and colleagues (Schweitzer et al., 2004). Anagrams consist of a series of scrambled letters (e.g., IKCTS) that must be re-organized into a word using all of the letters provided (e.g., STICK or TICKS) (c.f., Shah, Higgins, & Friedman, 1998). This activity was chosen because prior research has found that undergraduate students are willing to over-report their performance on this task (e.g., Schweitzer et al., 2004). In addition, before using this activity in the pilot study, the activity was pretested with a handful of undergraduate students. Students’ reports again suggested that this was a believable “selection test.” Furthermore, the difficulty level of this activity could be easily manipulated so that superior performance was unlikely to be achieved (without cheating).

After listening to the instructions for the second selection test, the participants were given 10 minutes to complete twenty anagrams. Once time was called, the experimenter handed a dictionary to each participant and instructed all participants to use the dictionary “to check that the word answers to the anagrams are spelled correctly.” They should then report their performance (how many anagrams they solved correctly) on the final handout. According to my research design, selection test one was meant to trigger a status protection goal (for participants in the status threat condition only). This nonconscious goal would motivate status threat participants to look for means to prevent status loss, or to protect their status. In this context, the
only way in which that goal could be accomplished is by performing well on the anagram activity (selection test two). Unbeknownst to participants, however, the anagram activity was purposefully designed to be difficult to complete, such that the only way to achieve superior performance would be to over-report one’s actual performance on the final handout. Pretesting revealed that students would not be able to complete all twenty anagrams in 10 minutes. On average, participants in this pilot study were able to complete only 6.73 of 20 anagrams ($SD = 2.46$) in the time allowed.

Before participants reported their performance on the final handout, the experimenter explained that she was only interested in “your overall performance and experience with these activities.” Once participants had completed the final handout, they should turn that into the experimenter and recycle all of the other lab materials. This was done to reduce any concern that participants may have had about “getting caught” (after over-reporting their performance) (e.g., Schweitzer et al., 2004). If a participant inquired about keeping the activities, the experimenter responded that materials could not leave the room because the lab sessions will continue throughout the week and she could not risk other potential participants seeing the activities ahead of time.

The final handout asked participants to report how many anagrams they completed (to determine unethical behavior) and the time needed to complete the scrambled sentence task (filler question). In addition, the handout included a series of filler questions about the participants’ experiences with the selection tests (to enhance the cover story) and four manipulation check items (discussed further below). To assess whether participants had any knowledge of the true purpose of the experiment, participants were asked to “state in your own
words your perception of the purpose of the activities you completed today.” They were also given space to write any “additional comments or thoughts about your experiences today.”

After completing the final handout, participants were thanked and assured that their $25 Restaurant.com gift certificate would be received via e-mail shortly. To avoid diffusion, participants were not debriefed at this time. Instead, after all of the data was collected, participants received a letter with full disclosure of the experiment and the experiment’s purpose.

**Dependent Variable.** To compute the unethical behavior measure, each participant’s performance on the anagram activity was tallied. This was done by connecting the recycled handouts from selection test two (i.e., the anagram activity) with the final handout turned in by the participant. Once the participant’s *actual* performance was calculated, it was subtracted from the participant’s *reported* performance (from the final handout). The difference represents the extent to which the student over-reported his or her performance on the anagram task (Schweitzer et al., 2004). On average, participants over-reported their performance by nearly one anagram ($\mu = .97$, $SD = 1.98$). A normal distribution plot of the dependent variable revealed a positive skew. Consequently, for all subsequent analyses, the dependent variable was log transformed (Judd, McClelland, & Culhane, 1995; McClelland, 2001).

**Data Analysis.** No participants guessed the purpose of the experiment or the relationship between the priming task and the anagram activity. Thus, all participants’ data were included in the subsequent analyses of the pilot study data.

Given the use of supraliminal priming, four items were created to attempt to measure any status-oriented motivations that might be recalled when individuals were asked about their motivations post hoc (e.g., Haidt, 2001). These items included “I desired to perform better on these tasks than others”; “It is important to me that others know that I did well on these tasks”; “I
desired to learn these tasks faster than others”; and “It was important for me to do well on these tasks” \( (\alpha = .72) \). To test whether the manipulation check items differed significantly across the control and treatment (status threat) groups, I performed a one-way analysis of variance (ANOVA) with one independent categorical variable (i.e., condition). The analysis revealed no significant differences, \( F(1, 36) = .74, p = .40 \), between the status threat (\( \mu = 3.42 \)) and neutral (\( \mu = 3.61 \)) conditions. Thus, there was no clear evidence that the status threat prime influenced participants’ desire to perform better than their peers.

Hypothesis 1 predicted a direct relationship between status threat and unethical behavior. That is, individuals who were exposed to the status threat prime would be more likely to engage in unethical behavior than those exposed to the neutral prime. Using ANOVA, the results revealed no significant difference between conditions, \( F(1, 36) = 1.14, p = .29 \). Hypotheses 2 and 3 (predicting interaction effects) could not be tested in the pilot study as participants did not complete any individual differences measures (e.g., narcissism or self-monitoring).

**Discussion.** The pilot study did not support my main hypothesis. However, some study design issues emerged to help explain the null results. These issues prompted several design changes to Study 1. First, the small conference room offered no privacy between seats. It is possible that the lack of privacy prevented individuals from engaging in unethical behavior (i.e., over-reporting their performance) because they felt their behavior was observable by the experimenter or those sitting around them. To address this issue, the main study was moved to a behavioral laboratory where all seats were separated by front and side privacy walls. Without blatantly looking over another’s shoulder, participants were not able to observe other participants’ behavior.
Second, a related issue emerged with the completion of the first selection test (i.e., scrambled sentence task). Participants completed the first selection test at varying times and this was noticeable by others around them (especially given the lack of privacy). One explanation for the lack of significant findings is that, if some individuals in the status threat condition completed the activity before others around them, the status protection goal may have become moot. That is, the status protection goal may have become satisfied by the participant’s early completion in comparison to his or her peers. In the main study, rather than asking participants to report their start and stop time, participants were given a set amount of time to complete the scrambled sentence task (10 minutes). Additionally, recognizing that some participants would still finish before time was called, the end of selection test one included the following instructions:

If you have completed this activity before time expires, please use the remaining time to complete the Restaurant.com Information Handout (white handout) provided in your packet. If time still remains, please put your writing utensil down and wait for further instructions.

Participants who finished early were able to “keep busy” for the remainder of the allotted time. Plus, the privacy walls prevented participants from noticing the progression of their peers.

Third, the manipulation check for the status threat prime was not significant. This result was not wholly unexpected because of the challenge involved in capturing evidence of a goal operating beneath conscious awareness. Indeed, prior nonconscious goal activation research has generally avoided the use of manipulation checks (Latham et al., 2010) and those who have included a manipulation check were not able to find significant results (e.g., Bargh et al., 2001). Furthermore, the sample size in this pilot study was low (n = 38), reducing the power to detect significant differences (Bobko, 2001). Thus, for the main study, the 4-item manipulation check was not removed. Instead, I added a modified PANAS test to assess whether reported affect
might be differentially influenced by the status threat prime. Perhaps individuals are more likely to recognize differences in their affective state rather than being able to report on a specific (nonconscious) goal. Additionally, to increase power (all else being equal), the main study targeted a sample size of at least 200 participants.

Lastly, the anagram activity used in selection test two was slightly modified. In the pilot study, the anagram activity was designed to be difficult based on timing – participants did not have enough time to finish all 20 anagrams in 10 minutes. However, it was possible that participants could make changes directly to their activity handout during self-reporting. In other words, the participants could solve additional anagrams (with the dictionary potentially used as a guide) after time was called. When the activity handout was later compared to reported performance, this type of “cheating” would be impossible to detect. To overcome this weakness, the anagram activity in the main study was modified to include unsolvable anagrams (Schweitzer et al., 2004). Not only did the unsolvable anagrams prevent students from performing well on the task, it also prevented them from engaging in a second type of “cheating” by adding answers to their activity during self-grading.

**Primary Study**

Two waves of data were collected from a sample of undergraduate students at a large northeastern university. In particular, students were recruited from an upper-level management course that is required of all business majors. Between the courses’ two sections, approximately 1,100 students were invited to participate in both “waves” of this two-wave data collection.
First Wave: Survey Data Collection

At the beginning of the semester, students were invited to complete a survey for course extra credit. This survey included measures of the target individual difference moderator variables – specifically, self-monitoring and narcissism -- embedded among other management-related measures. A confederate experimenter announced the extra credit opportunity in-class. A confederate was used so that students did not connect this first wave of data collection with the lab experiment later in the semester. Students were given 20 minutes in-class to complete the paper survey, and were assured confidentiality. Unbeknownst to the students, all surveys were marked with invisible ink so that students could be connected to each wave of data collected (i.e., the survey and the lab).

Survey Participants. Six-hundred and seventy-eight students returned the survey instrument. Sixty-two percent of these students were male and eighty-one percent were white. Most of the students (82%) were in their junior year of the management program, with a mean age of 20.32 years (SD = 1.026). Seventy-one percent of the students had either worked full-time or completed a full-time summer internship in the past.

Self-monitoring. Self-monitoring was measured with an 18-item, forced-choice scale adapted from Snyder’s (1974) original scale (Briggs & Cheek, 1988). Sample items included: “I find it hard to imitate the behavior of other people” (reverse-scored) and “I would probably make a good actor” (α = .64). Participants were required to choose either “true” (coded as 1) or “false” (coded as 2) for each item. To score the scale, ten of the eighteen items were reverse-scored. Then, all responses were summed for a total self-monitoring score. Higher scores correspond to higher levels of self-monitoring. See Appendix A for a full list of the items in the self-monitoring scale.
**Narcissism.** Narcissism was measured using a subset of the 40-item forced-choice Narcissism Personality Inventory scale (NPI-40) (Raskin & Terry, 1988). Each participant read two statements and circled the statement that best described him or her. Statement “a” was coded as “1” and statement “b” was coded as 2. The NPI instrument consists of seven subscales (Raskin & Terry, 1988), including authority, self-sufficiency, superiority, exhibitionism, exploitativeness, vanity, and entitlement. Given length restrictions and the provocative nature of the items, the vanity subscale items were not included in this survey (for example, “I like to look at my body”). Sample items from the remaining subscales included, “I have a natural talent for influencing people” and “I will be a success” (α = .82). Refer to Appendix A for a full list of the items used to measure narcissism.

**Control Variables.** In addition to the self-monitoring and narcissism scales, the survey instrument collected several control variables, including demographics and social desirability bias. Social desirability bias was measured with the Paulhus (1989) impression management scale, anchored from not true (1) to very true (7). Sample items include, “I never swear” (reverse-scored) and “I sometimes try to get even rather than forgive and forget” (α = .71). Nine items from the scale were reverse-scored. Please refer to Appendix A for a complete list of scale items.

**Second Wave: Laboratory Experiment**

Later in the semester, a second (ostensibly unconnected) extra credit opportunity was announced to the students. In exchange for extra credit and a $25 Restaurant.com gift certificate, students were invited to participate in a PhD student’s (the author’s) dissertation research. They were assured that both incentives (extra credit and gift certificate) would be received for participating in the experiment, and were not conditional on their performance during the
experiment. Students were given class time to sign up for a lab session and then instructed to show up at the behavioral laboratory at their designated time. Up to twelve students were admitted to each session time. Participants were randomly assigned to conditions (as described in detail below) (Cook & Campbell, 1976).

**Laboratory Subjects.** Two hundred and thirty-eight subjects participated in the lab experiment. However, of these students, only 189 completed the survey earlier in the semester. Thus, demographics can only be provided for this subset. Fifty-three percent of these students were male and eighty percent were white. Most of the lab participants (86%) were in their junior year of the management program, with a mean age of 20.29 years (SD = .92). Over half (63%) of the lab participants had past experience working full-time or completing a full-time summer internship.

**Laboratory Procedures.** The laboratory procedures and cover story followed those described in the pilot study above with three exceptions. First, in the pilot study, participants completed consent forms and the information handout (for the Restaurant.com gift certificate and extra credit) before the experiment began. In contrast, in the main study, participants were consented and then the experiment began. The information handout was completed at the end of selection test one, if time remained after selection test one was complete. This was done so that participants who finished early would stay busy and continue to appear busy until time was called. If the form was not filled out at the end of selection test one, participants completed the handout before leaving the lab session.

A second change was made to the anagram activity, or selection test two. In addition to adding examples to the handout (to aid the experimenter in describing the instructions of the activity), the participants were now given 10 minutes to complete fourteen anagrams (instead of
ten minutes to complete 20 anagrams). Unbeknownst to the participants and unlike the pilot study, some of the anagrams in the packet were unsolvable. This was done to prevent students from solving any additional anagrams after time was called. Plus, it ensured that over-reporting one’s performance was necessary to achieve high performance.

Based on the pilot study, the final change was made to the final handout. Again, the final handout asked participants to report how many anagrams they completed. In addition to a series of filler questions about the participants’ experiences with the selection tests (to enhance the cover story) and the four manipulation check items, the final handout now included a modified PANAS scale (Watson, Clark, & Tellegen, 1988), described in further detail below. To assess whether subjects had any knowledge of the true purpose of the experiment, participants were again asked to “state in your own words your perception of the purpose of the activities you completed today.” Finally, participants self-reported their SAT score.

**Dependent Variable – Unethical Behavior.** As described in the pilot study, unethical behavior was determined based on the difference of the participant’s actual performance and his or her reported performance. More specifically, each participant’s performance on the anagram activity was tallied by connecting the recycled handouts from selection test two (i.e., the anagram activity) with the final handout turned in by the participant. Once the participant’s **actual** performance was calculated, it was subtracted from the participant’s **reported** performance (from the final handout). The difference represents the extent to which the student over-reported his or her performance on the anagram task (c.f., Schweitzer et al., 2004).
Results

**Manipulation Checks.** No participants guessed the purpose of the study or the relationship between the priming manipulation and the anagram activity. Thus, all participants with complete data were included in subsequent analyses.

Given the use of supraliminal priming, I included two scales to assess any differences between the status threat and neutral conditions. First, as in the pilot study, four items were included to attempt to measure any status-oriented motivations that might be recalled when individuals are asked about their motivations post hoc (e.g., Haidt, 2001). Sample items include “It is important to me that others know that I did well on these tasks” and “I desired to learn these tasks faster than others” ($\alpha = .71$). An analysis of variance revealed no significant differences, $F(1, 228) = .47, p = .50$, between the status threat ($\mu = 3.03$) and neutral ($\mu = 3.37$) conditions on the manipulation check items. Thus, there was no clear evidence that the status threat prime influenced participants’ conscious desire to perform better than their peers.

In a supplemental analysis, I assessed whether participants reported any emotional difference between conditions using participants answers to a modified PANAS scale (Watson et al., 1988) on the final handout. Following the traditional PANAS scale, participants were instructed to “indicate to what extent you felt this way (in general) while you were completing Activity 2” on a scale of 1 (Very slightly or not at all) to 5 (Extremely). Emotion words included interested, alert, attentive, enthusiastic, thoughtful, excited, creative, and active ($\alpha = .86$). Negative emotion words were not included on the scale to prevent social desirability bias. It is possible that individuals who were exposed to the status threat condition would not rate their emotional state as positively as those who were exposed to the neutral prime. Indeed, anecdotal evidence supports this perspective as many students in the neutral condition wrote (in response to
the open-ended questions) about how interesting these activities were or their enjoyment in completing them. Using ANOVA, the results revealed a nonsignificant difference, $F(1, 229) = 2.50, p = .115$ between conditions on positive emotion. However, it is worth noting that the results follow the expected pattern – that is, participants in the status threat condition reported less positive affect ($\mu = 3.25$) than those in the neutral condition ($\mu = 3.39$). This pattern also holds when running an analysis using a subset of three of the most positive emotion words: creative, thoughtful, and enthusiastic ($\alpha = .70$). Again, participants in the status threat condition reported less positive affect ($\mu = 3.10$) than those in the neutral condition ($\mu = 3.28$); $F(1, 229) = 2.83, p = .09$.

**Hypothesis Tests.** Table 1 displays the means, standard deviations, and intercorrelations of the focal independent, dependent, and moderator variables. On average, participants solved 5.25 anagrams, but reported that they completed 5.66 anagrams. Of the 224 individuals that participated in Study 1, twenty-seven percent over-reported their performance by at least one anagram. The majority of these participants reported that they solved one ($n = 36$) or two ($n = 12$) more anagrams than they actually completed, with fewer participants ($n = 12$) over-reporting performance by three or more anagrams. Initial univariate statistics revealed that unethical behavior was positively skewed; thus, the dependent variable was log transformed for all subsequent analyses (Judd et al., 1995; Pedhazur & Schmelkin, 1991).

Hypothesis 1 predicted a direct relationship between status threat and unethical behavior. That is, individuals who were exposed to the status threat prime would be more likely to engage in unethical behavior than those in the neutral prime condition. To test this hypothesis, I used covariance analysis (ANCOVA). According to Fisher (1958: 281), ANCOVA “combines the advantages and reconciles the requirements of the two very widely applicable procedures known
Table 1. Means, Standard Deviations, and Correlations for Variables in Study 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>s.d.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Condition(^a)</td>
<td>0.50</td>
<td>0.50</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Unethical Behavior</td>
<td>0.41</td>
<td>0.95</td>
<td>0.03</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Self-Monitoring</td>
<td>25.99</td>
<td>3.13</td>
<td>-0.01</td>
<td>-0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Narcissism</td>
<td>54.71</td>
<td>6.22</td>
<td>-0.06</td>
<td>0.01</td>
<td>-0.51***</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Social Desirability</td>
<td>4.26</td>
<td>0.53</td>
<td>-0.09</td>
<td>-0.05</td>
<td>0.29***</td>
<td>-0.27***</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6. Sex(^b)</td>
<td>1.47</td>
<td>0.50</td>
<td>-0.15</td>
<td>-0.10</td>
<td>-0.26***</td>
<td>0.31***</td>
<td>-0.09</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Cognitive Ability(^c)</td>
<td>0.74</td>
<td>0.09</td>
<td>-0.09</td>
<td>-0.10</td>
<td>0.22**</td>
<td>-0.12</td>
<td>0.17*</td>
<td>-0.19*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Actual Performance</td>
<td>5.25</td>
<td>1.54</td>
<td>-0.05</td>
<td>-0.18*</td>
<td>0.03</td>
<td>0.008</td>
<td>0.13</td>
<td>0.05</td>
<td>0.13</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>9. Reported Performance</td>
<td>5.66</td>
<td>1.70</td>
<td>-0.03</td>
<td>0.44***</td>
<td>0.01</td>
<td>0.01</td>
<td>0.07</td>
<td>-0.005</td>
<td>0.06</td>
<td>0.80***</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: Reliability estimates appear on the diagonal; N = 180 to 232
\(^a\) Control = 0, Status Threat = 1
\(^b\) Male = 1, Female = 2
\(^c\) Ratio of earned SAT score to maximum possible SAT score (1600 or 2400)
\(*p<.05\), **\(p<.01\), ***\(p<.001\)
as regression and analysis of variance.” More specifically, ANCOVA allows the researcher to test the differences between means of the treatment and control groups (via a categorical variable), while controlling for the potential effects of one or more continuous variables (e.g., individual differences). The covariance analysis is run through a regression analysis. By adding covariates to the regression analysis (along with the categorical variable based on treatment conditions), the ANCOVA improves on a traditional analysis of variance by potentially reducing the error variance and increasing the sensitivity or statistical power of the analysis (Smith, 2000).

In Study 1, individuals completed an anagram task (i.e., unscrambling letters into a word) and reported their performance. Thus, one potential covariate is cognitive ability as certain individuals may have more (or less) ability when solving the puzzles. Cognitive ability was measured using students’ self-report of their SAT score from the final handout. However, some students completed the SAT when the score maximum was 1600, and others when the score maximum was 2400. To include all of these scores in the analysis, the original SAT scores were divided by the appropriate maximum SAT score (1600 or 2400) to determine a ratio. This ratio was used in all subsequent analyses that include the cognitive ability variable.

In addition to cognitive ability, another potential covariate is actual performance, or the number of anagrams the individual solved correctly. This is different from one’s self-reported performance (i.e., “Reported Performance” in tables) in which the individual has the opportunity to lie about how many anagrams were completed. Referring to Table 1, actual performance is negatively correlated with unethical behavior ($r = -.18, p < .05$), suggesting that individuals are less likely to engage in unethical behavior when they perform well (solve more anagrams) on the anagram task. Thus, because participants’ actual performance may differentially affect whether
they choose to over-report their performance on the activity, I controlled for this variable in the regression equation.

In testing my main hypothesis (that status threat is positively related to unethical behavior), I regressed unethical behavior on status threat while controlling for cognitive ability and actual performance. Once again, even after controlling for cognitive ability and actual performance, the results revealed no significant difference between conditions. Refer to Table 2 for results.

Table 2. Results of Regression Analyses Testing Direct and Moderating Effects for Study 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1 (H1)</th>
<th>Model 2 – Moderation Hypotheses (H2 &amp; 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Condition (^a)</td>
<td>.09</td>
<td>-.26</td>
</tr>
<tr>
<td>Self-Monitoring (SM)</td>
<td>-.10*</td>
<td>-.07</td>
</tr>
<tr>
<td>Narcissism (NARC)</td>
<td>-.02</td>
<td>-.04</td>
</tr>
<tr>
<td>Condition * SM</td>
<td></td>
<td>-.04</td>
</tr>
<tr>
<td>Condition * NARC</td>
<td></td>
<td>.05</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>-.08</td>
<td>-.07</td>
</tr>
<tr>
<td>Sex (^b)</td>
<td>-.54*</td>
<td>-.54</td>
</tr>
<tr>
<td>Cognitive Ability (^c)</td>
<td>-1.40</td>
<td>-.72</td>
</tr>
<tr>
<td>Actual Performance</td>
<td>-.21**</td>
<td>-.17</td>
</tr>
<tr>
<td>(R^2)</td>
<td>.06</td>
<td>.10</td>
</tr>
<tr>
<td>(df)</td>
<td>203</td>
<td>131</td>
</tr>
<tr>
<td>Adjusted (R^2)</td>
<td>.04</td>
<td>.05</td>
</tr>
<tr>
<td>Overall F</td>
<td>3.87</td>
<td>2.01</td>
</tr>
<tr>
<td>Model Significance ((p))</td>
<td>.01*</td>
<td>.06</td>
</tr>
</tbody>
</table>

\(^a\) Control = 0, Status Threat = 1
\(^b\) Male = 1, Female = 2
\(^c\) Ratio of actual SAT score to maximum SAT score allowable (1600 or 2400)

\(^*p < .05\) **\(^*p < .01\)
In a supplemental analysis, the dependent variable was dichotomized – participants who over-reported their performance by one or more were coded a “1” (cheating); all others were coded as “0” (no cheating). This was done because from a theoretical perspective, it may be more logical to assume that subjects either “cheat” or “don’t cheat” (rather than cheat on a continuous scale). Given the categorical dependent variable, logistic regression was used for the analysis (Kutner, Nachtsheim, Neter, & Li, 2005). Logistic regression predicts the likelihood of unethical behavior incidents to occur given the status threat condition predictor variable. Again, the analysis provided no support for a relationship between supraliminally primed status threat and unethical behavior ($p = .54$).

Hypotheses 2 and 3 predicted that self-monitoring and narcissism would moderate the status threat-unethical behavior relationship, such that these variables would strengthen the relationship between status threat and unethical behavior. In the first step, unethical behavior is regressed on the status threat condition, narcissism, self-monitoring, and the control variables (social desirability, cognitive ability, sex, and actual performance) (Baron & Kenny, 1986; Cohen & Cohen, 1983). As shown in Table 2, self-monitoring ($\beta = .11$, $p < .05$) and participant’s sex ($\beta = -.60$, $p < .05$) were found to have a direct effect on unethical behavior. In other words, low self-monitors and males are more likely to engage in unethical behavior. To test for hypotheses two and three, interaction terms need to be added to the model (Baron & Kenny, 1986; Kutner et al., 2005). The interaction terms include the product of self-monitoring and status threat, and narcissism and status threat. As shown in Table 2, the interaction terms for self-monitoring ($p = .70$) and narcissism ($p = .44$) did not reach significance. Contrary to my hypotheses, these results suggest that narcissism and self-monitoring do not strengthen the relationship between status threat and unethical behavior.
However, to improve the power of the aforementioned moderator analysis, I performed two additional analyses by running the two-step moderation process for self-monitoring and narcissism separately (see Table 3, models 3 and 4). After re-running the models, I found similar (non-significant) results for the self-monitoring and narcissism interactions. However, following the pattern of the previous analysis, self-monitoring ($p < .05$) and participant’s sex ($p < .05$) again had direct effects on unethical behavior, suggesting that low self-monitors and males may be more likely to engage in unethical behavior.

Table 3. Results of Supplemental Regression Analyses Testing Moderating Effects for Study 1

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 3 – Self-Monitoring Moderation Hypothesis (H2)</th>
<th>Model 4 – Narcissism Moderation Hypothesis (H3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Condition(^a)</td>
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<td>2.50</td>
</tr>
<tr>
<td>Self-Monitoring (SM)</td>
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<td>-.03</td>
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<tr>
<td>Narcissism (NARC)</td>
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<td></td>
</tr>
<tr>
<td>Condition * SM</td>
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<td>-.10</td>
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<tr>
<td>Condition * NARC</td>
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<td></td>
</tr>
<tr>
<td>Social Desirability</td>
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<td>-.05</td>
</tr>
<tr>
<td>Sex(^b)</td>
<td>-.58*</td>
<td>-.60</td>
</tr>
<tr>
<td>Cognitive Ability(^c)</td>
<td>-.63</td>
<td>-.89</td>
</tr>
<tr>
<td>Actual Performance</td>
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<td>-.16</td>
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<tr>
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<th>Model 4 – Narcissism Moderation Hypothesis (H3)</th>
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<td>Model Significance ($p$)</td>
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\(^a\) Control = 0, Status Threat = 1  
\(^b\) Male = 1, Female = 2  
\(^c\) Ratio of actual SAT score to maximum SAT score allowable (1600 or 2400)  
* $p < .05$ ** $p < .01$
Discussion

In Study 1, I aimed to demonstrate that status protection goals can be triggered by supraliminal primes (i.e., status-related words embedded in an activity) and influence unethical behavior. While the results do not support the hypotheses, several limitations may have influenced the findings. First, the supraliminal prime may not have been strong enough to trigger status protection goals. Indeed, no significant difference between conditions was found based on the four manipulation check questions. However, it is important to note that the difference on the emotions scale followed the expected pattern and approached statistical significance (at $p < .10$). Second, and perhaps more importantly, participants completed the activities individually, so the situation may not have provided the opportunity to attain a status protection goal. In other words, if a status protection goal was triggered, participants may not have felt that over-reporting their performance on an “anonymous” activity would earn or protect their status. The goal may have been satisfied by other means not observed or directly measured in the lab. Therefore, in Study 2, I provided a context that more clearly allows for the opportunity to protect one’s status. In addition, Study 2 included a more “realistic” status threat manipulation, such that participants were exposed to negative feedback (as might be experienced in a work organization) rather than a supraliminal prime.

Study 2 – A More Realistic Status Threat Condition

Study 1 examined the influence of a supraliminal priming technique on priming status threat and subsequent unethical behavior. Study 2 expands these findings by placing subjects in a context in which an activated status threat goal might be pursued. That is, subjects were invited to participate in research “designed to understand the effects of selection tests on work group
functioning.” From the beginning, subjects were informed that their performance on these selection tests would determine their status role in a group activity (pilot study) or their membership in a lower or higher status group (main study). In this way, the experimenter implied that some groups would have higher status than other groups. The modified cover story and subsequent procedures were designed to prime status threat in a more realistic situation.

**Pilot Study**

Before completing Study 2, a small pilot study was conducted to determine the appropriateness of the new design and activities as well as to assess any time, cover story, or procedural issues. Thirty-one students participated in the pilot study. Subjects were non-management majors recruited from an introductory management class. However, no demographic data could be collected as none of these students completed the individual differences survey administered later in the semester. Students received course extra credit and a $25 Restaurant.com gift certificate for their participation. As described in detail below, participants were randomly assigned to experimental groups (i.e., treatment and control groups) (Cook & Campbell, 1976).

**Procedures.** Participants arrived in groups of up to twelve students for each lab session. They were seated in desks separated by front and side privacy walls, and were provided with an activity packet and information handout. Following the procedures in pilot Study 1, the information handout was completed and turned into the experimenter before proceeding. This information was used to assign extra credit, e-mail the $25 Restaurant.com gift certificates, and connect participants to the previously collected survey data (via random and unique numbers written in invisible ink on all of the activities and handouts).
The experimenter began by explaining the purpose of the experiment, emphasizing that participants would be completing a series of three selection tests. These selection tests would determine each individual’s “status role” in a group activity at the end of the session. That is, participants would be assigned a higher or lower status role in the four-person group depending on their performance on the three selection tests. Along the way, participants will receive personalized feedback of their performance so that “you know how you are doing compared to your peers.”

Next, participants were instructed to remove “selection test one” from their activity packet. The “activity packet” was a large brown envelope containing each of the three selection tests and their corresponding answer sheets. When a participant removed a “selection test” from the packet, the selection test consisted of an “activity handout” (with instructions and the activity itself) and an answer sheet (stapled to the end of the activity handout). All three selection tests were designed in this manner and played a crucial role in maintaining the cover story. As in Study 1, participants needed to believe that their work on a given activity would not be collected. Thus, starting with selection test one, participants were told to remove the answer sheet from the back of the activity handout and turn it in to the experimenter; all other materials could be recycled on the way out. This message remained consistent throughout the experiment session so that it was clear that participants’ work would (ostensibly) not be linked to their answer sheets.

In the first selection test, participants were given 5 minutes to complete a series of 4 multiple choice logic questions (designed after questions from the LSAT law school entrance exam). These questions were purposefully designed so that it was difficult to determine whether one chose the correct answer. The ambiguous nature of the answers helped enhance the believability of the performance feedback and convince participants of the truth of their scores.
Before completing the activity, participants were instructed to write their answers on the corresponding “answer sheet” stapled to the back of their activity handout. Then, they handed the answer sheet to the experimenter’s assistant to ostensibly be scored in an adjacent room. (The same assistant and experimenter were used for all the lab sessions.) They were also informed that the activity handouts themselves can be put aside for now because they (all activity handouts) would not be collected; rather, participants would recycle them at the end of the session.

While the answer sheets were ostensibly being scored, participants completed a filler activity. After about 5 minutes, “performance handouts” were given to each participant. All participants (regardless of condition) received an “above average” performance report after the first selection test. The performance handouts were copied before the lab session and included the following statement:

Your performance on this selection test was in the ______ percentile as indicated on the chart above.

Based on your performance thus far, your rank in the group activity will be: ______ (4 – lowest rank, 1 – highest rank)

The handout also included a picture of a normal distribution curve marked in sections as “below average,” “average,” and “above average.” To increase the believability of the feedback, a thin black marker was used to fill in the blanks that were ostensibly unique to the individual participant. For example, for individuals who received “below average” (“above average”) feedback, the percentile blank was completed with “8 to 12th” (“91 to 95th”) and the ranking blank was completed with “4” (“1”). In addition, a circled “X” was placed on the normal distribution to roughly correspond to the appropriate percentile and provide a visual of the individual’s performance compared to others. All of this information was filled in before the
experiments began, but participants were led to believe that the handouts were filled in by the experimenter’s assistant during the lab session (based on participants’ performance).

Next, subjects completed the second selection test consisting of an involved logic problem. Participants were given 5 minutes to match months and days to particular names based on a series of clues. Again, this selection test was chosen because of the ambiguous nature of the answers – an individual, even if he or she “solves” the problem, cannot be sure that the answers are correct. After time was called, the participants turned in the corresponding answer sheet for scoring and completed a filler activity. Then, participants received their performance feedback.

The results from the second selection test were based on an individual’s condition. Participants were randomly assigned to either the status threat or control condition based on the last digit of a random number stamped onto their answer sheets. Those in the status threat condition received “below average” feedback (in the 8 to 12th percentile) while those in the control condition received “above average” feedback (in the 91 to 95th percentile). In this way, those in the control condition received feedback that “confirmed” their earlier performance on selection test one. However, those in the status threat condition received performance that was considerably worse than their performance on the first selection test. Participants were made aware that their performance on these selection tests would determine their status role in the final group activity. Receiving poor performance results and the likelihood of working in the poor performers group was designed to trigger a status threat and the accompanying status protection goal. This status threat was expected because the participant initially received above average feedback – there now was the potential to lose his or her status. Once the status protection goal was triggered, individuals would look for a means to prevent status loss. Selection test three was the participants’ opportunity to engage in unethical behavior to protect that status.
Selection test three offered participants the opportunity to over-report their performance as a means to earn a higher status position. This third activity was a variation of the original anagram activity used in Study 1. However, rather than unscrambling a set amount of anagrams, participants were given a series of four mini-activities. Participants were given only sixty seconds to complete each activity. In the first two activities, participants were given a letter (e.g., “O”) and asked to write as many three-letter (or longer) words as they could in 60 seconds that start with this letter. Then, in the second two activities, participants were given a string of eight letters and instructed to find three-letter (or longer) words using only those letters. As in Study 1, after completion of the activities, participants received a dictionary and instructions for self-grading their performance. Participants then reported their performance on the answer sheet and handed it into the experimenter’s assistant. While the answer sheets were ostensibly being scored, participants completed a final filler activity.

At the beginning of this pilot study, participants were informed that their performance would determine their status role in a group activity at the end of the session. The group activity was only part of the cover story as no group activity was ever planned. Instead, after participants completed the final filler activity, the experimenter regretfully ended the lab session because “the activities took too long and we do not have enough time to complete the group activity.” Before the participants left, however, they completed a final handout. Similar to the final handout in Study 1, this handout included manipulation check items and an open-ended question to assess one’s “perception of the purpose of the activities” completed during the lab session. To enhance the cover story, the final handout also included an entire section (one page) of group-related questions that the participants were instructed to ignore because the group activity was canceled.
After completion, participants placed the handout in a box and tossed the remaining materials (including the handouts from the three selection tests) into the “recycling” bin. Following the procedures described in Study 1, students were debriefed by letter once all of the lab data had been collected.

**Dependent Variable.** As in Study 1, the dependent variable – unethical behavior – represented the extent to which students’ over-reported their performance on the final selection test. In this pilot study, the final selection test consisted of four activities. The dependent variable was calculated by finding the difference between the participant’s actual performance (from the “recycled” activity handout) and the participant’s reported performance (from the final handout) for each of the four activities. Then, the score from each of the four activities was summed to represent an individual’s level of unethical behavior. Due to a positive skew, the dependent variable was transformed using the square root function (Judd et al., 1995; Kutner et al., 2005); the transformed variable was used for all subsequent analyses.

**Data Analysis.** No participants guessed the purpose of the experiment. However, six students were flagged during the session for various suspicious behaviors. The analyses described below were run with and without those students included. Since there was no change in the results, I report the analyses that include all participants.

Three manipulation checks were included on the final handout. All items were anchored on a 5-point scale from strongly disagree (1) to strongly agree (5). The status threat manipulation check for selection test two (“I performed better on selection test 2 than my peers”) was significant, $F(1, 28) = 16.99, p < .001$. As expected, individuals who received the status threat feedback (below average performance on the second selection test) rated their performance lower on that selection test ($\mu = 1.61$) than those in the control condition ($\mu = 3.375$).
In addition, following the pattern that all participants received above average feedback on
the first selection test, the manipulation check for selection test one (“I performed better on
selection test 1 than my peers”) was not significant, F(1, 28) = 2.76, p = .11. On average,
participants rated their performance on selection test one as above average (µ = 4.62; SD = .78).

The third manipulation check was designed to assess whether students understood the
relation between their performance on the selection tests and their position in the group. Two
items were created for this purpose: “The selection tests were designed to determine my position
in the group activity” and “If I did not perform well on a selection test, my position in the group
activity would suffer” (α = .67). As expected, an ANOVA revealed no significant differences
between the two groups, F(1, 27) = .38, p = .54. On average, individuals responded to these
items with above average agreement (µ = 3.62; SD = .94), suggesting a general understanding
that their performance on the selection tests determined their role in the group during the group
activity.

Lastly, I used analysis of variance to test my main hypothesis that status threat is
positively related to unethical behavior. Analysis of variance was used rather than covariance
analysis because these subjects did not complete an individual differences survey for this pilot
study. Based on the ANOVA, the main hypothesis was not supported—no significant difference
between conditions on unethical behavior was detected, F(1, 28) = .05, p = .82.

**Discussion.** The manipulation checks confirmed that participants understood how the
selection tests would be used (i.e., to place them into roles during the group activity) and the
feedback that was received. However, the pilot test for study one did not support the main
hypothesis. To increase the chances of detecting an effect (if one exists), the following design
issues were addressed by making changes to the design of main Study 2.
One possible explanation for the null results is that participants who received the below average feedback (status threat condition) after selection test two believed that their fate was sealed. That is, after terrible performance on selection test two and feedback that suggested he or she would be in the lowest rank position in their group, the participant may not have perceived selection test three as an opportunity to protect his or her status. To address this issue in Study 2, the experimenter informed participants that the selection tests increased in importance along the way, such that selection test three was a stronger determinant of the final outcome than selection tests one and two.

Diffusion of the cover story may have also tainted the results. While participants appeared to believe the cover story that the session “ran out of time,” it is possible that when talking with friends, participants shared that the group activity was cancelled due to lack of time. If this was the case, new participants may have come into the experiment expecting that the group activity will not happen. They may not have been influenced by the prospect of earning a lower status rank in the “upcoming” group activity. In other words, the context would be similar to that of Study 1 where superior performance (accomplished via cheating) would only be noticed by the experimenter and not by one’s peers (via group work at the end of the session). Thus, there may not have been a goal-oriented motivation to cheat. In the main Study 2, a brief (about 7 minutes) group activity was added to the end of the lab session to enhance the cover story though it was unrelated to the purpose of the experiment.

By adding a group activity to the end of the experiment, two additional changes needed to be made to the main study. First, given the time constraints (a short 45 minute session in which participants must complete activities, receive feedback after each activity, and then complete a group activity and final handout), the third selection test was modified to reduce the amount of
time it required to complete and report one’s performance. Rather than an anagram activity that required the use of a dictionary, participants completed a “number matrix puzzle” adapted from Shu and colleagues (Shu et al., 2009). This activity will be described in more detail below.

Second, the pilot study cover story was designed for groups of four students such that individuals in the control condition would always receive the top rank (1) while those in the status threat condition would always receive the bottom rank (4) based on the feedback from selection test two. By changing the design to include an actual group activity, participants would need to be placed into groups of four (a difficult task with sessions that range from 3 to 12 students) and ranked one through four (not just one or four). If this latter point was changed (for example, one status threat participant received a “4” while another status threat participant received a “3”, to accommodate groups of varying sizes), the manipulation might not have been comparable across individuals. Plus, the group activity would need to appear to utilize or justify the ranking system. Given these logistical issues, the cover story was changed such that participants would be placed into groups based on their performance – top performers would work with other top performers in higher status groups, average performers with average performers, and bottom performers with bottom performers. Additional details are provided below.

Finally, selection test two in the pilot study (a detailed logic puzzle) proved to be problematic as no participants were able to finish the activity in the time allotted. Therefore, a different activity was chosen for the main study to streamline the process and enhance the cover story. Selection test one (based on the LSAT questions) from the pilot study was moved to selection test two for the main study; the ambiguous answers were appropriate for the second selection test because participants received either above average or below average feedback at this point in the session. Lastly, the new selection test one was designed with questions that were
easy so that subsequent (above average) feedback was believable. Additional details are provided below.

**Primary Study**

As described in the procedures of Study 1, this study consisted of two waves of data collection – survey data and lab data. All data was collected from undergraduate students at a large northeastern university. Students were recruited from two sections of a management course designed for management majors only (approximately 1,200 students).

**First Wave: Survey Data Collection**

At the beginning of the semester, students were invited to complete a survey for course extra credit. This survey included measures of the target individual difference moderator variables – self-monitoring and narcissism -- embedded among other management-related measures. Once again, a confederate experimenter announced the extra credit opportunity in-class so that students did not connect this first wave of data collection with the lab experiment later in the semester. Unbeknownst to the students, all surveys were marked with invisible ink so that students could be connected to each wave of data collected (i.e., the survey and the lab).

**Survey Participants.** All survey procedures described in Study 1 were followed in Study 2. Eight-hundred and sixty-four students returned the survey instrument. Most of the students were freshman undergraduate management majors (98%). Fifty-seven percent were male and 74% were white. The mean age was 18.58 years (SD = 1.42). Forty-two percent of the students had either worked full-time or completed a full-time summer internship in the past.

**Survey Instruments.** The same instruments and procedures used in Study 1 to measure the moderator variables were also used in Study 2. Self-monitoring was measured using the 18-item, forced-choice scale adapted from Snyder’s (1974) original scale (Briggs & Cheek, 1988).
Cronbach’s alpha was $\alpha = .56$. Narcissism was measured using a subset of the 40-item forced-choice Narcissism Personality Inventory scale (NPI-40) (Raskin & Terry, 1988). Cronbach’s alpha was $\alpha = .84$. Again, the survey instrument collected demographic information, such as sex, race, and age. Social desirability bias was measured with 19-items from the Paulhus (1989) impression management scale ($\alpha = .73$).

**Second Wave: Laboratory Experiment**

Later in the semester, a second (ostensibly unconnected) extra credit opportunity was announced to the students. In exchange for course extra credit and a $25 Restaurant.com gift certificate, students were invited to participate in “faculty research aimed at understanding how selection tests may be used to improve group processes and group decision making.”

**Laboratory Participants.** One hundred undergraduate students participated in the lab experiment. Four of these students were flagged and removed from the study due to comments written in the open-ended question on the final handout. The flagged students’ comments suggested that they were suspicious of the performance feedback. Of the remaining 96 students, 68 could be matched to survey data collected at the beginning of the semester. Thus, demographics necessarily reflect the latter sample size. Nearly all of the students (98.5%) were freshman undergraduates. Fifty-one percent of the students were female and 71% were white. Almost half (45%) of the students had full-time work experience or full-time summer internship experience. The average age was 18.6 years ($SD = 1.09$).

**Laboratory Procedures.** The procedures mimicked those described above for the pilot study with few exceptions. I outline those exceptions here.

The cover story was modified from the pilot study. After arriving and being seated, the experimenter explained the purpose of the experiment, emphasizing that participants would be
completing a series of three selection tests. Based on their performance on these selection tests, the participants would be assigned to a particular group to complete a performance-based group activity. In particular, group members would be assigned to groups such that top performers would work with top performers in the highest status groups, average performers with average performers, and below-average performers with below-average performers. Additionally, participants were informed that the selection tests’ importance in determining their final scores increased as the participants moved through the selection tests (e.g., selection test 2 is more important than selection test 1, and selection tests 3 is more important than selection tests 1 and 2). This announcement was included so that participants believed that they could effect change on their scores, especially based on their performance on the third selection test (i.e., when they would have an opportunity to cheat). Additionally, the performance feedback handout now included only the normal distribution picture and the following statement: “Your performance on this selection test was in the ____-____ percentile as indicated on the chart above.” Again, the normal distribution and the blanks were marked by hand to support the cover story that all scoring was done during the experimental session.

Based on the pilot results, additional changes were made to the selection tests. In the first selection test, participants completed easy questions to increase the believability of subsequent feedback (all participants received above average feedback after selection test one). The participants were given 4 minutes to complete 5 questions including basic logic questions and anagrams. For example, one question stated: “Five girls took part in a race. Alison finished before Bunty but behind Clare. Debby finished before Emma but behind Bunty. Who finished first?” In selection test two, participants completed three multiple choice questions designed after practice LSAT questions. In the pilot study, this activity was originally selection test one, but
served better as selection test two because of the ambiguous nature of the answers. Finally, selection test three was also changed. Due to time restrictions, the anagram activities in the pilot study were removed and replaced with the “number matrix activity” (adapted from Shu et al., 2009). Unlike the anagram activities, the number matrix activity did not require the use of a dictionary to self-grade. In this activity, participants were given a series of 20 number matrices, and were instructed to find two numbers in each matrix that added up to exactly 10 (Shu et al., 2009). Below is an example of a number matrix:

```
1.31 2.85 9.48
8.69 9.52 2.00
6.71 4.36 1.67
8.1  5.48 8.90
```

Students were given four minutes to complete 20 matrices. Pretesting on a separate sample of undergraduate students at a private northwestern university (n = 64) revealed that students, on average, completed 4.72 matrices ($SD = 2.79$) in four minutes. The pretesting and prior research (Shu et al., 2009) confirmed that four minutes was not enough time for most students to complete the activity. As described in the pilot study, at the end of the activity, participants reported their performance (i.e., how many matrices they solved correctly) on an answer sheet and turned the answer sheet into the experimenter’s assistant for scoring. All other procedures regarding the completion of the selection tests and answer sheets, and the “scoring” of the answer sheets remained as described in the pilot study.

To enhance the cover story and prevent diffusion, participants were placed into groups following the completion of all three selection tests. The group activity served simply as a filler activity and was not related to the purpose of the experiment. Participants were instructed to take on the role of a work group (with their group members) to solve a problem under time and
resource constraints. Groups were given two sheets of thick paper and one inch of scotch tape, and instructed to construct the tallest freestanding structure in five minutes. At the end of the group activity, participants returned to their seats and completed the final handout. Again, to maintain the cover story, the experimenter’s assistant measured the structures, recorded the scores (ostensibly for our research), and announced a winner.

In the final handout, participants completed manipulation check items, filler questions, and an open-ended question to assess one’s “perception of the purpose of the activities” completed during the lab session. Students also self-reported their SAT scores (to be used as a control variable in later analyses). After completion, participants placed the handout in a box and tossed the remaining materials (including the handouts from the three selection tests) into the “recycling” bin. Following the procedures described in Study 1, participants were debriefed by letter once all of the lab data had been collected.

**Dependent Variable – Unethical Behavior.** To calculate unethical behavior, the recycled handouts from selection test three were removed from the recycling bin and connected to the participants’ answer sheets from the same selection test. (Again, before the experiment, invisible ink was used to write unique random numbers on each of the handouts in the participants’ activity packets.) Next, the number of matrices actually solved was compared to the number of matrices reported by the participant. The difference between these numbers represented the extent to which the student over-reported his or her performance (Schweitzer et al., 2004; Shu et al., 2009). The average participant completed 6.4 matrices while the average number of matrices reported was 6.9. Forty-percent of participants over-reported their performance by one or more matrices. The majority of those who over-reported their performance (n = 29) reported that their performance was exactly one matrix more than their true
performance. The remaining individuals (n = 9) over-reported their performance by two or three matrices. As in Study 1, the dependent variable was positively skewed. Therefore, all subsequent data analyses utilized the square root transformation of unethical behavior (Judd et al., 1995; McClelland, 2001).

Results

Manipulation Checks. Three manipulation check items were included on the final handout and completed by participants at the end of the lab session. All items were presented on 5-point Likert-type scale, anchored from strongly disagree (1) to strongly agree (5).

To assess whether participants understood that they would be assigned to groups based on their selection test performance, participants responded to the following statement: “The selection tests I took today determined which group I would work in during the group activity.” Across conditions, the mean was μ = 4.14, suggesting that participants generally agreed with the statement. Additionally, the status threat and control conditions did not rate this statement differentially, F(1, 94) = .001, p = .96.

Based on condition, participants in the status threat condition received above average feedback followed by below average feedback. In the control condition, participants received above average feedback for both selection tests 1 and 2. Thus, participants in the two conditions should respond differentially to the following manipulation check item: “On the second selection test, I performed better than my peers.” Using ANOVA, the expected pattern was confirmed, F(1, 94) = 286.77, p < .0001. Status threat condition participants rated their performance on the second selection test (μ = 1.55) significantly lower than the control group (μ = 4.14).

Both the control and treatment groups received the same feedback on selection test one. However, a significant difference between conditions was detected, F(1, 94) = 5.92, p = .02,
based on the manipulation check item (“On the first selection test, I performed better than my peers.”). Participants in the status threat condition rated their performance higher (µ = 4.64) on selection test one than those in the control condition (µ = 4.33). Although this was an unexpected finding, it is important to note that both groups rated their performance well above average. It is possible that participants in the status threat condition were particularly sensitive to their higher performance to compensate for their low performance on selection test two (i.e., emphasize the positive). This possibility will be explored further in the upcoming chapter.

**Hypothesis Tests.** Table 4 displays the means, standard deviations, and intercorrelations of the focal independent, dependent, and moderator variables (and control variables) in Study 2.

Hypothesis 1 predicted a direct relationship between status threat and unethical behavior. Once again, I analyzed the data with an ANCOVA (Fisher, 1958) to allow for the addition of covariates. As in Study 1, cognitive ability (measured by SAT score) and actual performance (measured by number of matrices solved correctly) were controlled for in the analysis. To test hypothesis 1, unethical behavior was regressed onto status threat, cognitive ability, and actual performance. As shown in Table 5 (Model 1), even while controlling for cognitive ability and actual performance, the covariance analysis revealed no significant differences between conditions on unethical behavior.
Table 4. Means, Standard Deviations, and Correlations for Variables in Study 2

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<tr>
<td>2. Unethical Behavior</td>
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<td>3. Self-Monitoring</td>
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<td>6. Sex(^b)</td>
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<td>--</td>
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<td>7. Cognitive Ability(^c)</td>
<td>0.76</td>
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<tr>
<td>8. Actual Performance</td>
<td>6.41</td>
<td>3.35</td>
<td>-0.004</td>
<td>-0.27**</td>
<td>0.02</td>
<td>0.20</td>
<td>0.14</td>
<td>-0.20</td>
<td>0.21</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>9. Reported Performance</td>
<td>6.91</td>
<td>3.22</td>
<td>0.01</td>
<td>-0.03</td>
<td>0.03</td>
<td>0.14</td>
<td>0.10</td>
<td>-0.13</td>
<td>0.21</td>
<td>.97***</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: Reliability estimates appear on the diagonal; \(N = 61\) to \(96\)
\(^a\) Control = 0, Status Threat = 1
\(^b\) Male = 1, Female = 2
\(^c\) Ratio of earned SAT score to maximum possible SAT score (1600 or 2400)
*p<.05, **p<.01, ***p<.001
Table 5. Results of Regression Analyses Testing Direct and Moderating Effects for Study 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1 (H1)</th>
<th>Model 2 – Moderation Hypotheses (H2 &amp; 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditiona</td>
<td>.06</td>
<td>.08</td>
</tr>
<tr>
<td>Self-Monitoring (SM)</td>
<td>.01</td>
<td>.007</td>
</tr>
<tr>
<td>Narcissism (NARC)</td>
<td>-.005</td>
<td>-.02</td>
</tr>
<tr>
<td>Condition * SM</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td>Condition * NARC</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Social Desirability</td>
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<td>-.20</td>
</tr>
<tr>
<td>Sexb</td>
<td>.24</td>
<td>.29</td>
</tr>
<tr>
<td>Cognitive Abilityc</td>
<td>.07</td>
<td>-.65</td>
</tr>
<tr>
<td>Actual Performance</td>
<td>-.04</td>
<td>.02</td>
</tr>
<tr>
<td>R²</td>
<td>.05</td>
<td>.13</td>
</tr>
<tr>
<td>df</td>
<td>81</td>
<td>52</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Overall F</td>
<td>1.33</td>
<td>.90</td>
</tr>
<tr>
<td>Model Significance (p)</td>
<td>.27</td>
<td>.52</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th>Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditiona</td>
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<td>-2.40</td>
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<tr>
<td>Self-Monitoring (SM)</td>
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<td>.007</td>
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<td>Narcissism (NARC)</td>
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<td>-.02</td>
</tr>
<tr>
<td>Condition * SM</td>
<td>.008</td>
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</tr>
<tr>
<td>Condition * NARC</td>
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<td></td>
</tr>
<tr>
<td>Social Desirability</td>
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<td>-.20</td>
</tr>
<tr>
<td>Sexb</td>
<td>.24</td>
<td>.29</td>
</tr>
<tr>
<td>Cognitive Abilityc</td>
<td>.07</td>
<td>-.65</td>
</tr>
<tr>
<td>Actual Performance</td>
<td>-.04</td>
<td>.02</td>
</tr>
<tr>
<td>R²</td>
<td>.05</td>
<td>.13</td>
</tr>
<tr>
<td>df</td>
<td>81</td>
<td>52</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.01</td>
<td>-.01</td>
</tr>
<tr>
<td>Overall F</td>
<td>1.33</td>
<td>.90</td>
</tr>
<tr>
<td>Model Significance (p)</td>
<td>.27</td>
<td>.52</td>
</tr>
</tbody>
</table>

a Control = 0, Status Threat = 1
b Male = 1, Female = 2
c Ratio of actual SAT score to maximum SAT score allowable (1600 or 2400)
*p < .05   **p < .01

Next, I attempted to increase the sample size used in the analysis of hypothesis one by conducting a basic analysis of variance that excluded the SAT score and actual performance variables. Again, the results did not support the hypothesis, F(1, 94) = .05, p = .83. Finally, following the procedures described in Study 1, the dependent variable was dichotomized – participants who over-reported their performance by one or more were coded a “1” (cheating); all others were coded as “0” (no cheating). Using logistic regression to handle the dichotomous dependent variable (Kutner et al., 2005), I tested the likelihood of unethical behavior incidents to
occur given the participant’s condition. Again, the results suggested no relationship between the status threat manipulation and over-reporting of performance ($p = .90$).

Hypotheses 2 and 3 predicted that self-monitoring and narcissism would moderate the relationship between status threat and unethical behavior. The moderator analysis was conducted in a two-step sequence (Baron & Kenny, 1986; Judd, 2000). In the first regression model, condition (coded as 1 for status threat condition and 2 for control condition), self-monitoring, narcissism, social desirability (Paulhus, 1989), sex, cognitive ability, and actual performance (i.e., number of matrices solved correctly) were regressed onto unethical behavior. Then, the interaction terms (for both self-monitoring and narcissism) were created and included in the model. Table 5 (model 2) presents the results of the regression analysis. The interaction hypotheses were not supported. Given the low sample size and low power to detect an effect (Bobko, 2001; Pedhazur & Schmelkin, 1991; Smith, 2000), a supplemental analysis separated the two-step regressions to test for the moderating effects of narcissism and self-monitoring individually. Again, the interaction terms (see Table 6, models 3 and 4) were not significant, providing no support for hypotheses 2 and 3.

**Discussion**

Study 2 attempted to test the hypotheses in a more realistic setting. In particular, participants completed a series of three selection tests to determine their role in a group activity. This cover story was designed so that the situation was more clearly related to status (than Study 1) and an opportunity to protect that status (i.e., cheat on a selection test). Status threat (and the related status protection goal) was triggered via poor performance feedback after selection test two. The results from Study 2 followed a similar pattern as Study 1, providing no support for the direct or interaction hypotheses. Some design and sample limitations may help account for the
results. Despite the lack of results, however, much was learned from this study that can be applied to future work related to status threats and nonconscious goal activation. In the next chapter, I discuss in detail the study’s limitations, takeaways, and opportunities for future research.

Table 6. Results of Supplemental Regression Analyses Testing Moderating Effects for Study 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 3 – Self-Monitoring Moderation Hypothesis (H2)</th>
<th>Model 4 – Narcissism Moderation Hypothesis (H3)</th>
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<tbody>
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<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Condition(^a)</td>
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<td>Self-Monitoring (SM)</td>
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<td>-.003</td>
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<tr>
<td>Condition * SM</td>
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<td>-.02</td>
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<td>Condition * NARC</td>
<td>-.20</td>
<td>-.21</td>
</tr>
<tr>
<td>Social Desirability</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>R(^2)</th>
<th>df</th>
<th>Adjusted R(^2)</th>
<th>Overall F</th>
<th>Model Significance (p)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>.07</td>
<td>58</td>
<td>.07</td>
<td>1.43</td>
<td>.25</td>
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<tr>
<td></td>
<td>.09</td>
<td>58</td>
<td>.03</td>
<td>1.37</td>
<td>.25</td>
</tr>
</tbody>
</table>

\(^a\) Control = 0, Status Threat = 1
\(^b\) Ratio of actual SAT score to maximum SAT score allowable (1600 or 2400)
\(*p < .05 \quad **p < .01\)
CHAPTER 5
DISCUSSION

The purpose of this dissertation is to demonstrate that unethical behavior in the workplace may be explained through the process of nonconscious goal activation (Bargh et al., 2001; Bargh & Huang, 2009). In particular, I focused on status threats as a potential trigger for the nonconscious goal to protect one’s status. Thus, this dissertation extends prior behavioral ethics work by introducing nonconscious goal activation to the literature. According to Latham and colleagues (2010), “most scholars in human resource management and organizational behavior are unaware of, or have ignored the programmatic research by a small number of social psychologists on priming subconscious goals” (235). Outside of a handful of studies focused on task performance (e.g., Shantz & Latham, 2009; Stajkovic et al., 2006), this dissertation represents an early and first extension of the nonconscious goal activation concept into the management and behavioral ethics literatures, respectively. Furthermore, this dissertation is the first behavioral ethics study to explicitly test the influence of status threats on unethical behavior. By combining these two areas of study and elucidating the concept of status threat, this dissertation also represents a theoretical extension of prior status-related work (e.g., Hobson & Resutec, 2008; Nieuwenboer, 2008; Pettit et al., 2009).

Hypotheses Testing: Status Threats and Unethical Behavior

In this dissertation, I focused on status as an important characteristic of human existence – both in evolutionary and modern times. When faced with a situation where status might be lost (i.e., status threat), I hypothesized that individuals will be likely to engage in unethical behavior to protect their status. I proposed that the status threat situation (or status-related cues) activates
the goal to protect one’s status outside of conscious awareness (Bargh & Huang, 2009). One means to accomplish this nonconscious goal, especially when other options are unavailable, is to engage in unethical behavior that protects one’s status (e.g., lying about one’s performance). I also hypothesized that this status threat-unethical behavior relationship would be stronger for individuals characterized by high levels of self-monitoring or narcissism, two individual differences that are acutely related to attention to and concern for status (e.g., Morf & Rhodewalt, 2001; Snyder, 1974; Wallace & Baumeister, 2002). I tested these hypotheses in two studies.

Study 1: Supraliminal Priming

In Study 1, participants were exposed to a supraliminal prime – that is, individuals are aware of the environment, but they are not aware of the focal prime itself (Carlson, Tanner, Meloy, & Russo, 2010). This prime was administered via a Scrambled Sentence Task, commonly used in nonconscious goal activation literature (Bargh & Chartrand, 2000; Latham et al., 2010). Participants received words related to status and status loss (status threat prime), or neutral words (control prime). I also created a four-item “manipulation check” in an attempt to assess whether participants in the status threat condition rated themselves as more interested in “performing better than their peers” than those in the neutral condition.

After running an ANOVA, the manipulation check proved to be nonsignificant in explaining differences between conditions ($p > .05$). This result was not completely surprising. The very nature of a nonconscious goal is that it operates outside of conscious awareness, suggesting that individuals are not necessarily aware or able to report on that goal. This may be especially the case when asking individuals to report on their motivations post hoc. In the supraliminal priming study, participants were asked to report on their motivations on the final
handout after they reported their performance on the anagram activity. At that point, the individual may have already “fulfilled” the goal and the goal was released. Thus, the manipulation check could not detect the arguably (in)active goal.

Interestingly, most nonconscious goal activation research does not include a manipulation check for priming (Latham et al., 2010). As an exception, Bargh et al (2001, experiment 2) included a manipulation check for the goal of cooperativeness (reported on 7-point scale), but found no significant differences across conditions. In response to this struggle, Carlson and colleagues (2010) have recently proposed and found support for a new method designed “to catch goals in the act of decision making” (3). More specifically, in a series of three studies, participants were stopped midway through a decision task and asked to report on their “active” goals in the moment. Results supported the manipulation for both subliminal and supraliminal primes. This new type of manipulation check may be particularly helpful in future status threat research to assess the strength of the priming manipulation. Related to my studies, the use of this method midway through selection test two would not be ideal because the activity is a timed opportunity designed for participants to have a difficult time achieving superior performance. An interruption during this type of task may motivate individuals to use rationalizations or to morally disengage (Bandura, 1986; Carlson et al., 2010), thereby confounding the final results. Future research might consider if the “goal catching” method can successfully be added directly after the second selection test and just before participants report their performance results.

An interesting and unexpected finding was the pattern of differences in reported positive emotions across the two conditions. Emotion words were included on the final handout. Participants in the status threat condition reported average lower levels of positive emotions ($\mu = 3.10$) than participants in the control condition ($\mu = 3.28$). Although this difference was not
statistically significant (at \( p = .09 \)), the pattern of results raises intriguing questions about how emotions might be affected by status threat priming manipulations and if these effects can be used as a post hoc manipulation check in future research. Prior research demonstrates that individuals who fail to meet a goal or who progress slower towards a goal-related outcome than expected are likely to experience negative affect (Fishbach & Ferguson, 2007). It is possible that significant differences would be found if negative emotion words were used (in my study, negative words were avoided because of concerns about triggering social desirability bias). It is also possible that a status protection goal in the status threat condition was triggered, but the situation or context of the experiment (discussed further below) did not present a clear opportunity for the goal to be attained. Thus, these individuals did not reach the goal and may have subsequently reported lower levels of positive emotions. Another possibility is that certain goals have theoretical links to emotions and these links can be explored in future research. For example, based on its origins in early human history, need for status is believed to be deeply embedded in the human psyche (e.g., Cummins, 2005; Schaller et al., 2007). When this status is threatened, individuals may automatically experience negative emotions such as anxiety or fear (Kemper, 1968; LeDoux, 1996). Future research might consider incorporating explicit measures of anxiety or fear directly before and after the manipulation prime to determine if status threat might differentially influence participants’ emotions.

Another possible explanation for the lack of significant findings (for the manipulation check and the dependent variable, unethical behavior) is that the supraliminal prime simply did not trigger a status protection goal in the first place. This could have occurred for two reasons. First, nonconscious goal activation is based on the theory of spreading activation in associative network models of memory (Andersen, 1983; LeDoux, 1996; Rumelhart et al., 1994). That is,
the mere perception of a related stimulus (or prime) activates a node (representing a memory) stored in long-term memory (Moskowitz & Gesundheit, 2009). This activation then spreads to connected nodes (Moors & De Houwer, 2007) such that the activation of one cognitive representation in memory will influence the activation of connected or related memories (e.g., means to attain a goal) (Fishbach & Ferguson, 2007). Given this line of reasoning, a prime that is not related to the focal goal will fail to activate related nodes in memory and thus, fail to activate the focal goal. In Study 1, I attempted to choose words related to status and status loss (e.g., lost distinction; remove esteem) that would prime status threat and subsequently, the status protection goal. However, the priming activity may not have included words that twenty-year olds generally associate in memory with status threat and the goal to protect one’s status. Future research is needed to “map” the words individuals associate most closely with status threat and status protection so that primes can be targeted to the focal goal and to a particular sample. For example, researchers might conduct interviews and ask interviewees to describe prior experiences in a status threat situation. What are the words that interviewees commonly use to describe the situation? This could also be accomplished using open-ended questions on a survey instrument. Once key words are identified, a final pretest might ask an independent sample of participants to rate the words as more or less related to status threat.

In addition to word choice, the second potential reason that the prime was not effective may be the type of prime used. In Study 1, I utilized the scrambled sentence task, a priming technique regularly and successfully used by nonconscious goal activation researchers (Bargh & Chartrand, 2000; Carlson et al., 2010; Latham et al., 2010). This research has often used one word in each scramble to trigger basic goals such as to achieve or to memorize (Bargh & Chartrand, 2000). In contrast, the scrambled sentence task may be less effective for status
protection goals because status threat is difficult to communicate with one word. In Study 1, for example, the priming manipulation necessitated two words (e.g., lost distinction). It is possible that individuals cannot focus on two words in tandem, and thus, the priming manipulation is not as strong as when one word is used. For more complex goals, an alternative priming technique may be necessary. As one example, Laran (2010) presented participants with phrases (e.g., “Just Do It” or “It’s Time to Fly”) to prime an action-related goal. The cover story included asking participants to read the phrases and report on the most “memorable” phrase. Unbeknownst to the participants, the phrases themselves represented the prime. Future research might consider a similar technique to prime status protection goals (e.g., “Pop One’s Balloon” or “Knock Down a Peg”).

Furthermore, the scrambled sentence task may not be as effective at eliciting status protection goals because “different concepts may have different propensities to be primed” (Latham et al., 2010: 249). That is, different types of primes (e.g., word matrices or pictures) might activate different parts of the brain and thus, be more or less effective depending on the type of goal one is trying to activate:

For example, if a priming manipulation taps into a prefrontal cortex (which handles rational, long-term consequences), it would be less effective for concepts in the limbic system (which handles emotional, short-term choices). It is also possible that a prime is operationalized by the anterior cingulated part of the brain, which determines whether incoming information is delegated to the prefrontal, cortex, or limbic systems. (Latham et al., 2010: 249)

Prior research provides some support for this argument, finding that one priming technique is more effective than another for a particular goal (e.g., Stajkovic et al., 2006). Although much work remains to be done to understand how and why certain primes are effective, it is possible that via future studies, researchers may find that pictures of individuals experiencing a status threat are more influential than words presented in a scrambled sentence task or word matrix.
Turning to the dependent variable of interest, unethical behavior was calculated by taking the difference between the participant’s actual performance and his or her reported performance on the final selection test (anagram task). After controlling for cognitive ability (using SAT scores) and actual performance, I found that status threat did not have a significant influence on unethical behavior. These non-significant results remained even after removing cognitive ability and actual performance to perform an analysis of variance with status threat alone. The lack of results for status threat could potentially be explained by one of the following: (1) the status threat manipulation was unsuccessful, or (2) status threat is not related to unethical behavior as hypothesized. As described above, the status threat manipulation may not have been strong enough or the most appropriate to elicit a status protection goal. Indeed, coupled with null results from the manipulation check, this possibility is even stronger. I will further address these possibilities below (see section, “Is Status Threat Related to Unethical Behavior in the Workplace?”).

Although I did not find results to support my hypotheses in Study 1, I did find that participants’ sex and self-monitoring (Snyder, 1974) were directly related to unethical behavior. Starting with participants’ sex, the results suggest that males may be more likely than females to engage in unethical behavior. Given prior research, this result was not surprising. Past research has found that when compared to males, females make more ethical choices (e.g., Latham & Perlow, 1996) and ethical judgments (e.g., Franke, Crown, & Spake, 1997), and report more ethical attitudes (e.g., Borkowski & Ugras, 1998). Gilligan (1977) argued that this pattern occurs because females focus on care for others when making ethical judgments. Others have suggested that females are socialized differently than males (Eagly, 1987). Still, much debate has surrounded the topic of gender and unethical behavior. A recent meta-analysis of sixty
independent samples (N = 21,927) attempted to shed light on the topic, finding that sex had a weak effect on unethical choices in the same direction found in this study (p = .098) (Kish-Gephart et al., 2010). However, because it drew from prior work, the meta-analysis was only able to examine methodological moderators. It is possible that certain types of situations may affect the relationship between sex and unethical behavior. Although Study 1 was likely unsuccessful at manipulating status threat, future research may find that males are even more likely to engage in unethical behavior when status is on the line. From an evolutionary perspective, for example, Kanazawa (2009: 96) argues that status is more important to men because “women prefer men with greater resources as their long-term mates.” Thus, men may be more likely to engage in unethical behavior to secure their status.

The second finding from Study 1 suggests that low self-monitors may be more likely than high self-monitors to engage in unethical behavior. At some level, this finding seems counterintuitive. One might argue that high self-monitors are characterized by their ability to read the situation and act accordingly; therefore, they are more likely to “cheat” or lie to fit in with their current environment (c.f., Covey, Saladin, & Killen, 1989). Despite the dearth of studies in behavioral ethics that focus on self-monitoring (for exceptions, see Ross & Robertson, 2000, 2003), prior research outside of the field has found support for this relationship (e.g., Wirtz & Kum, 2004). According to Covey and colleagues, high self monitors are less likely to engage in cheating because of their desire to maintain good appearances (Covey et al., 1989). Still, additional work is necessary to understand when self-monitoring is most likely to influence unethical behavior. For example, the influence of self-monitoring on unethical behavior may be moderated by situational factors, such as surveillance (Covey et al., 1989) or the competitiveness of the environment (Ross & Robertson, 2003). Furthermore, researchers might ask: how can self-
monitoring help inform current and future theoretical work in the field? Indeed, this individual difference may be helpful in answering calls for additional research and theoretical models that include both situational and individual variables (i.e., a more interactionist approach) (e.g., Kish-Gephart et al., 2010; Treviño, 1986).

**Study 2: Context, Context, Context**

In an attempt to counteract two weaknesses of Study 1, I focused on context in Study 2. First, Study 2 was designed to create a more realistic status threat manipulation based on the performance feedback received after each selection test. Participants in the status threat condition received negative feedback after selection test two, while participants in the control condition received positive feedback. (To set a baseline, both conditions received positive feedback after the first selection test.) If the supraliminal priming manipulation was not strong enough to produce results in Study 1, then Study 2 was designed to overcome that weakness and produce results. Second, nonconscious goal activation research suggests that context is an important factor in the effectiveness of nonconscious goals on behavior (e.g., Laran, Janiszewski, & Cuhna, 2008). For an individual to act on a goal, one must be in a context in which this goal can be acted upon. In Study 1, if a status protection goal was activated, the results demonstrated that participants did not engage in unethical behavior to obtain that goal. I surmised that the context may not have provided a clear opportunity to earn back status because only the experimenter would see participants’ performance scores. Thus, in Study 2, participants were led to believe that their performance would determine their status in a group activity with their peers. This more clearly tied the context to the opportunity to engage in behavior that could theoretically fulfill a status protection goal.
In contrast to Study 1, several of the key manipulation checks in Study 2 followed the pattern expected. For example, participants in the status threat condition rated their performance on the second selection test as much worse than those in the control condition ($p < .0001$). Likewise, participants from both conditions understood that the selection tests determined one’s group (i.e., no significant difference between groups; $p = .96$). These results suggest that the design was effective in communicating the cover story of the experiment (students’ performance determined the status of the group with which they would be working) and that status threat participants understood that their performance on the second selection test was below average. However, ultimately, the results from Study 2 confirmed the overall results from Study 1 – no significant difference in unethical behavior between the status threat and control conditions.

Clearly, the lack of results from studies 1 and 2 begs the question: is status threat related to unethical behavior? I will address that question in detail in a section below. Before moving on to this question, however, it is important to note several limitations of Study 2 that may have contributed to the null results. First, a major limitation of Study 2 is the sample size and thus, the study’s power. According to Bobko (2001: 10), “statistical ‘power’ is the probability that $H_0$ will be rejected when $H_0$ is indeed false.” One important determinant of statistical power is sample size (Pedhazur & Schmelkin, 1991). In Study 2, my sample size dropped from $n = 96$ to $n = 61$ because of the relatively few survey instruments (from wave 1) that could be connected to the lab data (from wave 2). Using GPower Software (Erdfelder, Faul, & Buchner, 1996), I conducted a post-hoc power analysis. Given an effect size of $d = .12$ (based on the results from Study 2), a sample size of $n = 96$ (choosing the best case scenario), and alpha (probability of a Type I error) = .05, the analysis revealed that my study had very limited power (.14; $\beta = 1 - .14 = .86$). Often, researchers target a power of at least .80 ($\beta = .2$) (Pedhazur & Schmelkin, 1991). At this
convention level, I would need a sample size of n = 156 under the assumptions of a medium effect size (d = .40) and n = 620 under the assumptions of a small effect size (d = .20). In Study 2, every effort was made to achieve a minimum sample size of n = 300. This was done, for example, by offering additional incentives (extra credit and a gift card), scheduling lab times to be convenient for classes and to avoid common exam times, in-class announcements, and follow-up reminder e-mails. Yet, only one hundred students could be run through the lab. This was due, in part, to severe weather conditions that caused many subjects to cancel their sessions. Given the sample size limitation, it may be inappropriate – on the basis of this study alone – to conclude that status threat and unethical behavior are unrelated without future research to replicate the experiment. With a larger sample size (all else being equal), the potential to detect an effect – if one exists – will increase (Bobko, 2001; Pedhazur & Schmelkin, 1991).

A second limitation of Study 2 may be the way in which participants were instructed about their performance and the group activity. In a recent working paper, accounting researchers investigated the influence of public ranking on over-reporting of performance (Hobson & Resutek, 2008). In the ranked condition, participants’ performance scores were publicly announced, ranked, and acknowledged. In the non-ranked condition, participants’ performance scores were simply publicly announced (not ranked or acknowledged). The research found that participants in the ranked condition were more likely to over-report their performance than those in the non-ranked condition. These results suggest that public displays are likely most effective in triggering status threats when scores are publicly ranked and acknowledged. In my Study 2, the experimenter was purposely vague about whether participants’ performance would be publicly announced. In the pilot study, participants were told that they would be assigned to particular roles in a group for the purposes of the group activity, but again the experimenter was
vague regarding public knowledge (though it was implied). In hindsight, the pilot cover story may have been a better choice for implying that other members of the group would know whether the focal member performed well or poorly (because how else will you know your responsibilities during the group activity?). However, given that both the pilot and the main study yielded the same results, it is possible that both designs needed to include an explicit statement by the experimenter that participants’ performance would be made public. This represents an interesting avenue for future research because of its implications for work organizations. If the hypothesized results are found, they imply that organizations need not be a high status-oriented culture to trigger status protection goals and unethical behavior. Rather, organizations that simply publicly acknowledge and rank their employees – a common practice, for example, in sales organizations – may be unintentionally triggering status protection goals and unethical behavior.

Another potential explanation for the nonsignificant results in Study 2 may be that the manipulation tapped into self-esteem rather than status threat. Self-esteem can be defined as “a person’s appraisal of his or her value” (Leary & Baumeister, 2000: 2). Based on this definition, self-esteem is different from status such that self-esteem is internally measured (one’s own impression of one’s value) whereas status is externally measured (one’s value based on his or her position in a group or hierarchy). As described earlier, Study 2 was designed to provide a more group-oriented context so that participants had a clear opportunity to fulfill an activated status protection goal. This was done by leading participants to believe that their performance on the selection tests determined their position (or group) in a group activity. However, the feedback was given to participants confidentially without any public recognition by the group. In addition, participants were engaged in a temporary group activity with other participants that they may
never see again. These circumstances may have resulted in the negative feedback being internalized as a threat to self-esteem rather than externalized as a threat to one’s status in the group. Given humans’ natural desire to maintain positive self-esteem (Baumeister, Campbell, Krueger, & Vohs, 2003; Crocker & Park, 2004; Leary & Baumeister, 2000), the participants may have looked for a means to rectify their bruised self-esteem. Simply over-reporting their performance on the final selection test would not accomplish this because the act of cheating may further damage self-esteem: cheating can change the group’s impression of the participant, but it would not change the participant’s knowledge that he or she performed poorly on the second selection test. Instead, drawing from the dissonance literature, “people can call upon other positive aspects of their self-concept when threatened…[as a means to] reduce the dissonance without having to confront the issue that caused the threat in the first place” (Cooper, 2001: 76). Use of this strategy is suggested by the results from the manipulation check for selection test one (“On selection test one, I performed better than my peers”). When compared to the control condition, individuals in the status threat condition reported that they performed even better than their peers on selection test one ($p < .05$). This result was contrary to expectations: because both the control and treatment group received the same feedback (above average) after selection test one, there should be no difference in answers on this particular item. If participants experienced a threat to self-esteem, they may have compensated for that threat by over-emphasizing their “positive” (above average) performance on the first selection test. Future research needs to consider the similarities and differences of status threat and self-esteem threat. Researchers should include measures of state self-esteem when studying status threat to help rule out self-esteem threat as a possible alternative explanation.
Although the Study 2 results were not supportive of the status threat—unethical behavior relationship, an interesting insight was revealed that may inform future research. If unethical behavior had been detected in Study 2, a potential alternative explanation might be related to equity theory. According to equity theory (Adams, 1963, 1965), individuals compare their own input-outcome ratio to a comparison other. If a discrepancy is detected, the individual experiences inequity and distress, and looks for ways to restore equity and reduce the distress. Status threat research implicitly assumes that individuals perceive the status threat as deserved. However, one might argue that an alternative explanation to any status threat--unethical behavior finding is that individuals perceived the situation as unfair and reacted with anger (Bies & Moag, 1986; Homans, 1974) and unethical behavior (e.g., Ambrose, Seabright, & Schminke, 2002). Thus, future research should include measures of fairness to help rule out this alternative explanation. In Study 2, participants responded to an open-ended question regarding their experience with the selection tests. It is worth noting that many participants who received negative feedback commented on how much they enjoyed the activity because it was informative and helped them recognize areas that they needed to work on. There was no indication that participants did not believe the feedback nor that they felt the feedback or grading process was unfair. Interestingly, unlike the results from Study 1, Study 2 did not reveal any relationship between unethical behavior and participants’ sex or level of self-monitoring. One explanation for these results may lie with the potentially self-selected sample in Study 2. As described above, extenuating circumstances (e.g., severe weather) impacted the number of students who participated in the laboratory experiment. These extenuating circumstances may have also biased the sample such that the students who did attend the laboratory sessions were systematically
different from those who did not attend the sessions or from those who attended the sessions in Study 1. For example, students who attended the sessions may have been the ones who were most in need of course extra credit (as this was the last opportunity for them to earn it).

Furthermore, students in Study 1 were predominantly juniors (average age = 20.29 years) while students in Study 2 were predominantly freshman with an average age of 18.6 years. Drawing from the previous point related to equity theory, it is possible that the freshman undergraduate sample in Study 2 (in contrast to older students) perceived their performance on the selection tests as informative rather than as threatening because they knew they had nearly four years to hone their skills before entering the job market.

**Moderator Relationships**

In addition to a direct relationship between status threat and unethical behavior, I also hypothesized that individuals who have a propensity to focus on status-related concerns – such as narcissists and high self-monitors – are even more likely to engage in unethical behavior in the face of a status threat. This moderator hypothesis was tested in Study 1 and Study 2. In both cases, the interaction terms were nonsignificant and thus, I found no support for the hypotheses. It is important to note that by including interaction terms that must compete with the direct effect in a moderator analysis, a large sample size (or large effect size) is necessary to have significant statistical power to detect an interaction (Bobko, 2001; Smith, 2000). In both of my studies, the sample sizes were comparatively low (e.g., Study 2, n ranged from 61 to 96). Once again, future research should attempt to replicate this study (with modifications) before concluding that no interaction between status-related individual differences and unethical behavior exists.
Is Status Threat Related to Unethical Behavior in the Workplace?

Despite multiple attempts to capture evidence of a status threat-unethical behavior relationship, the results from two lab studies did not provide support for my hypotheses. These null results beg the question – does a status threat-unethical behavior relationship exist? Certainly, based solely on the results of my studies, I have to entertain the possibility that no such relationship exists. In Study 2, for example, the manipulation checks confirmed that the subjects were aware of the changes in their status relative to others (via performance feedback) and that their performance determined the group they would work in, but no significant differences in unethical behavior were detected. This result was also found in the pilot study for Study 2 when participants were placed into a particular “status role” within their group. Still, several possibilities may account for the null results as well as provide potentially promising new avenues for future research. In addition to the limitations discussed above for each of the individual studies, I now discuss additional limitations or concerns related to both studies. Indeed, in attempting to answer the question posed at the beginning of this paragraph, consideration of the results from both studies is necessary. I also use this occasion to outline future research opportunities.

First, in both studies 1 and 2, I used lab experiment methodology to examine my hypotheses. In particular, I chose the laboratory to maximize the experimenter’s control (McGrath, 1982) and to allow for cheating to occur. This was an especially attractive feature given the infancy of nonconscious goal activation research in management settings (Latham et al., 2010), the potential for more than one goal to influence an individual’s behavior (Moskowitz & Gesundheit, 2009), and the difficulty involved in creating opportunities to cheat in the field. Additionally, the main purpose of the study was to demonstrate that subtle environmental cues
can influence unethical behavior via nonconscious goals. This type of hypothesis is best examined in a situation where alternatives (that cannot be controlled in the field) can be ruled out. Of course, as with all research methods (McGrath, 1982), the lab experiment methodology has limitations and tradeoffs. For example, in gaining control over the environment, the experimenter loses realism in the lab (McGrath, 1982). However, lab methodology is used often and successfully in nonconscious goal activation studies (e.g., Bargh et al., 2001; Fitzsimons et al., 2008; Kay et al., 2004). Once a link is established, a complimentary approach (e.g., field experiment) can be used to offset limitations (c.f., Latham et al., 2010). The lack of effect in my study may in and of itself suggest new information about the focal phenomenon.

As an example, one of the weaknesses of using lab experiment methodology may have been its inability to capture the reality and longevity of relationships that exist in workplace settings. That is, employees often work in the same departments or groups for the term of their employment. Outside of telecommuting or extensive travel situations, employees are in regular contact with the same individuals over time. Some of these individuals may be involved in 360 degree employee reviews. Coworkers may even lead teams or assign tasks among the group members. Thus, an employee who experiences a status threat at work is likely to perceive the potential status loss as a greater offense than a student engaged in a temporary lab session. A status loss in the workplace has long-term consequences that are difficult to capture in the 45-minute lab sessions. Furthermore, the participants in my study were recruited from a class of 1,100 students. Although these students will take classes together in the future, the class size decreases the likelihood that they have personal interaction with many of the other students. Any consequences from status loss during the lab session may be short-lived.
These results suggest that the longevity of relationships may be a necessary component of the status threat-unethical behavior link. Future research may benefit from exploring the link in further detail. Future research should also consider alternative methods that allow for the potential influence of long-term relationships. For example, one study might utilize student groups that form early in the semester and have the expectation of working together throughout the rest of the semester. A study similar to the ones described in this dissertation – in which students are given assessment tests to ostensibly determine their status in the group – could be conducted midway through the semester. Students would attend and complete the session with their fellow group members. Another option, albeit more difficult, is to conduct a field experiment in an actual work organization. This methodology provides higher realism than a lab experiment (McGrath, 1982), and thus, would serve to complement this dissertation research. Here again coworkers could be invited to “assessment sessions” with the expectation of receiving assigned roles, and working together in a group activity. Both of these situations incorporate the (long-term) relationship aspect that might have been missing from my own study designs. But, in both cases, capturing an unethical behavior dependent variable would be challenging.

A second consideration is that individuals facing a status threat may find unethical behavior an unattractive option and look for alternative ways to “attain” the status protection goal. That is, by its very definition, unethical behavior is counter-normative (Kish-Gephart et al., 2010). Engaging in such behavior carries its own risk of being caught and potentially losing trust or goodwill (e.g., Covey et al., 1989). An individual may not be willing to risk these and other penalties (including losing additional status) to prevent status loss alone. Instead, they may look for “easier” means to protect their status. As one example, individuals may be more likely to
engage in acts of omission instead of acts of commission. Although both may technically be
“unethical behavior,” the individual may be able to rationalize acts of omission as both less risky
and less unethical (e.g., moral disengagement; Bandura, 1986). In my studies, individuals had to
over-report their performance—an act of commission. If the participants had been given the
opportunity to engage in an act of omission – for example, their performance had “accidently”
been over-reported for them – would they be more likely to “behave” unethically (i.e., fail to
point out and correct the over-reported performance) to protect their status?

If unethical behavior is perceived as a risky option, future research may also consider if
unethical behavior is more likely to occur when status is clearly linked to some type of gain or
reward. For early humans, status was typically related to access to resources and reproductive
opportunities (Cummins, 2005; Schaller et al., 2007; Sundie, Cialdini, Griskevicius, & Kenrick,
2006). In work organizations, status can be linked to positive “gains” including monetary
incentives, the corner office (Owens & Sutton, 2001), or influence in group decision-making
(e.g., Berger et al., 1974; Ridgeway et al., 1985). These types of incentives may be necessary to
motivate unethical behavior in the face of a status threat. For example, in my studies, status was
examined as an end in and of itself. If an individual over-reported his or her performance, the
clear reward was additional status in the face of one’s peers. However, would individuals be
more willing to over-report their performance if status (higher respect from one’s peers) was
accompanied by a monetary bonus (common in organizations), a key seat at the table that clearly
acknowledges their position, or a simple “You’re Number 1” sticker? People may not be as
reactive (i.e., willing to engage in unethical behavior) when they are only publicly better
performers than others (c.f., Hobson & Resutek, 2008). The status may need to come with other
incentives such as actual acknowledgement or a tangible benefit. Interestingly, prior research has
found that individuals are willing to forgo monetary incentives to achieve status, prompting researchers to suggest that status may be an end in and of itself (e.g., Huberman et al., 2004; Loch et al., 2000). However, in several of these studies, individuals were acknowledged publicly as part of their “reward” for earning status. In light of the results from this dissertation, future research should consider if status in and of itself is strong enough to motivate unethical behavior, or if it interacts with rewards. Perhaps the counter-normative nature of unethical behavior makes it a less likely option in most situations. In that case, when do the rewards of status overcome the risks of engaging in unethical behavior?

This section began with the question: is status threat related to unethical behavior? Based on the results of my studies alone, I would be forced to conclude that the answer is “no.” However, the preliminary evidence -- based on only a handful of studies -- suggests that individuals respond to status loss (e.g., Hobson & Resutek, 2008; Porath et al., 2008) and unethical behavior is a potential response (Jensen et al., In press; Nieuwenboer, 2008; Owens & Sutton, 2001; Porath et al., 2008). Plus, the study of status threat and nonconscious goal activation is still in its infancy (see Latham et al., 2010). Thus, I believe the better answer is “it is too soon to tell.” The status threat manipulations in my studies were likely not effective in priming status threat and the related status protection goals (as described in detail above). Future research should consider a manipulation where the loss of status is public, group-oriented, and related to a group that is meaningful to the individual. Thus, although this dissertation does not support the hypothesized relationships, I believe that this area can still be fruitful for future research. I now turn to additional research opportunities that are not directly related to the limitations of this study.
Additional Research Opportunities

In addition to the future research opportunities discussed above, two other avenues are also worth noting. First, through my readings and research, it became evident that further work is necessary to understand the nuances involved in status and status threat. For example, as described earlier, status can be defined as “one’s standing in a social hierarchy as determined by respect, deference, and social influence” (Ridgeway & Walker, 1995: 251). It also represents “the extent to which an individual or group is respected or admired by others” (Magee & Galinsky, 2008: 359). However, two individuals may not define status in the same manner. That is, one person may define status based on the respect other individuals have for him or her, regardless of how others “feel” about the person. In contrast, another person may define status based on how much other individuals like him or her, regardless of where that person fits in the hierarchy. Status to the former person is based on a more objective position while status to the latter person is based more on an emotional connection (i.e., who likes me?). Yet, to each person, “status” is important, but defined by a different set of criteria. Depending on how an individual defines status, he or she is likely to react differentially in “status threat” situations created by the experimenter. Thus, to understand the influence of status threat situations, future research is necessary to further understand how people perceive, define, and react to status. One potential study might involve interviewing participants about past experiences in status situations and as part of the interview process, asking them directly to define status.

In addition to further understanding status threat, additional research is necessary to understand the various ways in which nonconscious goal activation might help explain unethical behavior. What are other situations or subtle cues that may influence individual’s choices in ethics situations? For example, recent research found that simply seeing money on a table can
increase the incidence of unethical behavior (Gino & Pierce, 2009). According to Loch and colleagues (Loch et al., 2001), “consumer goods companies regularly depict competitors as the ‘enemy’ – Pepsi’s ‘war cry’ (‘We hate Coke!’) is famous” (23). To what extent do these subtle cues influence employees’ unethical behavior? In addition, taking the focus off of the negative, how can positive words and pictures encourage ethical behavior? Recent research demonstrates that a simple picture of a person winning a race can increase task performance (Shantz & Latham, 2009). Although this study is not directly related to ethical behavior, it does suggest the positive (behavioral) force of certain cues. Overall, these examples suggest that nonconscious goal activation is a useful avenue for future behavioral ethics research, especially for researchers interested in explaining if and how nonconscious processes affect employee deviance.

**Conclusion**

In this dissertation, I attempted to extend research in two areas that have seen little attention in behavioral ethics – nonconscious goal activation and status threat. In particular, I argued that via nonconscious goal activation, subtle cues in our environment can signal status threat and trigger the goal to protect one’s status. With this goal operating, I hypothesized that individuals will be more likely to engage in unethical behavior as a means to protect their status. I also hypothesized that individual differences related to attention to status cues – such as self-monitoring and narcissism – might strengthen the relationship between status threat and unethical behavior. Two pilot studies and two main studies did not provide support for the hypotheses. Despite null results, however, the area remains ripe with opportunities for future research.
REFERENCES


APPENDIX A

SURVEY ITEMS

Self-Monitoring (Briggs & Cheek, 1988; Snyder, 1974)

I can only argue for ideas which I already believe.
I have never been good at games like charades or improvisational acting.
At parties and social gatherings, I do not attempt to say things that others will like.
I can make impromptu speeches on topics about which I have almost no information.
I guess I put on a show to impress or entertain others.
I would probably make a good actor.
In a group of people, I am rarely the center of attention.
In different situations and with different people, I act like very different persons.
I am not particularly good at making other people like me.
I’m not always the person I appear to be.
I would not change my opinions (or the way I do things) in order to please someone else or win their favor.
I have considered being an entertainer.
I find it hard to imitate the behavior of other people.
I have trouble changing my behavior to suit different people and different situations.
I may deceive people by being friendly when I dislike them.
I feel a bit awkward in company and do not show up as well as I should.
I can look anyone in the face and tell a lie with a straight face (if for the right end).
At parties, I let others keep the jokes and stories going.

Narcissism (Raskin & Terry, 1988)

Authority Subscale
I have a natural talent for influencing people.
I am not good at influencing people.

I will be a success.
I am not too concerned about success.

I am not sure if I would make a good leader.
I see myself as a good leader.

I am assertive.
I wish I were more assertive.

I like having authority over other people.
I don't mind following orders.
Being in authority doesn't mean much to me. People always seem to recognize my authority.

I would prefer to be a leader. It makes little difference to me whether I am a leader or not.

I am a born leader. Leadership is a quality that takes a long time to develop.

Exhibitionism
Modesty doesn't become me. I am essentially a modest person.

I would do almost anything on a dare. I tend to be a fairly cautious person.

I prefer to blend in with the crowd. I like to be the center of attention.

I try not to be a show off. I will usually show off if I get the chance.

I don't care about new fads and fashion. I like to start new fads and fashion.

I really like to be the center of attention. It makes me uncomfortable to be the center of attention.

I get upset when people don't notice how I look when I go out in public. I don't mind blending into the crowd when I go out in public.

Superiority
When people compliment me I get embarrassed. I know that I am a good person because everybody keeps telling me so.

I am no better or no worse than most people. I think I am a special person.

Compliments embarrass me. I like to be complimented.

I wish someone would someday write my biography. I don't like people to pry into my life for any reason.
I am much like everybody else.
I am an extraordinary person.

*Entitlement*
The thought of ruling the world frightens the hell out of me.
If I ruled the world it would be a better place.

I insist upon getting the respect that is due me.
I usually get the respect I deserve.

I just want to be reasonably happy.
I want to amount to something in the eyes of the world.

I expect a great deal from other people.
I like to do things for other people.

I will never be satisfied until I get all that I deserve.
I will take my satisfactions as they come.

I have a strong will to power.
Power for its own sake doesn't interest me.

*Exploitativeness*
I can usually talk my way out of anything.
I try to accept the consequences of my behavior.

I find it easy to manipulate people.
I don't like it when I find myself manipulating people.

I can read people like a book.
People are sometimes hard to understand.

Sometimes I tell good stories.
Everybody likes to hear my stories.

People sometimes believe what I tell them.
I can make anyone believe anything I want them to.

*Self sufficiency:*
If I feel competent I am willing to take responsibility for making decisions.
I like to take responsibility for making decisions.
I always know what I am doing.
Sometimes I am not sure what I am doing.

I sometimes depend on people to get things done.
I rarely depend on anyone else to get things done.

**Social Desirability Bias** (Paulhus, 1989)

I sometimes tell lies if I have to.
*I never cover up my mistakes.*
There have been occasions when I have taken advantage of someone.
*I never swear.*
I sometimes try to get even rather than forgive and forget.
*I always obey laws, even if I’m unlikely to get caught.*
I have said something bad about a friend behind his or her back.
*When I hear people talking privately, I avoid listening.*
I have received too much change from a salesperson without telling him or her.
*I always declare everything at U.S. customs when I travel.*
When I was young, I sometimes stole things.
*I never dropped litter on the street.*
I sometimes drive faster than the speed limit.
*I never take things that don’t belong to me.*
I have taken sick-leave from work even though I wasn’t really sick.
*I have never damaged a library book or store merchandise without reporting it.*
I have some pretty awful habits.
*I don’t gossip about other people’s business.*
ACTIVITY 1 (STATUS THREAT PRIMING MANIPULATION)

INSTRUCTIONS

For each set of five words below, create a grammatically-correct four word sentence. There may be more than one correct answer.

For example:

flew eagle the plane around

*The eagle flew around.*

Sentences (e.g., I held the can), questions (e.g., are you here yet?), and commands (e.g., pick up the book) are all permitted answers.

You should complete this activity as quickly as you can. You will have ___ minutes to complete this activity. This activity consists of 28 exercises.

When instructed by the experimenter, please turn to the next page to begin the exercise. You may use the space provided on this paper to write down your answers.

Please DO NOT begin until instructed to do so.
1. ball the throw toss silently
2. him earns respect she always
3. shoes distinction the are lost
4. he observes occasionally status people
5. buy will apples rank they
6. ate she it selfishly all
7. descend the tier mountain down
8. prepare the gift wrap neatly
9. sew significant buy item the
10. his drops in position now
11. are we in standing here
12. the push wash frequently clothes
13. us iPhone songs play let
14. should now withdraw esteem we
15. above was camera her station
16. sunlight temperatures prevents value cold
17. is importance he usually studying
18. prominent wedding attended guests the
19. picked throw apples hardly the
20. drink this looks seems distinguished
21. they obedient him often meet
22. the claim they dispute prestige
23. knits legacy he occasionally them
24. studies she texts influential the
25. helpless it hides there over
26. lose water plants honor his
27. quality alone some lose they
28. send I mail it over
ACTIVITY 2 (ANAGRAM ACTIVITY)

INSTRUCTIONS

This activity is called an “Anagram Task.” For each series of letters, unscramble the letters into a correctly-spelled English word.

For example:

EACHP

PEACH, CHEAP

You must create only ONE word from each series of scrambled letters. Use all the letters provided in your answer. While there may be more than one answer, please provide only one word per letter scramble.

When instructed by the experimenter, please turn to the next page to begin the exercise. You may use the paper provided to write down your answers.

Please DO NOT begin until instructed to do so.
1. NELMO
2. TDUYS
3. MERSG
4. DESAH
5. ALSAT
6. ICEHOS
7. LLWOOF
8. LSEATF
9. FEITLS
10. AYYWAN
11. DERDCEU
12. TNRPAAI
13. ALINEST
14. EDPHORT
15. LKTOOUO
16. AMUTNNOI
17. TINETERN
18. ENDDDSOS
19. DINESODP
20. SUEBNSIS
Selection Test Research Study – Final Questionnaire

We are interested in your experience with the selection tests you completed today. Please take a moment to answer the questions below. When you are done, place this questionnaire in the box provided.

Activity 2 (Anagram Activity)

Number of anagrams solved: _______ of 14 anagrams

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you felt this way (in general) while you were completing Activity 2. Use the following scale to record your answers.

<table>
<thead>
<tr>
<th>1 Very slightly or not at all</th>
<th>2 A little</th>
<th>3 Moderately</th>
<th>4 Quite a bit</th>
<th>5 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____ interested</td>
<td>_____ thoughtful</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____ alert</td>
<td>_____ excited</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____ attentive</td>
<td>_____ creative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____ enthusiastic</td>
<td>_____ active</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Activity 1 (Scrambled Sentences)

Number of sentences unscrambled: _______ of 28 sentences

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you felt this way (in general) while you were completing Activity 1. Use the following scale to record your answers.

<table>
<thead>
<tr>
<th>1 Very slightly or not at all</th>
<th>2 A little</th>
<th>3 Moderately</th>
<th>4 Quite a bit</th>
<th>5 Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____ interested</td>
<td>_____ thoughtful</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____ alert</td>
<td>_____ excited</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____ attentive</td>
<td>_____ creative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_____ enthusiastic</td>
<td>_____ active</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
General Experience

Please indicate your level of agreement (from 1 – strongly disagree to 5 – strongly agree) with each of the statements below:

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

- It was important for me to do well on these tasks.
- I developed a specific strategy to approach these tasks.
- I enjoy problem-solving on tasks.
- Problem-solving on tasks is best done in groups.
- It is important to me that others know that I did well on these tasks.
- I used prior job experience to help learn this task.
- I have had prior work experience that helped me complete this task quickly and efficiently.
- I desired to learn these tasks faster than others.
- I desired to perform better on these tasks than others.
- Selection tests should be used by organizations to select employees.
- Selection tests are a good indicator of future employee performance.
- The selection tests I completed today helped me learn about myself and my potential abilities for my future career.
- The selection tests I completed today tested my creativity.
- The selection tests I completed today tested my problem-solving skills.
- The selection tests I completed today tested my cognitive ability.
- The selection tests I completed today tested my ability to work well in groups.

(more on the next page)
General Experience (continued)

*Please state in your own words your perception of the purpose of the activities you completed today:*

*Please include any other comments or thoughts you may have about your experience with the selection tests today:*
APPENDIX C

STUDY 2 MATERIALS
We are interested in your experiences and thoughts about the selection tests and group activity you completed today. Please take a moment to answer the questions below. Thank you again for your participation in our research!

**PART A – Selection Tests**

*Please indicate your level of agreement (from 1 – strongly disagree to 5 – strongly agree) with each of the statements below:*

<table>
<thead>
<tr>
<th>Selection Test #1 – Logic puzzles, word scramble, etc.:</th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>On the <em>first</em> selection test, I performed better than my peers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This selection test assessed my ability to think logically.</td>
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<td></td>
</tr>
<tr>
<td>This selection test assessed my ability to be a creative problem-solver.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Selection Test #2 – Three Multiple Choice Questions:</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>On the <em>second</em> selection test, I performed better than my peers.</td>
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<tr>
<td>This selection test assessed my problem-solving skills.</td>
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<td></td>
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</tr>
<tr>
<td>This selection test assessed my ability to be a creative problem-solver.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Selection Test #3 – Number Matrix Activity:</th>
<th></th>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>On the <em>third</em> selection test, I performed better than my peers.</td>
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<td></td>
</tr>
<tr>
<td>This selection test assessed my ability to think logically.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>This selection test assessed my ability to be a creative problem-solver.</td>
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</tr>
</tbody>
</table>

**Overall:**

The instructions for each of the selection tests were clearly explained.

The purpose of the selection tests was clearly explained.

The selection tests I took today determined which group I would work in during the group activity.

I will receive a $25 Restaurant.com gift certificate for my participation today, regardless of my performance on the selection tests or group activity.

It was possible to earn additional compensation by being a top performer.

Performance on the selection tests was *not* related to compensation.
**PART B – Group Activity**

**Rate how well you thought your group performed along the following dimensions:**

<table>
<thead>
<tr>
<th></th>
<th>Somewhat Below Requirements</th>
<th>Average</th>
<th>Exceeded Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creativity</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Communication between group members</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using a logical and well thought out decision making process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall group performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Your overall (individual) performance</td>
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</tr>
</tbody>
</table>

**Rate how well your group worked together during the activity:**

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th></th>
<th>A Lot</th>
</tr>
</thead>
<tbody>
<tr>
<td>How much tension was there among group members?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How much were personality conflicts evident among group members?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To what extent were there differences of opinion among group members?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often did you voice your opinions during group decisions?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*How many of the members of your group have you worked with in the past (e.g., in a class project or team; in sports or at a work location)?* 

____________

*(Optional) In the space below, please feel free to write any additional thoughts or comments you may have about your group’s performance on today’s activity:*
PART C – Demographics

Please provide us with some demographic information:

What is your sex (circle one)?
- Female
- Male

How old are you (in years)?

Are you an International student (circle one)?
- Yes
- No

What was your most recent SAT score?

Was your SAT score out of 1600 or 2400 (circle one)?
- 1600
- 2400

PART D – Other Information

Please state in your own words your perception of the purpose of the activities you completed today:

Please include any other comments or thoughts you may have about your overall experience with any of the activities today:
VITA
Jennifer J. Kish-Gephart

ACADEMIC POSITION
2010  Assistant Professor of Management
       Sam M. Walton College of Business, University of Arkansas – Fayetteville

EDUCATION
2010  Ph.D., Business Administration
       Concentrations: Organizational Behavior, Business Ethics
       Smeal College of Business, Pennsylvania State University

2002  M.B.A., Human Resources and Management Information Systems
       Drexel University

2000  B.S., Accounting
       Drexel University

DISSERTATION
Title: Nonconscious Goal Activation and Unethical Behavior: Examining the Effects of Status Threat Cues on Over-reporting Performance
Committee: Linda K. Treviño (Chair), Barbara Gray, David A. Harrison, Margaret Meloy

PUBLICATIONS


HONORS & RESEARCH AWARDS
Edward & Susan Wilson Graduate Scholarship Award, 2009-2010
Grace G. Albrecht Women in Management Graduate Scholarship, 2008-2009
Invited Lecturer at Smeal’s Business Opportunities Summer (BOSS) Session, 2008, 2009
University of Notre Dame’s Ethical Dimensions in Business Conference Scholarship, 2008
Research Grant Award (“Social Class in Organizations” with L. Pilver and B. Gray), 2008
Legacy Scholar Grant from Pennsylvania State University’s Arthur W. Page Center, 2007
Best Paper Award from Academy of Management - SIM division, 2007

OTHER WORK EXPERIENCE
- Assistant Professor of Business, Valley Forge Christian College
- Course Developer/Project Consultant, USERS