ABSTRACT

Title of Dissertation:	FACTORS IN THE REPORTING OF UNETHICAL CONDUCT: THE IMPORTANCE OF TRUST IN LEADERS
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My research investigates factors related to the reporting of unethical conduct. While accounting for known individual, organizational and situational correlates, I focus particularly on leaders and especially on trust in leaders as whistle-blowing research to date has neglected the well-developed sociological literature of trust. Leveraging the benefits of multiple methods, I analyze recent secondary data on federal civilian employees, collect and analyze interview data at four civilian and military sites, and conduct a factorial vignette study to test factors and themes identified in the first two sections of my research.

My secondary data analyses support previous whistle-blowing research in relating supervisor status, greater importance placed on anonymity, greater organizational support for anonymous reporting, greater organizational protection for whistle-blowers and greater severity of observed misconduct to increased reporting. Contrary to what previous literature theorizes, I find more observed leader

misconduct and in-group location of misconduct relate to increased reporting. With the exception of an expressed in-group preference, my qualitative analyses reinforce these findings and identify a peer-oriented culture and self-preservation as reasons why unethical conduct may go unreported. My interview data also reveal that participants prefer to report unethical conduct to a trusted leader, although the severity of such misconduct may moderate this preference.

My vignette analyses find greater trust in leaders is related to increased reporting only for non-supervisors, highlighting the additional importance trust plays for lower-status individuals. Also, good behavior by the leader accepting a report is related to increased reporting for all participants. My vignette data bolster previous findings, including relating a lesser orientation towards Machiavellianism to increased reporting, and find the severity of observed misconduct has the largest relative effect on the reporting outcome. Counter to my prediction, vignette participants are less likely to report unethical conduct perpetrated by a supervisor supporting the notion that fear of retaliation may factor into the reporting decision. By highlighting obstacles to reporting, I assist leaders in addressing such barriers possibly contributing to the identification and correction of unethical conduct. I conclude with implications for federal employees and all leaders seeking to increase the reporting of unethical conduct in their organizations.

FACTORS IN THE REPORTING OF UNETHICAL CONDUCT: THE IMPORTANCE OF TRUST IN LEADERS

by

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Dedication

I dedicate my research to my wife, Becky, and my daughters, Bridget and Katie. My older daughter asked me about my research one day, and I explained that I was exploring reasons why some people do not speak up about the bad things they see. In a matter-of-fact way, she wondered why anyone would not say something. What if our vision could be so clear?

Acknowledgements

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Three other individuals were particularly helpful to me in completing my research. Without the access provided by Dr. Marek Posard, I would not have been able to conduct my secondary data analyses. Two fellow graduate students, Gordon Rinderknecht and Brittany Dernberger, were indispensable in guiding me during the design and administration of my factorial vignette survey. Finally, I thank my committee members: Professor Jeff Lucas, Professor Paul Hanges, Professor Meredith Kleykamp, Professor Alan Neustadtl and Professor Rashawn Ray. Their guidance undoubtedly improved my research. Particularly, without the continuing

mentorship provided by Professor Lucas I would not have started my research in the first place. Jeff, you always gave selflessly of your time and, like you do with all of your students at Maryland, looked to involve me in your research. You are as good a leader as any I have seen in the Navy, and I will be forever grateful for all that you have done for me.

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Chapter 1: Introduction

My research investigates factors related to the reporting of unethical conduct, or whistle-blowing. Previous empirical research identifies individual, organizational and situational factors that relate to the whistle-blowing decision. At the individual level, certain persons may be more predisposed to report; a variety of factors such as power and status, attitude towards whistle-blowing, and self-interest could affect this predisposition. In an organization, support for whistle-blowers, avenues to report unethical conduct anonymously and the behavior of leaders in the organization may affect the decision to report or not. Situationally, the location and severity of the observed misconduct may also play into the reporting decision. These concepts frame my inquiry into factors related to the reporting of unethical conduct. While accounting for known individual, organizational and situational factors, I focus particularly on leaders and especially on trust in leaders. Research to date on whistle-blowing has neglected the well-developed social psychological literature of trust. Accounting for previously-identified individual, organizational and situational factors, I examine the relationship between whistle-blowers and their leaders to explore whether or not trust in leaders is related to the reporting of unethical conduct.

Reporting unethical conduct has important implications in civilian and military settings in the United States. Among federal civilian employees, estimates of those who observe wrongdoing such as mismanagement of federal programs, stealing and providing funds to ineligible persons range from 25% to 45% across studies (Miethe and Rothschild 1994; MSPB 1981). Given the low public visibility of most unethical conduct in the workplace, prevention of such activity rests in large part on

actions by employees. In the military, an increasing focus on sexual harassment and assault led the Department of Defense to request an independent assessment of these issues. The resulting RAND Military Workplace Study examined, among other things, decisions to report such behavior and found that sexual harassment is a common experience in the military, especially for women, and that 52% of women who report sexual assault perceive some form of retaliation (Morral et al. 2015); this gender effect on perceived retaliation is consistent with results from other studies (Rehg et al. 2008).

Data indicates that reporting unethical conduct is the exception rather than the norm. When internal auditors are excluded, only 42% of those that observe unethical conduct report it. Of these reports, 79% are made internal to the organization in which they occur (Miethe and Rothschild 1994). Reasons cited for this silence include an individual's belief that nothing will be done, fear of reprisal, culturally negative views of a whistle-blower as a "tattle-tail" and the implied disloyalty to the organization associated with reporting. Although not previously considered, trust in leaders is another reason why individuals may choose to report or not.

Two recent cases implicate trust in leaders as relevant to the reporting of unethical conduct. Federal government contractor Edward Snowden leaked classified information from the National Security Agency on global surveillance programs; this information was subsequently published in *The Guardian*, *The Washington Post* and *The New York Times*. In an interview with *The New York Times*, Snowden revealed he places little trust in his leadership, observing the requirement to, "report wrongdoing to those most responsible for it." Snowden also pointed to the lack of

whistle-blower protection for government contractors (Risen 2013). Speaking further on the lack of trust he had in NSA leaders, Snowden said his breaking point was, "seeing the Director of National Intelligence, James Clapper, directly lie under oath to Congress [by denying that the NSA knowingly collects data on millions of Americans]" (Greenberg 2013; The Courage Foundation 2014).

In the military, Coast Guard Commander (CDR) Benjamin Strickland's reporting of a sexual assault onboard the Coast Guard Cutter Munro in 2013 and the subsequent retaliation he faced also highlights the relationship between whistle-blowers and their leaders. CDR Strickland alleged multiple acts of retaliation by the Coast Guard Investigative Service (CGIS) and senior Coast Guard officials, and expressed his frustration with and distrust of the CGIS (Myers 2015). In both this case and that of Edward Snowden, the individual reporting the unethical conduct express a lack of trust in leadership. In Edward Snowden's case, this lack of trust may have contributed to his decision to report external to the organization. In both cases, the individuals express mistrust of those organizational entities responsible for receiving a report of misconduct. Are individuals who report regardless of their trust in leaders the norm or the exception, and what reporting avenue(s) might they use?

In the following chapters, I consider previously identified individual, organizational and situational factors related to the reporting of unethical conduct and seek to establish a relationship between trust in leaders and the reporting of such conduct. I use multiple methods to explore my research question, taking advantage of the strengths of each method in different sections of my research (Khan and Fisher 2014; Vadera, Aguilera and Caza 2009). I first analyze recent secondary data, guided

by established literature, to confirm individual and organizational factors related to the reporting of unethical conduct without explicitly implicating trust in leaders. Next, I conduct open-ended, semi-structured interviews at four civilian and military sites. In these interviews, participants provide nuanced, open-ended responses to questions eliciting themes associated with the reporting of unethical conduct. These themes identify trust in leaders and situational factors as related to reporting, and explore the mechanisms underlying relationships observed in my secondary data analyses. Thematic analysis of qualitative data, in combination with factors identified in my secondary data analyses, inform the final section of my research; a factorial vignette study to test factors and themes identified in the first two sections of my research. In this experimental approach, I consider multiple explanations for the reporting of unethical conduct and address causality in observed relationships.

Results from my secondary data analyses support previous whistle-blowing research in relating individual and organizational factors to the reporting of unethical conduct. Individual factors such as supervisory status and greater importance placed on anonymity are related to increased reporting of unethical conduct, as are the organizational factors of leader misconduct, greater organizational support for anonymous reporting and more perceived protection for whistle-blowers. The results of my qualitative analyses reinforce these findings, and identify a peer-oriented culture and self-preservation as reasons why unethical conduct may go unreported. Additionally, in my interviews I identify the themes of in-group preference and severity of observed misconduct as related to the reporting of unethical conduct; subsequent secondary data analyses provide further evidence for these themes. Most

relevant to my research question, my qualitative analyses reveal that participants overwhelmingly prefer to report unethical conduct to a trusted leader as opposed to an untrusted leader. However, factors such as the severity of observe misconduct may influence individuals to report when presented with only an untrusted leader as a reporting option; a significant number of military participants state they would report the unethical conduct regardless of their trust in leadership.

In my factorial vignette study, I test observed relationships from my secondary data and qualitative analyses. My vignette analyses indicate that trust in leaders is related to reporting only for non-supervisors, highlight the additional importance that trust plays for lower-status individuals when deciding whether or not to report unethical conduct. Additionally, good behavior by the leader accepting a report is related to increased reporting for all participants. Greater organizational support for anonymous reporting and more severe observed misconduct are both related to increased reporting, as well. The severity of observed misconduct has the largest effect on the reporting outcome, with a relative effect 23% greater than the next closest factor. Counter to what I predict, vignette participants are <u>less</u> likely to report unethical conduct in vignettes with misconduct perpetrated by a supervisor as compared to a coworker. This finding supports the notion that fear of retaliation from an individual in power (e.g. a supervisor) may factor into the reporting decision.

In my vignette analyses, three participant factors have the predicted effect on reporting; participants who are supervisors, those with a greater importance placed on anonymity and those with a lesser orientation towards Machiavellianism all are more likely to report unethical conduct. Although gender did not affect the reporting

decision for the workplace misconduct depicted in my vignette, it is clear from my interview themes that gender does matter for certain types of misconduct. Interview participants who are women were more likely to discuss sexual harassment and assault as a form of misconduct they were familiar with, and only women shared personal stories of friends (both men and women) they were aware had experienced sexual harassment or assault.

This chapter covers the logic underlying my research question, and provides a general summary of my findings. In Chapter 2, I review the literatures of whistle-blowing, power and status, attitudes, trust and leadership to identify known factors related to the reporting of unethical conduct and propose a relationship between trust in leaders and such reporting. In Chapter 3, I summarize my research approach and expectations based on previous work. In Chapters 4 and 5, I present the results of my secondary data analyses using recent survey data on federal civilian employees and considering individual and organizational factors related to the reporting of unethical conduct. In Chapters 6 and 7, I present the results of my qualitative analyses of interview data, establishing trust in leaders as a potential factor related to the reporting of unethical conduct. In Chapter 8, I establish additional quantitative support for my interview themes by exploring situational factors that influence reporting. In Chapters 9 and 10, I present the results of my factorial vignette study where I test the relationship of reporting unethical conduct with factors and themes identified in previous chapters, particularly trust in leaders. I conclude with a general discussion of my findings in Chapter 11 and the implications of my research in Chapter 12.

I make two contributions to the sociological body of knowledge. First, I connect the well-established literature of trust with recent research on whistle-blowing. This interdisciplinary approach brings insight from the social psychology literature of trust to whistle-blowing research in the fields of management and psychology. In addition to trust, the sociological literatures of power and status, attitudes, and altruism enhance my findings. Second, my factorial vignette study experimentally explores the effect of individual, organizational and situational factors on the reporting of unethical conduct, allowing me to determine the relative effect of each on the reporting outcome. By highlighting obstacles to reporting, I assist leaders and organizations in addressing such barriers which could contribute to the identification and correction of unethical conduct. My findings have implications for federal employees and all leaders seeking to increase the reporting of unethical conduct in their organizations.

Chapter 2: Theory Development

Established sociological literature is well-poised to contribute to recent whistle-blowing research. I draw from four such areas to address my research question; these areas correspond to how trust in leaders, power, status and attitudes relate to the reporting of unethical conduct. First, I consider the literature of whistle-blowing, which informs my analyses by identifying known factors related to reporting unethical conduct. I next consider the literatures of power and status as well as attitudes, and how they related to my research question. Previous power and status research examines individual characteristics which make trust in leaders more or less likely to relate to the reporting of unethical conduct. The attitudes literature shows that individuals' attitudes about a particular issue, in this case the reporting of unethical conduct, are related to but not always consistent with their actions on the issue. Finally, I consider the literatures of trust and leadership, particularly as they relate to each other. Identifying known outcomes of trust in leaders assists me in forming specific predictions on the potential relationship of trust in leaders with the reporting of unethical conduct.

Reporting Unethical Conduct

Whistle-blowing is defined as "the disclosure by organization members (former or current) of illegal, immoral, or illegitimate practices under the control of their employers, to persons or organizations that may be able to affect action" (Near and Miceli 1985, p. 4). Whistle-blowing is a dynamic process involving multiple social actors. At a minimum, there is an individual or organization accused of wrongdoing, an individual who observed this wrongdoing and decided to report it and

an individual or organization that receives the report. Unethical conduct encompasses behavior that is illegal, immoral or illegitimate, but behavior that falls into these categories can be interpreted differently by various individuals (Near and Miceli 1996). For the purposes of my research, the view of the observer is taken; if an individual feels observed conduct is unethical, the conduct is assumed to be unethical. This assumption carries the risk of accepting false whistle-blowing reports as legitimate, but the data I use do not follow reported incidents to their conclusion which precludes establishing the validity of such reports.

Whistle-blowing is differentiated from top-down social control in three ways. First, whistle-blowing involves the reporting of unethical conduct by individuals upon peers, more senior personnel or the organization itself. Second, while in some cases it may be normative to report unethical conduct, whistle-blowing is not considered part of an individual's work role. This is as opposed to quality control personnel or internal monitors whose job it is to bring to light unethical conduct within an organization. Third, a whistle-blower has the prospect of facing some level of retaliation for their reporting as it is outside the scope of their responsibilities (Miethe and Rothschild 1994).

In an early attempt to determine whether whistle-blowing is related to individuals' positions within an organization, Miceli and Near (1984) find four distinct profiles emerge; individuals who do not observe wrongdoing, those who observe wrongdoing but do not report it and two categories of whistle-blowers; those who report via internal channels only and those who report via external channels either solely or in addition to internal channels. These profiles are reinforced in later

literature (Miethe and Rothschild 1994). Elliston (1982) differentiates three categories of internal whistle-blowers; those who inform supervisors, those who go directly to higher levels of management, and those who bypass management and inform another internal group in the organization. In addition to Elliston's categories, it is also possible for an individual to report unethical conduct to friends or coworkers. This avenue may provide a sense of having done something, but may not result in action to correct the behavior.

Analyses of Merit Systems Protection Board questionnaire data (Miceli and Near 1984) find that both individual and organizational factors are related to whether or not individuals report unethical conduct. Those who report via external channels tend to be less educated and in non-supervisory positions. This research also finds correlation between the reporting of unethical conduct and favorable attitudes towards whistle-blowing. Organizationally, individuals who did not blow the whistle are more fearful of organizational retaliation, and organizations which have a culture of unethical conduct may provide strong indicators that retaliation will occur (Miceli and Near 1984).

Concerning position within an organization, it is difficult to disentangle whether level of responsibility within an organization results in varying exposure to unethical conduct or whether the power and status of individuals relates directly to the likelihood of reporting. The positive relationship between being a manager and internal reporting may be indicative of wanting to keep the organization's problems from the public eye (Near and Miceli 1985), or just an artifact of increased exposure to wrongdoing. Assuming position does play a role, anonymity may encourage

individuals with lower status to report unethical conduct (Miceli and Near 1984). Some research positively relates anonymity to whistle-blowing (Lee and Fargher 2013), but anonymous reporting may also be received as less credible than attributed reporting (Miethe and Rothschild 1994). As a lack of credibility undermines trust (Miceli and Near 2002) and change theory suggests that individuals resist change when they mistrust the change agent (Kotter and Schlesinger 1979), it is possible that identified whistle-blowers are more likely to persuade others to terminate unethical conduct (Miceli and Near 2002).

Individuals who report unethical conduct harbor an expectation that their reporting will affect the termination of the wrongdoing (Near and Miceli 1996). Results from three field studies indicate that would-be whistle-blowers perceive unethical conduct will be terminated when it occurs infrequently, is relatively minor in impact or has occurred for a short period of time. As well, individuals in higher-status positions and those who have the support of others tend to believe action will be taken on their reporting (Miceli and Near 2002). If an individual believes that their report will not end the unethical conduct, this may deter them from reporting. One study found the belief that nothing can be done about observed wrongdoing to be the primary obstacle to reporting (Near et al. 2004), and prior exposure to wrongdoing is related to decreased intentions to report (Curtis and Williams 2014).

Later research (Near and Miceli 1996) points out that organizational factors explain more variance in a whistle-blower's decision to report than do individual factors. Organizational factors that support whistle-blowing include perceived support for whistle-blowing by leadership and organizational policy, organizational

commitment and the type of the wrongdoing itself, especially when the wrongdoing is seen as illegal (Chen and Lai 2014; Kang 2015; Lee and Fargher 2013; Miethe and Rothschild 1994; Near and Miceli 1996). In a survey of employees at a military base, those observing mismanagement, sexual harassment or unspecified legal violations were significantly more likely to report the behavior than employees observing stealing, waste, safety problems or discrimination (Near et al. 2004).

Experimental research indicates that factors representing organizational policies, managerial practices, and degree of demographic dissimilarity between employees and top managers can contribute to a culture of silence which in turn has an effect on an individual's willingness to blow the whistle (Park and Keil 2009). Also, organizations are known to recruit individuals who support their mission and further socialize employees to be loyal. This loyalty grows over time as benefits such as retirement plans and sick leave are accumulated, possibly decreasing the likelihood of reporting observed wrongdoing. Finally, when leaders are known to condone unethical conduct it makes the reporting of such behavior less likely (Miethe and Rothschild 1994).

Power and Status

Two areas of sociological literature positioned to contribute to whistle-blowing research are power and status. The whistle-blowing literature (Miceli and Near 1984) identifies individual factors related to whistle-blowing, and theorizes that power plays a role in the decision to report unethical conduct (Near and Miceli 1995) via theories of resource dependence (Pfeffer and Salancik 1978), minority influence (Moscovici 1976) and power bases (French and Raven 1959). Motivated by research

on power in exchange relations, Molm (2003) considers reciprocal exchange and notes different causal mechanisms behind power use, different emphasis on learning versus rational choice, different motivations, and different emphasis on cooperation versus competition that affect an actor's experience with the exchange (Molm 2003). Molm's research on reciprocity informs her reciprocity theory of social exchange, in which risk of non-reciprocity, expressive value and salience of conflict mediate the relationship between the structure of reciprocity and social solidarity. Later research by Molm and colleagues explores generalized exchange, finding reciprocal acts of unilateral giving promote bonds of trust, affective regard, and solidarity by increasing risk and uncertainty and decreasing the salience of conflict (Molm 2010; Molm, Collett and Schaefer 2007).

Empirical testing of earlier power theories in whistle-blowing research yielded inconsistent results (Near and Miceli 1996). One possibility is that these earlier theories did not account for personal characteristics of the observer (Miethe and Rothschild 1994). Incorporating status, or inequality based on differences in esteem and respect, is one way to address these personal characteristics. In a summary of power and status research (Lucas and Baxter 2012), status is identified as a differentiator in groups where members of disadvantaged status groups have less influence and face challenges in acquiring and using power. Individually, status motivates behavior just as power does. Culturally, status promotes resource and power inequality via beliefs about group differences; these beliefs result in resource advantages attributed to group membership in groups perceived as more esteemed. Status beliefs discourage low-status group members from challenging the status

hierarchy. The cumulative effect of status results in positions of increased resource and power for members of higher status groups, while simultaneously holding back lower status group members. In this way, status institutionalizes group differences such as gender, race, and class into organizational structures of resource and power (Ridgeway 2014).

Previous whistle-blowing research shows that factors representing power and status play a role in whether an individual reports unethical conduct or not. In a summary of whistle-blowing literature (Near and Miceli 1996), those who did report have more years of service, hold a supervisory role, are better educated and are more likely to be men as compared to individuals who did not report observed unethical conduct. These individual factors are not consistent across every study, but the relationships appear in a majority of the literature reviewed. It is also possible that the influence of power and status on reporting unethical conduct is attributed to power and status differences in the likelihood of observing unethical conduct (Miethe and Rothschild 1994).

Theoretically, I incorporate status via the group processes tradition of status characteristics theory (SCT). SCT has its roots in research on power and prestige differences in small groups (Bales 1965) and developed as a branch of the expectation states research program (Berger, Wagner and Zelditch 1985). Expectation states are properties of relations between individuals, not the individuals themselves, and are assumed to arise out of social interaction (Berger, Rosenholtz and Zelditch 1980). Social characteristics (e.g. race, gender), social rewards and behavior patterns all determine performance expectations (Correll and Ridgeway 2003).

Status processes from the Bales research indicate that when group members are initially status equals a status hierarchy will emerge, and when there are differences in status initially that these differences immediately establish a hierarchy (Berger et al. 1980). One of the ways individuals differentiate performance expectations is via status characteristics. Status characteristics can be diffuse, applying generally across tasks, or specific, applying only to a limited range of tasks. Cultural meanings impact which status characteristics are relevant to given tasks; for example, race may be more relevant to performance expectations in one culture than another. SCT seeks to explain how cultural beliefs about status characteristics translate to performance expectations (Berger, Cohen and Zelditch 1972; Correll and Ridgeway 2003).

The Attitude-Behavior Relationship

In addition to power and status, the sociological literature of attitudes could contribute to whistle-blowing research as attitudes towards whistle-blowing affect the decision whether to report or not (Miceli and Near 1984; Trongmateerut and Sweeney 2013). Research on the relationship between attitudes and behavior stems from the seminal study by LaPiere (1934) on attitudes and the operationalization of behavior. Not until decades after LaPiere's work did sociologists develop general interest in the attitude-behavior relationship. In a review of existing literature at the time, Schuman and Johnson (1976) define an attitude as an affective response towards objects; this is differentiated from behavior intentions which are actions one would personally take. Varying levels of attitude-behavior consistency are theorized: conceptual (do they empirically go together?), literal (do people do what they say they will?), and

correlational (are people ordered the same way on attitude and behavior measures?). A small to moderate degree of correlation is noted in most attitude-behavior studies reviewed, equivalent to studies of other social phenomena (Schuman and Johnson 1976).

Given that early research on the attitude-behavior relationship finds variation across settings, the attitudes literature progressed to ask under what circumstances a relationship exists by taking into account moderators such as situational factors and personality variables. Despite empirical improvements, however, little work was done to advance theory on or mechanisms underlying the attitude-behavior relationship. To remedy this, Fazio (1990) proposed spontaneous and deliberate models attempting to conceptualize the relationship. Some empirical support is seen for both models, but a mixed-model is more likely to represent real-world attitude-behavior linkages (Fazio 1990). Assuming that whistle-blowing is a behavior that individuals consider before performing, Fazio's deliberate model may be more applicable.

Based on my review of the literature thus far, Table 2.1 lists individual and organizational factors associated with whistle-blowing. The sociological literatures of power, status and attitudes complement the whistle-blowing literature in highlighting individual and organizational factors potentially related to reporting. As a whole these literatures evidence that the relationship with leaders is relevant as potential whistle-blowers make their reporting decision, but questions remain; particularly the role trust plays. I next review the relevant literatures of trust and leadership.

Table 2.1: Factors Related to Whistle-blowing in Previous Research

Individual Factors	Organizational Factors
Power and Status	***Support for Reporting***
-Seniority	-Stated Support of Leaders
-Supervisory Status	-Official Policy
Attitudes	-Acceptance of Wrongdoing
-Whistle-blowing	-Demographic Similarity Between Leaders and Followers
-Expectation That Wrongdoing Will Cease	***Reporting Methods***
-Anonymity	-Path for Anonymous Reporting
-Status of Offender	-Perceived Retaliation
Demographics	***Attributes of Wrongdoing***
-Education	-Severity/Moral Nature
-Gender	-Type

Trust in Leaders

Having considered the existing whistle-blowing literature and the sociological concepts of power, status and attitudes, I now establish trust in leaders as a relevant, although unexplored, factor in the reporting of unethical conduct. Existing research relates supervisory ethical leadership (Mayer et al. 2013), manager integrity (Kang 2015) and authentic leadership (Liu, Liao and Wei 2015) to whistle-blowing intentions, but trust is not specifically addressed despite the fact it is well-established in social psychological literature (Gambetta 1990; Simpson, Harrell and Willer 2013). The exact meaning of trust varies across studies; in my research, I define trust as a belief in another person's integrity. Trust is conceptualized as a social belief impacting the relationship between leader and follower (Ross and Mirowsky 2003; Ross, Mirowsky and Pribesh 2001).

For Cook (2004), trust is grounded in ongoing relationships where individuals who value the relationship behave in a trustworthy manner. Exchanges between

individuals are often characterized by uncertainty, especially initial interactions where familiarity is limited. Will another person reciprocate a gift given, or will that person take advantage of the gift giver? Trust assists individuals in acting to sustain a relationship, aiding in the expectation of reciprocity. Initial assessments of trust may be based in previous successful exchange behavior or in judging potentially favorable exchange partners based on status characteristics, kinship or stereotype (Cook 2004). Longitudinal research examining the effect of interaction with family, friends, and other group members (Glanville, Andersson and Paxton 2013) suggests that generalized trust is something that can be altered over time. As well, in an experiment Paxton and Glanville (2015) find that generalized trust varies across changing social circumstances when initial trust expectations are mismatched with actual social interactions. These findings have important implications for leaders seeking to build trust with followers of dissimilar backgrounds in a variety of situations.

Other social psychological research demonstrates the importance trust plays in the leader-follower interaction. Simpson et al. (2013) show how individuals' perceptions of leader trustworthiness affect their behavior when making moral judgements. The psychological literature indicates that leaders who display what their followers believe to be the characteristics of a good leader get increased response from and more favorable evaluations by their followers (Eagly and Karau 2002; Epitropaki and Martin 2005; Lord and Hall 2003). Recent work (Schilke, Reimann and Cook 2015) also shows that power differentials, such as those between a leader and a follower, negatively affect trust in social exchanges.

Status is also related to trust; experimental research demonstrates that higher status individuals trust others more than lower status individuals. Mediation analyses reveal that having status alters the perception of others' intentions, such that the perceived positive intentions account for the relationship between status and trust. This may result in lower status individuals trusting their leaders less, possibly impacting the reporting of unethical conduct (Lount and Pettit 2012).

Having defined the concept of trust and demonstrated its importance in past research, I next consider the concept of leadership. This is important as leaders likely play a pivotal role in both influencing would-be whistle-blowers and in receiving such reports of wrongdoing.

Leadership Defined

What actually defines a leader? Addressing this question, European theoretical approaches to the study of leadership inspired work in the United States in the field of group dynamics. Here, leadership is defined via roles in social groups which help group members achieve collective ends. The primary method of studying leadership focused on interaction within the group (e.g. observation and peer evaluation). Early studies demonstrate that the same group of people would behave differently when their leaders behaved differently. While not claiming that individual leadership characteristics were the sole determinant of group performance, these studies forward that the degree to which leaders support their followers and encourage group integration has consequences for the group (Lewin, Lippitt and White 1939). More recently, the focus of leadership research includes structural constraints on leadership and the functions that a leader must perform in the group. A

constant finding is that the nature and quality of interaction between the leader and the group is strongly related to the group's effectiveness (Segal 1981).

Subsequent work on the variation of leadership across cultures empirically established nine cultural leadership dimensions, making it possible to capture similarities and/or differences across societies. These dimensions include power distance, uncertainty avoidance, humane orientation, institutional collectivism, in-group collectivism, assertiveness, gender egalitarianism, future orientation and performance orientation. This research compliments earlier literature in identifying a leader's goal as helping the group achieve a common goal. However, it goes much further in identifying the mechanisms by which a leader influences, motivates, and enables others to achieve such goals (House et al. 2004). In my research, rather than conceptualizing a leader by position, I focus on the interpersonal processes in social groups by which an individual (the leader) assists the group in completing a collective task.

The follower is an equally important part of the equation; the follower's interactions with the leader and the situation need to be accounted for (Fiedler 1967). The interaction between these three entities, leader, follower and situation, is brought together in an interactional framework. A particular case can be analyzed by considering each of the three entities separately, but greater insight is gained when the interaction between the three entities is considered. For example, it is necessary to take the leader's traits and abilities into account but it is also necessary to determine how the situation impacts the leader's ability to employ specific traits (Hollander 1978; Hughes, Ginnett and Curphy 1996). One experimental study (Bhal and

Dadhich 2011) indicates that both quality of leadership and the leader-follower interaction impact the whistle-blowing decision.

Summary

Although previous empirical work addresses whistle-blowing, it does not consider the social psychological literature of trust. As well, the sociological literatures of power, status and attitudes have much to offer to whistle-blowing research. Guided by these literatures, in the next chapter I present hypotheses which I test in my secondary data analyses. I also leverage the trust and leadership literatures to make predictions on the relationship between trust in leaders and the reporting of unethical conduct, which I explore in my qualitative analyses.

Chapter 3: Research Approach and Expectations

Theoretical consideration of the literatures of whistle-blowing, power and status, and attitudes reveals a lack of attention to the potential relationship between trust in leaders and the reporting of unethical conduct. To address this gap, I first analyze recent secondary data on federal civilian employees, guided by established literature, to confirm factors related to the reporting of unethical conduct without explicitly implicating trust in leaders. I next analyze qualitative data from four civilian and military sites constructed from open-ended, semi-structured interviews. Thematic analysis of this qualitative data, in combination with factors identified in my secondary data analyses, informs the final section of my research; a factorial vignette study where I test factors and themes identified in the first two sections of my research.

Hypotheses for Secondary Data Analyses

Position in an organization may affect the likelihood of both observing and reporting unethical conduct. It is possible that individuals with different levels of responsibility have different exposure to unethical conduct (Miceli and Near 1984), where supervisors occupying central positions or with other high-status attributes are more likely to directly observe unethical conduct (Miethe and Rothschild 1994). Having been exposed to such behavior, individuals with higher power and status may be more likely to report this behavior despite possible retribution as their position could provide greater options for employment outside of the organization (Miceli and Near 1984). As well, reporting unethical conduct carries with it the assumption that some action will be taken to terminate the wrongdoing (Near and Miceli 1996).

Individuals with higher power and status could have a greater belief that their reporting will be acted upon based on their elevated positions in the organization and support from others (Miceli and Near 2002), as well as perceived benevolence from others (Lount and Pettit 2012).

H1a: Individuals who are in a supervisory position, have more years of federal service, have higher education, and are in the demographic majority (e.g. non-Hispanic, white) are more likely to observe unethical conduct than their counterparts of lower power and status.

H1b: Individuals who are in a supervisory position, have more years of federal service, have higher education, and are in the demographic majority (e.g. non-Hispanic, white) will report unethical conduct more than their counterparts of lower power and status.

Organizations that engage in unethical conduct may be highly dependent on such behavior (Near and Miceli 1985). Organizations that rely on unethical practices to survive may provide indicators that retaliation will occur against whistle-blowers, either through organizational practices or the expressed attitudes or behavior of leaders in the organization. Observers of unethical practices could be discouraged by this culture of silence, and rationalize not reporting by attributing the behavior to established organizational culture (Miceli and Near 1984; Miceli and Near 1985).

H2: Individuals who observe more instances of misconduct by their leaders will report unethical conduct less than those who observe fewer instances.

Organizational factors shown to support whistle-blowing include perceived support for whistle-blowing by organizational policy and organizational commitment (Chen and Lai 2014; Kang 2015; Lee and Fargher 2013). Perception of support for whistle-blowing by the organization is related to whether individuals report unethical conduct or not (Near and Miceli 1996). Anonymity could also influence whether

individuals report unethical conduct or not (Miceli and Near 1984; Miceli and Near 1985), both at the organizational and individual levels.

H3a: Individuals with a greater perception of organizational support for whistle-blowing will report unethical conduct more than those who perceive less support.

H3b: Attitudes towards anonymity will influence the reporting of unethical conduct, where greater individual importance of anonymity and greater perceived organizational support for anonymity are correlated with increased reporting.

Those with less education and in non-supervisory positions are more likely to report externally (Miceli and Near 1984), while supervisors may be more likely to use internal channels to report unethical conduct due to an increased belief that the organization will see their reporting as legitimate (Kolarska and Aldrich 1980). However, most external reporters have also reported the incident internally (Miceli and Near 1985; Rothschild and Miethe 1999), indicating that their complaint was not addressed potentially due to their lower power and status. An unethical culture could also be related to greater external reporting (Miceli and Near 1985).

H4a: Individuals with lower education will report unethical conduct via external avenues more than those with higher education.

H4b: Individuals in a supervisory role will report unethical conduct via internal avenues more than those not in a supervisory role.

H4c: Individuals with lesser perception of organizational support for whistle-blowing will report more using external avenues than those who perceive greater support.

Predictions for Qualitative Analyses

Based on the trust and leadership literatures, I expect that trust in leaders is related to the reporting of unethical conduct where greater trust in leaders correlates with increased reporting. When leaders are known to condone unethical conduct, the reporting of such behavior is less likely (Miethe and Rothschild 1994). Previous

literature relates trust in leaders to more moral judgements by and increased response from individuals they lead (Eagly and Karau 2002; Epitropaki and Martin 2005; Lord and Hall 2003; Simpson et al. 2013). Assuming that trust represents a belief in another person's integrity, individuals with greater trust in their leaders should be more likely to report unethical conduct due to a belief that they will be supported by their leaders and that their leaders will take action on the report (Miceli and Near 2002).

I also expect status to be related to trust in leaders, as experimental research has shown higher status individuals trust others more than lower status individuals (Lount and Pettit 2012). The whistle-blowing literature I reviewed supports this notion, as well. My qualitative analyses could reveal different mechanisms by which status is related to trust in leaders. Before considering these mechanisms and the relationship of trust to reporting, however, I first test my hypotheses via secondary data analyses in the next two chapters.

Chapter 4: Secondary Data Analyses – Data and Methods

In this chapter and the one following, I analyze data from the 2010 Merit Principles Survey (2010 MPS) to explore factors related to the reporting of unethical conduct. A whistle-blowing study using earlier Merit Principles Survey (MPS) data (Miceli and Near 1984) finds both individual and organizational factors related to the reporting of unethical conduct. While enlightening, these analyses use data now 35 years old. More recent MPS data exists, specifically survey data from 2010, which I use to determine if previous findings are still relevant.

One major limitation of the 2010 MPS data is the lack of gender information. Although other demographic information is available, such as race, ethnicity and educational attainment, 2010 MPS respondents were not asked for their gender. This is particularly relevant to research on whistle-blowing, as previous literature (Miceli et al. 2012; Near and Miceli 1996) indicates gender is applicable to the reporting decision. I address this shortcoming further in the limitations section of the next chapter, including ideas on compensating for it in subsequent sections of my research.

The literature broadly defines whistle-blowing as, "the disclosure by organization members (former or current) of illegal, immoral, or illegitimate practices under the control of their employers, to persons or organizations that may be able to affect action" (Near and Miceli 1985, page 4). It is important to note that definitions used in the collection of the 2010 MPS data limit whistle-blowing to a subset of conduct the literature defines. Specifically, in addressing hypothetical misconduct the 2010 MPS frames wrongdoing as, "the creation or toleration in the workplace of a health or safety danger, unlawful behavior, fraud, waste, or abuse." This definition is

in line with the Federal Whistleblower Protection Act of 1989, but does not encompass the "immoral" aspect that whistle-blowing literature addresses. Further, when asking respondents if they actually observed or had direct evidence of misconduct, the 2010 MPS only queries for "illegal or wasteful" activity. Although respondents were previously primed with the complete Whistleblower Protection Act definition, it is possible that they omitted misconduct (e.g. health or safety danger and abuse) not meeting the narrower definition used in collecting personal experiences.

To begin, I discuss the 2010 MPS data as a whole after which I explain how I construct measures from these data pertinent to my research question. Following this, I present my plan of analyses.

Data

I first address my research question via secondary data analyses of whistle-blowing data from federal civilian workers' responses to the 2010 MPS. The 2010 MPS is a government-wide survey of federal employees that solicits their opinions and experiences related to their careers, organizational human resources practices, and leadership. The survey is administered by the Merit Systems Protection Board (MSPB), an entity established to ascertain whether prohibited personnel practices are occurring in the civil service (MSPB 1981). Topics covered in the 2010 MPS include employee engagement, workforce motivation, adherence to merit system principles, fairness, prohibited personnel practices, leadership, disability, whistle-blowing and competency requirements. The 2010 MPS was administered to permanent, full-time federal employees in the 18 departments and six independent agencies presented in Table 4.1.

Table 4.1: Departments and Independent Agencies Participating in the 2010 MPS

Departments	Independent Agencies
• Department of the Air Force (N=1,069) • Department of the Army (N=1,030) • Department of the Navy (N=1,024) • Department of Defense (N=1,142) • Department of Agriculture (N=2,853) • Department of Commerce (N=1,749) • Department of Justice (N=3,085) • Department of Labor (N=3,025) • Department of Energy (N=486) • Department of Education (N=636) • Department of Health and Human Services (N=2,380) • Department of Homeland Security (N=3,480) • Department of Housing and Urban Development (N=541) • Department of Interior (N=2,723) • Department of State (N=628) • Department of Transportation (N=2,335) • Department of the Treasury (N=2,824) • Department of Veterans Affairs (N=2,252)	• Environmental Protection Agency (N=602) • Federal Deposit Insurance Corporation (N=845) • General Services Administration (N=668) • National Aeronautics and Space Administration (N=674) • Office of Personnel Management (N=594) • Social Security Administration (N=1,588)

Note: The number of respondents per department or agency is obtained after dropping those who had missing data when asked if they observed unethical conduct in the past 12 months.

The 2010 MPS data include 42,020 valid responses with an overall response rate of 58%.[1] Responses drawn from the 24 different government departments and agencies represent over 97% of the permanent, full-time federal workforce as of September 2009. For almost all employees, the survey was administered online through e-mail invitations and a dedicated, secure web site.[2] Employees were informed that survey participation is voluntary and that their responses would be confidential.

[1] To be accepted as valid, a survey had to contain non-missing responses to 25 or more core items. Lower response rates may compromise the random sampling methodology used and affect the generalizability of the data across the population sampled (Khan and Fisher 2014).

[2] At the request of the Department of Transportation, MSPB distributed paper surveys to approximately 1,300 employees in the Federal Aviation Administration who could not receive or respond to an online survey.

Employees were selected for inclusion through stratified random sampling drawn from records in the Office of Personnel Management's Central Personnel Data File. The strata were designed to provide usable measures of employee opinion by supervisory status (supervisor and non-supervisor) and department or agency. The sampling plan required oversampling of some groups to provide statistically reliable results; accordingly, MSPB calculated response weights to produce results representative of government-wide employee opinion. My analyses are weighted unless stated otherwise (see Appendix A for weighting methodology).[3]

Measures

Although my secondary data analyses are largely exploratory, incorporating all 2010 MPS variables is impractical both theoretically and statistically. In addition to demographic measures, the 2010 MPS data contain information on satisfaction with supervisors, perceptions of supervisors' actions towards whistle-blowing and other unethical conduct, respondent attitude and behavior regarding whistle-blowing, and respondent perceptions of institutional protections against and support for whistle-blowing. Due to the large volume of data available, I make decisions about which variables to consider initially in my analyses.

I begin by conceptualizing the 2010 MPS data in line with existing literature. Following Miceli and Near (1984), I organize questions into individual and organizational categories. For individual factors, I identify both demographic variables and variables previous whistle-blowing literature relates to the reporting of

[3] Instead of weighting, I control for supervisory status and department/agency in my logit regression analyses. These are the two strata used in the sampling design, and the oversampling performed necessitates accounting for them.

unethical conduct. Table 4.2 presents these individual factors, and their respective questions from the 2010 MPS are noted in parentheses.[4]

Table 4.2: Individual Factors from the 2010 MPS

Demographics
-Hispanic Descent (DEM_02)
-Race (DEM_03)
-Years of Education (DEM_04)
Power and Status
-Supervisory Status (DEM_05)
-Years of Federal Service (DEM_01)
Attitudes
-Anonymity (WB_08)

For organizational factors, I construct indices measuring satisfaction with leaders, perceptions of leaders' actions with regard to a variety of misconduct, trust in the organization, and perceptions of organizational support for whistle-blowing. Other 2010 MPS questions measure perceived organizational protection for whistle-blowers and perceived organizational support for anonymous reporting. Table 4.3 presents these organizational factors, and their respective questions from the 2010 MPS are noted in parentheses.

Before beginning to construct my variables, I consider all cases (N=42,020) and whether respondents indicate that they have personally observed or obtained direct evidence of one or more illegal or wasteful activities in the past 12 months (WB_15). This question is pivotal to my research, both in identifying respondents who observed unethical conduct for potential reporting and in creating a comparison group of those who did not observe such misconduct. I drop 3,787 cases with

[4] See Appendix B for the portions of the 2010 MPS instrument I use in my research.

Table 4.3: Organizational Factors from the 2010 MPS

Leaders
-Leader Behavior (Index from MSP_03)
Attitudes
-Satisfaction with Leaders (Index from ENG_04/05/18/19/24)
Organization
Attitudes
-Organizational Trust (Index from MSP_01)
-Support for Whistle-blowing (Index from WB_01 to 06)
-Support for Anonymous Reporting (WB_10a)
-Protection for Whistle-blowers (WB_07)

missing data for this variable, resulting in N=38,233 total cases to use in analyses. Of the retained cases, N=3,770 report observing illegal or wasteful activities in the past 12 months. For all other variables, unless otherwise indicated, missing values are left unchanged.

Dependent Variables

I construct five dichotomous dependent variables from the 2010 MPS question that asks respondents, who in the past 12 months had personally observed or obtained direct evidence of one or more illegal or wasteful activities, if they reported the activity. This question (WB_20) allows respondents to choose one or more avenues of reporting from the list in Table 4.4.

Again following Miceli and Near (1984), I organize the dependent variables based on whether respondents reported internally or externally. I also conceptualize an "informal reporting" category, as this variation is identifiable in the 2010 MPS data. All five dichotomous variables are coded where 0 = no and 1 = yes. Not reporting encompasses respondents who observe illegal or wasteful activities but do not report them. For respondents who did report observed activities, informal

Table 4.4: Possible Avenues of Whistle-blowing

No Report
I did not report the activity
Informal Report
Family member or friend
Coworker
Internal Report
Immediate supervisor
Higher level supervisor
Higher level agency official
External Report
Agency Inspector General (IG)
Office of Special Counsel (OSC)
Government Accountability Office (GAO)
Law enforcement official
Union representative
News media
Congressional staff member or member of Congress
Advocacy group outside the Government
Other

reporting encompasses those who report to other-than-official sources, internal reporting encompasses those who report to sources in their own organization and external reporting encompasses those who report to sources outside of their own organization. These three avenues of reporting are not mutually exclusive. A fifth outcome, external-only, encompasses those who report to sources outside of their own organization without also reporting internal to their organization. This distinction could be important, as literature (Miceli and Near 1984; Miethe and Rothschild 1994) indicates that most external whistle-blowers also attempt to report

within their organization; deviation from this norm would be noteworthy, as would possible influences.

Independent Variables

I construct variables representing individual power, status and attitudes from three questions in the 2010 MPS. As a power-status proxy, I use two questions from the Demographics section asking respondents to identify their years of federal service and supervisory status. Years of federal service is taken from a question asking respondents to report their length of service; however, answers to this question are in non-standard ranges of years. While most possible answers encompass four years, one encompasses three years and two others an undetermined amount of time (e.g. Under 1 year and More than 35 years). Rather than recoding to an interval variable, I accept the respondents' answers directly as an ordinal variable.

Possible answers to the supervisory status question include non-supervisor, team-leader, supervisor, manager and executive. Amplifying descriptions for each choice distinguish the first two categories as not officially having supervisory duties. Accordingly, I construct a dichotomous variable for supervisory status where respondents in the first two categories are coded as a 0 and those in the last three categories are coded as a 1.[5]

I measure individual attitude towards anonymity from a whistle-blowing question asking respondents, "If you were to observe or have evidence of wrongdoing, how important would it be to you that you be able to report it without

[5] I recode N=57 missing values for the supervisor variable as non-supervisors, as a majority of respondents identify in this category.

disclosing your identity?" Responses range from 2 = very important to 5 = not important; I reverse code these responses and shifted them by one, resulting in a new range from 4 to 1 where higher responses equate to greater importance.[6]

Moving to organizational variables, I construct an index measuring satisfaction with leaders from five questions in the Engagement section of the 2010 MPS. These questions ask for the respondent's level of agreement (on a 1-5 scale) with the following statements: (1) Overall, I am satisfied with my supervisor; (2) Overall, I am satisfied with managers above my immediate supervisor; (3) My supervisor provides constructive feedback on my job performance; (4) My supervisor provides timely feedback on my job performance; and (5) The performance and/or conduct of my supervisors and managers are primary reasons my job performance is not higher. I reverse-code responses to the final question so that higher values equate to positive responses, and average the five questions to construct an index of satisfaction with leaders (α=0.8568).[7]

I construct an index of perceived leader behavior from 22 questions in the Merit Systems Principles and Prohibited Personnel Practices section of the 2010 MPS. These questions ask, in the past two years, if an agency official in the respondent's work unit has partaken in a variety negative behaviors. For each

[6] N=2,151 respondents answered "Don't Know/Can't Judge"; I recode these responses to 1 (Not important) using the logic that indecision most equated to lack of importance.

[7] Factor analysis using the principle component factor option in Stata indicates a single factor. For the five individual questions in this index, respondents ranging from N=162 to N=1,072 answered "Don't Know/N/A"; I recode these responses to 3 (Neither Agree Nor Disagree) using the logic that not knowing most equated to neutrality. Missing values for ENG_04 (N=159) and ENG_23 (N=62) occasionally prevent the calculation of a five-question average; instead, I generate a four-question average for these cases as the resulting index without each respective question included has a higher Cronbach's alpha score than the full index.

behavior, respondents can indicate: (1) I was personally affected by this; (2) This has occurred in my work unit, but I was not personally affected by this; and (3) This has NOT occurred in my work unit. For each answer of (1) or (2), a respondent's index score is incremented by one from a starting value of zero. I reverse-code the resulting index so that higher values equate to less observed negative behavior.

In constructing an index measuring trust in the organization, I consider 26 questions in the Merit Systems Principles and Prohibited Personnel Practices section of the 2010 MPS. These questions ask for the respondent's level of agreement (on a 1-5 scale) with a variety of organizational issues on merit systems principles and prohibited personnel practices (see Appendix B for the 26 specific items). Factor analysis of these questions using the principle component factor option in Stata indicates three factors. I create three indices from these factors by averaging individual variable values. MSP_01a to MSP_01g formed one index (α=0.9077), MSP_01h to MSP_01t a second index (α=0.9395) and MSP_01u to MSP_01z a third index (α=0.9096). All three indices perform similarly in subsequent regression analyses when considered individually, while the third index accounts for the first two when all three indices are included simultaneously. For this reason, I use the third index comprised of six questions as a measure of perceived organizational trust.[8] This index includes two questions explicitly addressing whistle-blowing as well as

[8] For the six individual questions in this index, respondents ranging from N=1,964 to N=8,572 answered "Don't Know/N/A"; I recode these responses to 3 (Neither Agree Nor Disagree) using the logic that not knowing most equated to neutrality. Missing values for MSP_03z (N=18) occasionally prevent a six-question average from being calculated; instead, I generate a five-question average for these cases as the resulting index without MSP_03z included has a higher Cronbach's alpha score than the full index.

others on protection from arbitrary action, favoritism, political coercion and discrimination based on sexual orientation.

I construct an index measuring perceptions of organizational support for whistle-blowing from six questions in the Whistleblowing section of the 2010 MPS. These questions ask for the respondent's level of agreement (on a 1-5 scale) with the following statements: (1) My agency actively encourages employees to report wrongdoing; (2) If I disclosed wrongdoing, I would be praised for it at work; (3) I feel that I could disclose wrongdoing without any concerns that the disclosure would make my life harder; (4) My agency has educated me about the purpose of the Office of the Inspector General; (5) My agency has educated me about how I can anonymously disclose wrongdoing; and (6) My agency has educated me about what my rights would be if I disclosed wrongdoing. I average the six questions to construct an index of perceived organizational support for whistle-blowing (α=0.8869).[9]

Other 2010 MPS questions measure perceived organizational protection against whistle-blowing and perceived organizational support for anonymous reporting. I measure whistle-blowing protection from a question asking, "In your opinion, how adequate or inadequate is the protection against reprisal for federal employees who report wrongdoing?" Responses range from 1 = Very adequate to 5 = Very inadequate.[10] I reversed code these responses. I measure support for

[9] Factor analysis using the principle component factor option in Stata indicates a single factor. For the six individual questions in this index, respondents ranging from N=1,555 to N=7,227 answered "Don't Know/N/A"; I recode these responses to 3 (Neither Agree Nor Disagree) using the logic that not knowing most equated to neutrality.

[10] N=12,203 respondents answered "Don't Know/Can't Judge"; I recode these responses to 3 (Neither adequate nor inadequate) using the logic that not knowing most equated to neutrality.

anonymity from a question asking, "If you were to report wrongdoing to [your agency's Office of the Inspector General(OIG)], and asked that your identity be kept confidential, to what extent do you believe that the organization would keep your identity secret?" Responses range from 4 = Great Extent to 1 = Not at All.[11]

Control Variables

I construct control variables directly from 2010 MPS questions capturing Hispanic descent, race and years of education. I measure Hispanic descent from a single yes/no question asking if respondents were Hispanic or Latino. I recode the values to create a dichotomous variable, where 0 = no and 1 = yes. Similar to other surveys of federal government employees, Hispanic descent is treated separately from race.[12]

I measure race from a single question asking respondents to choose their race from these categories: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White. Respondents are allowed to choose more than one race category if they feel it applies to them. In order to construct a nominal race variable with independent categories and sufficient power in each category, I categorize respondents who identify as American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander as "Other", regardless of whether they also identify as Black or White. Subsequently, I categorize

[11] N=12,412 cases had an unidentified value of "98"; in other questions this equated to some form of "Don't Know" but for this question "Don't Know" is not a choice on the survey. I assume that this is an omission on the electronic copy of the survey I have and treat these responses as neutral, recoding them to an average value of 2.5.

[12] The Office of Management and Budget (OMB 1977; OMB 1997) provides guidance on treating race and Hispanic descent separate not for anthropological reasons, but rather for administrative classification purposes.

respondents who identify as Black or African American as "Black", regardless of whether they also identify as White. I categorize the remaining respondents as "White".[13]

I measure years of education from a single question asking respondents about their current education level; responses to the question equate to the highest degree obtained. I convert these answers to an interval variable based on the scale in Table 4.5.

Table 4.5: Equivalent Years of Education for 2010 MPS Respondents

Current Education Level	Equivalent Years
Less than a high school diploma	10
High school, equivalent diploma, or GED	12
Some college credits but no degree	13
Associates' college degree	14
Bachelor's college degree	16
Master's degree	18
Professional degree (e.g. J.D., M.D., D.D.S.)	20
Academic or scientific doctorate (Ph.D.)	20

Analyses

I use logit and ordinary least squares regression models for analyses in the subsequent chapter. The logit regression model I use for analyses of dependent variables and preliminary analyses of one independent variable is of the general form:

$$\log(p/1-p) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3, \text{ where } p=P(Y=1)$$

where $\log(p/1-p)$ is the outcome of interest, X_1 is a set of demographic control variables, X_2 is a set of individual variables and X_3 is a set of organizational

[13] I recode N=333 missing values for the Hispanic variable as non-Hispanic, as a majority of respondents identify as non-Hispanic. I recode N=5 missing values for the race variable as White, as a majority of respondents identify as White.

variables. I present logit coefficients in all tables, while in written analyses I specify odds for ease of understanding. The logit regression expressed in odds (Ω) is of the general form:

$$\Omega(X) = \exp(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3)$$

with similar groupings of independent variables.

The ordinary least squares model I use for preliminary analyses of independent variables is of the general form:

$$Y_i = \alpha + \beta_1 X_1 + \varepsilon_i$$

where Y_i is the outcome of interest X_1 is a set of control variables.

While respondents observing wrongdoing are the primary group of interest, similar to other research (MSPB 1981) I include a comparison group of respondents who say that they have not observed wrongdoing. These non-observers have no reason for modifying their self-reported status and attitudes to achieve consistency with reporting behavior, and their responses may help to interpret results for those who did observe wrongdoing. To begin, I compare values of demographic, individual and organizational variables for respondents observing unethical conduct with those who do not. Observed differences lend context to further analyses of whistle-blowers, and possibly shed light on organizational variables related to whether individuals observe wrongdoing in the first place. Next, in the subset of respondents who have observed unethical conduct, I examine the relationship of control variables to individual and organizational independent variables. Finally, I conduct logit regression analyses for the five dependent variables incorporating individual and organizational independent variables and control variables. These analyses reveal

factors related to the reporting of unethical conduct, and shed light on the different reporting avenues whistle-blowers use as well as which independent and control variables are related to each avenue.

In this chapter I describe the 2010 MPS data and how I construct the variables I use in my analyses. I also formulate my analyses plan. In the next chapter, I present the results of my analyses and discuss their implication for my research question.

Chapter 5: Secondary Data Analyses – Results and Discussion

My analyses of the 2010 MPS data indicate that individual and organizational factors remain related to the reporting of unethical conduct. In agreement with Near and Miceli (1996), these analyses find that organizational variables explain slightly more variance than individual variables in the reporting outcome. Individually, being a supervisor and greater importance of anonymity are related to increased reporting. Organizationally, observing more leader misconduct, greater perceived support for anonymous reporting and greater perceived protection for whistle-blowers are all related to increased reporting. Building on these whistle-blowing findings, I further analyze factors related to the various avenues respondents use to report (e.g. informal, internal and external).

To begin, I present results of my analyses of the 2010 MPS data. A discussion of how the variables relate to the reporting of unethical conduct follows, along with race implications on the reporting avenue. Finally, based on my analyses, I present a general model for reporting unethical conduct.

Results

I first compare the values of demographic, individual and organizational variables for respondents observing unethical conduct with those who did not. Table 5.1 presents descriptive statistics for these control and independent variables, differentiated by whether the respondent reported observing unethical conduct or not. Individuals of other race are significantly[14] more likely than white respondents to report observing unethical conduct, while black respondents are significantly less

[14] As used here and subsequently, the term significant means statistically significant.

Table 5.1: Control and Independent Variable Descriptive Statistics (Weighted)

	Observed Unethical Conduct			
	Yes		No	
N	3,770		34,463	
Control Measures				
Hispanic Descent	7.5%		8.0%	
Race[a]				
Black	13.3%		15.5%	
Other	14.0%		12.4%	
	Mean	Std.Dev.	Mean	Std.Dev.
Education in Years (10-20)	15.2	2.3	15.3	2.3
Individual Variables				
Supervisor Status	32.4%		33.6%	
	Mean	Std.Dev.	Mean	Std.Dev.
Length of Federal Service (1-11)[b]	5.7	2.7	5.4	2.8
Importance of Anonymity (1-4)[b]	1.7	1.0	1.9	1.0
Organizational Variables				
Leader Satisfaction (1-5)[b]	3.0	1.0	3.8	0.8
Leader Behavior (0-22)[b]	17.6	4.7	21.0	2.3
Trust in Organization (1-5)[b]	2.5	0.9	3.3	0.8
Support for Whistle-blowing (1-5)[b]	2.5	1.0	3.4	0.8
Support for Anonymous Reporting (1-4)[b]	2.3	0.9	2.8	0.8
Protection for Whistle-blowers (1-5)[b]	3.6	1.1	2.7	1.0

a: Reference Group: White.

b: Two-sample difference of means statistically significant (two-tailed, α=0.05)

likely than white respondents to report observing such conduct. Among individual measures, observers have significantly longer federal service and place less importance on anonymity. For the organizational measures, observers of unethical conduct differed significantly on both leader metrics and on all four variables operationalizing attitudes towards the organization. Logit regression analyses including all measures from Table 5.1 and controlling for department or agency (results not shown) confirm that all variables but years of education are significantly

related to whether a respondent observes unethical conduct or not (α=0.05, two-tailed).

Table 5.2 presents dependent variable descriptive statistics for respondents who reported observing unethical conduct; only these cases are used in further analyses. Table C.1 in Appendix C presents a full correlation matrix for all control

Table 5.2: Dependent Variable Descriptive Statistics

N[a]	3,768
Dependent Variables	
Reported Incident	65.2%
Of Those Reporting (N=2,456)	
Informal	51.8%
Internal	64.8%
External	29.6%
External Only	12.8%

a: Two cases had missing DV data and are not included in analyses

and independent variables, along with the primary dependent variable of whether the respondent reported the observed unethical conduct. There are significant but weak positive correlations between reporting unethical conduct and being of Hispanic descent, viewing the organization as supporting whistle-blowing and viewing the organization as supporting anonymous reporting. There is also a significant but weak negative correlation between reporting unethical conduct and observed leader behavior, where more observed negative behavior is correlated to increased reporting. Among the independent variables, five of six organizational measures have a significant, strong positive correlations with each other.

Table C.2 in Appendix C presents a correlation matrix of control and independent variables with the remaining four dependent variables, which are possible avenues of reporting. As compared to white respondents, black respondents

and respondents of Hispanic descent have a significant but weak positive correlation with reporting external to the organization.[15] As well, these two categories of respondents have a significant, moderate positive correlation with reporting solely via external avenues. Black respondents also have significant but weak negative correlations with reporting informally and internally. Respondents who identify as supervisors have a significant but weak positive correlation with reporting internally, and a significant but weak negative correlation with reporting informally. For the organizational measures, there are significant, moderate negative correlations between observed leader behavior and both external reporting outcomes. There are also significant, moderate negative correlations between trust in the organization and both external reporting outcomes.

Before analyzing the reporting outcomes further, I examine the relationship of control variables to individual and organizational independent variables. Table 5.3 presents ordinary least squares and logit regression analyses treating the three individual measures as outcomes. The relationship between years of education and service length is significant ($t=-6.15$, $\alpha=0.05$, two-tailed). On average, for every eight years of education respondents are one category lower in service length after accounting for the other control variables. As well, for every year increase in education respondents are 1.1 times as likely to be supervisors. Finally, black respondents value anonymity slightly higher than white respondents.

[15] This reporting method includes respondents who also reported internal to the organization and those who solely made an external report.

Table 5.3: Preliminary Analyses of Individual IVs (Weighted)

	Service Length	Supervisory Status[b]	Anonymity
Control Variables			
Hispanic Descent	-0.303	-0.226	-0.060
	(0.172)	(0.143)	(0.063)
Black[a]	-0.120	-0.216	0.109*
	(0.130)	(0.112)	(0.047)
Other[a]	-0.322*	-0.152	0.038
	(0.129)	(0.107)	(0.047)
Years of Education[c]	-0.122*	0.120*	-0.004
	(0.020)	(0.016)	(0.007)
Constant	7.652*	-2.485*	1.744*
	(0.305)	(0.273)	(0.112)
N	3,767	3,767	3,767
R^2	0.013	-	0.002
-2LL	-	4,569.48	-
BIC'	-	45.800	-

*p<0.05, Unstandardized coefficients, Standard errors in parentheses
a: Reference Group: White
b: Instead of weighting, department/agency controlled for (not shown)
c: One case had missing data and is not included in analyses

Table C.3 in Appendix C presents ordinary least squares regression analyses treating the six organizational measures as outcomes. The relationships of Hispanic descent (t=-7.62, α=0.05, two-tailed), black (t=-6.53, α=0.05, two-tailed), other race (t=-2.00, α=0.05, two-tailed) and years of education (t=4.05, α=0.05, two-tailed) with leader behavior are significant. On average after accounting for the other control variables, respondents of Hispanic descent report observing over two more instances of negative leader behavior than white respondents while black respondents report observing nearly one and a half more instances than white respondents. The other significant relationships with leader behavior are not substantive. Similar significant relationships exist between the control variables and trust in the organization and organizational support for anonymous reporting, although none are substantive.

Table 5.4 presents logit regression analyses for the outcome of reporting unethical conduct. I first estimate models for the reporting outcome including only individual or organizational variables with controls (not shown). The full model for the reporting outcome includes both individual and organizational variables in addition to controls. I present the results of the full model, which includes significant individual and organizational factors. There are no substantive differences in significant variables between the full model and the reduced models.

For individual variables, the relationship of supervisor status with reporting unethical conduct is significant ($z=2.14$, $\alpha=0.05$, two-tailed). On average, supervisors were 1.2 times as likely as non-supervisors to report unethical conduct after accounting for other variables in the model. The relationship of the importance of anonymity with reporting unethical conduct is also significant ($z=3.07$, $\alpha=0.05$, two-tailed). On average, a one-point increase on the importance of anonymity scale is related to a respondent being 1.1 times as likely to report unethical conduct after accounting for other variables in the model.

For organizational variables, the relationship of perceived support for anonymous reporting with reporting unethical conduct is significant ($z=2.45$, $\alpha=0.05$, two-tailed). On average, a one-point increase on the perceived support for anonymous reporting scale is related to a respondent being 1.1 times as likely to report unethical conduct after accounting for other variables in the model. The relationship of perceived protection for whistle-blowers with reporting unethical conduct is also significant ($z=2.68$, $\alpha=0.05$, two-tailed). On average, a one-point increase on the perceived protection for whistle-blowers scale is related to a

Table 5.4: Logit Regression Analyses of Reporting Unethical Conduct (Unweighted[b])

	Full Model
Control Variables	
Hispanic Descent	0.165
	(0.139)
Black[a]	-0.172
	(0.107)
Other[a]	-0.039
	(0.105)
Years of Education	0.005
	(0.016)
Individual Variables	
Supervisor Status	0.175*
	(0.082)
Length of Federal Service	-0.002
	(0.014)
Importance of Anonymity	0.116*
	(0.038)
Organizational Variables	
Leader Satisfaction	-0.020
	(0.042)
Leader Behavior	-0.037*
	(0.010)
Trust in Organization	0.089
	(0.062)
Support for Whistle-blowing	0.064
	(0.054)
Support for Anonymous Reporting	0.107*
	(0.044)
Protection for Whistle-blowers	0.118*
	(0.044)
Constant	0.066
	(0.430)
N	3,689
-2LL	4,682.03
BIC’	216.055

*p<0.05, Unstandardized coefficients, Standard errors in parentheses
a: Reference Group: White
b: Instead of weighting, department/agency controlled for (not shown)

respondent being 1.1 times as likely as to report unethical conduct after accounting for other variables in the model. Although the relationship with leader behavior is significant, where more observed misconduct is related to increased reporting, there is no substantive change in odds for each additional negative behavior observed.

Table 5.5 presents logit regression analyses for the outcomes of the various avenues to report unethical conduct. I first estimate models for each outcome including only individual or organizational variables with controls. The full model for each outcome includes both individual and organizational variables in addition to controls. For two of the outcomes, the full model includes significant individual and organizational factors; as applicable I highlight differences in significant variables between the full model and the reduced models. For the other two outcomes, I present the model including only individual or organizational variables as the full model contains no individually significant variables in the other category.

For reporting unethical conduct informally, the relationship with supervisor status is significant ($z=-7.65$, $\alpha=0.05$, two-tailed). On average, supervisors were 0.5 times as likely as non-supervisors to report unethical conduct informally after accounting for other variables in the model. The relationship of reporting unethical conduct informally is also significant with three organizational variables; leader satisfaction ($z=-2.81$, $\alpha=0.05$, two-tailed), leader behavior ($z=-2.15$, $\alpha=0.05$, two-tailed) and perceived support for whistle-blowing ($z=-2.39$, $\alpha=0.05$, two-tailed). On average, a one-point increase on the leader satisfaction or perceived support for whistle-blowing scale is related to a respondent being 0.9 times as likely to report unethical conduct informally after accounting for other variables in the model.

Table 5.5: Logit Regression Analyses of Various Reporting Avenues (Unweighted[b])

	Informal	Internal	External	External Only
Control Variables				
Hispanic Descent	-0.033	-0.174	-0.130	0.193
	(0.160)	(0.157)	(0.174)	(0.218)
Black[a]	-0.321*	-0.358*	0.270	0.613*
	(0.134)	(0.130)	(0.139)	(0.167)
Other[a]	-0.138	-0.438*	-0.140	-0.031
	(0.126)	(0.125)	(0.143)	(0.196)
Years of Education	0.013	0.020	-0.042*	-0.035
	(0.019)	(0.019)	(0.021)	(0.028)
Individual Variables				
Supervisor Status	-0.741*	0.432*	-0.120	-
	(0.097)	(0.098)	(0.108)	-
Length of Federal	0.002	-0.019	0.000	-
Service	(0.017)	(0.017)	(0.019)	-
Importance of	-0.027	0.178*	0.148*	-
Anonymity	(0.043)	(0.045)	(0.047)	-
Organizational Variables				
Leader Satisfaction	-0.142*	-	0.037	0.026
	(0.050)	-	(0.055)	(0.074)
Leader Behavior	-0.025*	-	-0.058*	-0.045*
	(0.012)	-	(0.012)	(0.015)
Trust in Organization	0.014	-	-0.065	-0.062
	(0.073)	-	(0.080)	(0.105)
Support for Whistle-	-0.156*	-	0.001	0.071
blowing	(0.065)	-	(0.071)	(0.095)
Support for Anonymous	0.041	-	0.165*	0.091
Reporting	(0.052)	-	(0.057)	(0.075)
Protection for Whistle-	-0.030	-	0.228*	0.131
blowers	(0.053)	-	(0.059)	(0.078)
Constant	1.349*	0.127	-0.456	-1.260
	(0.513)	(0.354)	(0.557)	(0.724)
N	2,410	2,454	2,410	2,410
-2LL	3,170.18	3,088.07	2,763.89	1,751.20
BIC’	113.379	140.744	115.278	173.755

*p<0.05, Unstandardized coefficients, Standard errors in parentheses

a: Reference Group: White

b: Instead of weighting, department/agency controlled for (not shown)

Although the relationship with leader behavior is significant, where more observed misconduct is related to increased informal reporting, there is no substantive change in odds for each additional negative behavior observed.

For reporting unethical conduct internally, the relationship with supervisor status is significant ($z=4.40$, $\alpha=0.05$, two-tailed). On average, supervisors were 1.5 times as likely as non-supervisors to report unethical conduct internally after accounting for other variables in the model. The relationship of the importance of anonymity with reporting unethical conduct internally is also significant ($z=3.94$, $\alpha=0.05$, two-tailed). On average, a one-point increase on the importance of anonymity scale is related to a respondent being 1.2 times as likely to report unethical conduct internally after accounting for other variables in the model.

For reporting unethical conduct externally, the relationship with the importance of anonymity is significant ($z=3.17$, $\alpha=0.05$, two-tailed). On average, a one-point increase on the importance of anonymity scale is related to a respondent being 1.2 times as likely to report unethical conduct externally after accounting for other variables in the model. The relationship of reporting unethical conduct externally is also significant with three organizational variables; leader behavior ($z=-4.81$, $\alpha=0.05$, two-tailed), perceived support for anonymous reporting ($z=2.89$, $\alpha=0.05$, two-tailed) and perceived protection for whistle-blowers ($z=3.89$, $\alpha=0.05$, two-tailed). On average, a one-point increase on the perceived support for anonymous reporting scale is related to a respondent being 1.2 times as likely to report unethical conduct externally after accounting for other variables in the model. The same one-point increase on the perceived protection for whistle-blowers scale

equates on average to a respondent being 1.3 times as likely to report unethical conduct externally after accounting for other variables in the model. Concerning leader behavior, on average for each additional negative behavior observed a respondent is 1.1 times as likely to report unethical conduct externally after accounting for other variables in the model.[16]

The relationship of reporting unethical conduct via solely external avenues is significant with leader behavior ($z=-2.91$, $\alpha=0.05$, two-tailed), where more observed misconduct is related to increased external reporting. However, there is no substantive change in odds for each additional negative behavior observed. Being black as compared to white does have a substantive effect in this model, where black respondents are 1.8 times as likely as white respondents to report unethical conduct external without also reporting it internally. This same race effect is mirrored in the informal and internal reporting outcomes, where black respondents are 0.7 times as likely as white respondents to report via these avenues.

Discussion

In considering the entire sample of the 2010 MPS (Table 5.1), it is clear there are differences between individuals observe unethical conduct and those who do not. However, observed differences lend mixed support for H1a which equates higher power and status to more observed unethical conduct. As compared to white respondents, individuals of other race are significantly more likely to report observing unethical conduct while black respondents are significantly less likely to report

[16] For reporting unethical conduct externally, supervisory status and being black as compared to white are significant in the individual-only model. However, the organizational variables accounted for their effect in the full model. In the full model, being black as compared to white is nearly significant ($p=0.052$).

observing such conduct. Given that both groups are numeric minorities to the white reference group, it is noteworthy that opposite relationships are observed. Particularly, that respondents of other race report observing unethical conduct at the highest rate among all race categories does not support H1a and may indicate their increased willingness to expose wrongdoing. An alternate explanation could be that white majority members seek to shield their organization and are unwilling to bring unethical conduct to light, but this would imply that black minority members do the same. Additional analyses are necessary to address causality, but as these differences exist I address the effect of race in subsequent analyses of the subgroup of reporters.

As compared to non-observers, respondents who report observing unethical conduct have significantly longer federal service and placed lesser importance on anonymity. The length-of-service finding provides support for H1a, but more time with an organization could also equate to comfort with speaking up about observed wrongdoing. Among the organizational measures, observers of unethical conduct scored significantly lower on both leader metrics and three of the four variables operationalizing attitudes towards the organization.[17] One explanation for these relationships might be that observed misconduct negatively impacts views on the organization, although it is also possible that a pessimistic individual would be more willing to expose such behavior. Whatever the cause, the subgroup that reported observing unethical conduct has a less favorable view of the organization and this view may impact whether they report such behavior or not.

[17] It is logical that observers scored higher than non-observers on the fourth attitude measure, perceived protection for whistle-blowers. Having observed misconduct, respondents may be more likely educate themselves on protections provided by their organization for whistle-blowers.

Moving to the subgroup of respondents who reported observing unethical conduct, I first address a counterintuitive finding from analyses of the independent variables. On average, for every eight years of education respondents are one category lower in service length after accounting for the other control variables. While this difference is not substantive, it could be indicative of the technical skills and associated education required of more recent entry-level federal employees. Despite this relationship, the only power-status proxy supporting H1b is supervisory status. H1b equates higher power and status to increased reporting of unethical conduct, and supervisors were 1.2 times as likely as non-supervisors to report unethical conduct after accounting for other variables in the model.

H2 predicts that individuals observing more instances of leader misconduct would report unethical conduct less often than those who observe fewer instances. This hypothesis is based on previous literature (Miceli and Near 1984; Miceli and Near 1985) theorizing that a culture of silence would discourage individuals from reporting. Analyses of the 2010 MPS data disconfirm this hypothesis, as there was a significant relationship between more observed leader misconduct and increased reporting. Although the relationship is not substantive, the 2010 MPS data did not support the concept that cultural barriers related to observed misconduct discourage reporting. Concerning avenues of reporting, on average for each additional negative behavior observed a respondent is 1.1 times as likely to report unethical conduct externally after accounting for other variables in the model. Analyses of the external reporting avenue further disconfirm H2.

H3a predicts that more perceived organizational support for whistle-blowing would be related to increased reporting. Analyses of the 2010 MPS data provide partial support for this hypothesis. While two of the organizational measures (trust in the organization and perceived support for whistle-blowing) have no significant relationship with reporting, perceived protection for whistle-blowers provides evidence for increased reporting where, on average, a one-point increase on the perceived protection for whistle-blowers scale is related to a respondent being 1.1 times as likely as to report unethical conduct after accounting for other variables in the model.

There was support for H3b, which predicts that greater individual importance of and organizational support for anonymity would be related to increased reporting. On average, a one-point increase on the perceived support for anonymous reporting scale is related to a respondent being 1.1 times as likely to report unethical conduct after accounting for other variables in the model. Anonymity is also important at the individual level where, on average, a one-point increase on the importance of anonymity scale is related to a respondent being 1.1 times as likely to report unethical conduct (and 1.2 times as likely to report such conduct via internal avenues[18]) after accounting for other variables in the model. Taken together, these findings indicate that the concept of anonymity is an important factor as both organizational support for anonymous reporting and individual importance of anonymity have unique relationships with the reporting outcome.

[18] Individuals are also 1.2 times as likely to report unethical conduct via external avenues. This indicates that greater personal value of anonymity is related to increased reporting, regardless of the avenue.

Analyses of the various reporting avenues find support for H4a and H4b, but not H4c. H4a predicts that individuals with lower education would report unethical conduct via external channels more than those with higher education. Education did have a significant relationship; while not substantive, there is a negative relationship between years of education and reporting externally. H4b predicts that individuals in a supervisory role would use internal avenues to report unethical conduct more than those not in a supervisory role. On average, supervisors are 1.5 times as likely as non-supervisors to report unethical conduct internally after accounting for other variables in the model.

H4c predicts that individuals with lesser perception of organizational support for whistle-blowing would report more using external avenues than those who perceive greater support. My analyses do not support this hypothesis. For the measure of perceived protection for whistle-blowers, a one-point increase on the perceived protection for whistle-blowers scale equates on average to a respondent being 1.3 times as likely to report unethical conduct externally after accounting for other variables in the model. As well, an average one-point increase on the perceived support for anonymous reporting scale is related to a respondent being 1.2 times as likely to report unethical conduct externally after accounting for other variables in the model. However, when considering reporting done solely via external avenues these significant relationships no longer exist. Taken together, my results indicate that greater perceived organizational support is related to increased external reporting, but only for respondents who report externally and internally. Although these

respondents perceive organizational support for whistle-blowing, some other factor is driving them to report outside of the organization.

While no hypotheses address the informal reporting avenue, there are significant relationships between informal reporting and multiple individual and organizational variables. Concerning individual measures, supervisors are on average 0.5 times as likely as non-supervisors to report unethical conduct informally after accounting for other variables in the model. For organizational measures, a one-point increase on the leader satisfaction and perceived support for whistle-blowing scales is related on average to a respondent being 0.9 times as likely to report unethical conduct informally after accounting for other variables in the model.[19] The strongest finding here is that non-supervisors are much more likely to report unethical conduct to a family member, friend or coworker.

Race Implications for Reporting Avenue

Based on observed demographic differences between respondents who observed unethical conduct and those who did not, I now discuss the effect of race in analyses of the subgroup of reporters. Initial analyses of independent variables reveal that, on average after accounting for the other control variables, black respondents report observing nearly one and a half more instances of leader misconduct than white respondents. As opposed to observing illegal or wasteful activities, black respondents may be in a better position to observe leader misconduct. Alternatively, they may be more willing than white respondents to highlight such misbehavior.

[19] Although the relationship with leader behavior is significant, where more observed misconduct is related to increased informal reporting, there is no substantive change in odds for each additional negative behavior observed.

This difference in observed misconduct does not translate to a relationship with reporting illegal or wasteful activities, however. Black respondents are no more likely than the white reference group to report unethical conduct. Moving beyond this finding, it is important to note that race does have an effect on avenue of reporting in the subgroup that does report such conduct. Once the decision to report has been made, black respondents are 0.7 times as likely as white respondents to report via informal or internal avenues. Coupled with the finding that black respondents are 1.8 times as likely as white respondents to report unethical conduct solely via external avenues, it is clear that black respondents are hesitant to report within their organization. Of the external reporting avenues (See Table 4.4), three are most-frequently used by all respondents: Agency Inspector General, union representative and the "other" avenue. As compared to the Agency Inspector General, black respondents report to union representatives at a proportionally higher rate than other races, accounting for 18.2% of the reports made via this avenue.

Although the cross-sectional nature of the 2010 MPS data veils causality of the reporting decision, respondents are asked questions concerning hypothetical whistle-blowing that provide context to the race finding in preferred reporting avenue. As well, reported retaliation experienced by actual whistle-blowers could provide another lens to explain the race finding for avenues of reporting. Data on hypothetical reporting and actual retaliation experiences for those who do report unethical conduct provide additional information to consider when analyzing the decision of which avenue black respondents choose to report such conduct.

All respondents are asked (WB_12), upon observing a hypothetical "health or safety danger, unlawful behavior, fraud, waste, or abuse," which of the following from a list of 21 items would factor into their decision whether or not to report the wrongdoing. Respondents answer on a 1-4 scale where 1 = Not at All; 2 = Little Extent; 3 = Some Extent; and 4 = Great Extent. Ordinary least square regression analyses of each question for respondents who reported actual unethical conduct reveal differences for some items across race. Table 5.6 presents items differing significantly for black respondents as compared to white respondents, along with the unstandardized coefficient for each item.

Table 5.6: Items Factoring More in Reporting Hypothetical Misconduct (Weighted)

Coefficient	Item
0.20	Concern that I would be suspended, demoted, or fired.
0.15	Belief that nothing ***would*** be done to stop it.
0.15	Belief that nothing ***could*** be done to stop it.
0.37	Belief that it would not happen again.
0.21	Belief that someone else had already reported it.
0.25	Concern that it might get someone in trouble.
0.28	Concern that is might harm the reputation of my organization/agency.
0.23	Concern that it might cause other things to be investigated.
0.34	Concern that it might affect my performance appraisal.
0.37	Concern that it might affect my ability to get a performance award.
0.54	Concern that it might affect my ability to get training.
0.38	Concern that it might affect my ability to get a promotion.
0.29	Concern that management might become less tolerant of any small mistakes I might make.
0.27	Concern that management might become less willing to grant me any favors that are optional for them.
0.17	Concern that I might be retaliated against in another way not mentioned above.
0.35	A lack of knowledge about to whom I should report.

$p<0.05$ for all unstandardized coefficients ($\alpha=0.05$), N ranges from 2,388-2,362
Black respondents as compared to white respondents.

Of note, there were no items that mattered significantly less for black respondents are compared to white respondents; this indicates that black respondents coefficient sizes equate to items reflecting some form of personal retaliation against give careful consideration to hypothetical reporting. Of the items that did matter more for black respondents as compared to white respondents, four of the top five the respondent (e.g. appraisals, awards, training and promotions). Black respondents are also more willing than white respondents to believe that observed misconduct will not be repeated. Other themes include protecting individuals and the organization, a belief that the misconduct would continue even if reported, and a lack of knowledge on whom to report to.

All respondents are also asked (WB_13), upon observing the same hypothetical misconduct as WB_12, how important each of the following from a list of nine items would be in their decision whether or not to report the wrongdoing. Respondents answer on a 1-5 scale ranging from 1 = Unimportant to 5 = Very Important. Ordinary least square regression analyses of each question for respondents who reported actual unethical conduct reveal differences for some items across race. Table 5.7 presents items differing significantly for black respondents as compared to white respondents, along with the unstandardized coefficient for each item. While the effect sizes are smaller as compared to Table 5.6, the theme of retaliation is repeated for which black respondents place a greater importance than white respondents.

For the same group of respondents considered in the above two tables, information on actual retaliation experienced is available. Respondents who reported unethical conduct are asked (WB_23), “Within the last 12 months, have you

Table 5.7: Importance of Items in Reporting Hypothetical Misconduct (Weighted)

Coefficient	Item
-0.14	The activity might endanger people's lives.
0.15	You would be protected from any sort of reprisal.
0.27	You would be positively recognized by management for a good deed.
0.17	The activity was something you considered to be a serious ethical violation, although the monetary costs associated with it were small.
0.48	You would be eligible to receive a cash reward.

$p<0.05$ for all unstandardized coefficients ($\alpha=0.05$), N ranges from 2,342-2,206 Black respondents as compared to white respondents.

personally experienced some type of reprisal or threat of reprisal by management for having reported an activity?" Of the 2,456 whistle-blowers, N=345 report experiencing reprisal or threat of reprisal. Logit regression analyses of this outcome indicate a near-significant difference ($p=0.06$) for black respondents as compared to white respondents[20], where black respondents are 1.4 times as likely as white respondents to experience retaliation or threatened retaliation for reported misconduct.

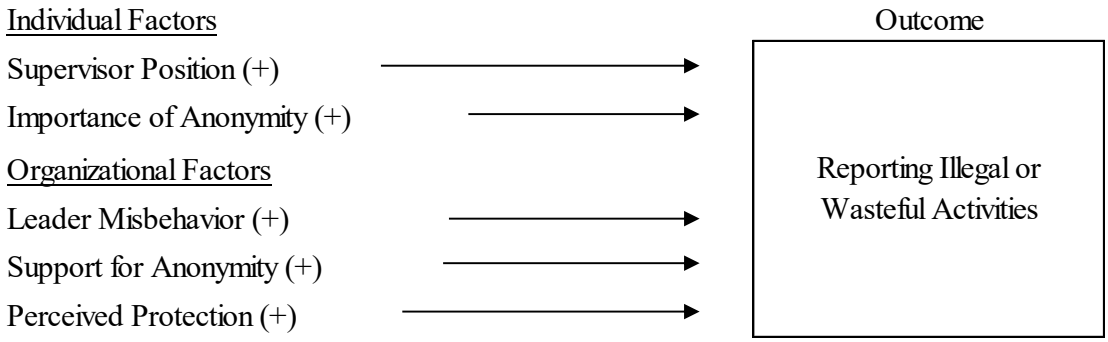
Taken together, the fear of retaliation voiced in questions about hypothetical unethical conduct could be a reason why black respondents report observing unethical conduct at a lower rate than other race categories, are more likely than white respondents to report only via external avenues and less likely than white respondents to report via informal or internal channels. Actual retaliation experiences of black whistle-blowers as compared to white whistle-blowers lend strength to this line of reasoning. Determining causality is not possible with the 2010 MPS data; however, future work could explore this potential relationship.

[20] The small number of black respondents reporting retaliation or threatened retaliation (N=55) may not provide the necessary power to achieve statistical significance.

Modeling the Reporting of Unethical Conduct

Based on analyses thus far, the model in Figure 5.1 displays relationships observed in the 2010 MPS data; only statistically significant relationships are shown.

Figure 5.1: 2010 MPS Whistle-blowing Relationships



Five relationships emerge; supervisory status, individual importance of anonymity, leader behavior and two measures of organizational protection.[21] Individually, being in a supervisory position is related to increased reporting. A greater individual importance placed on anonymity is also related to increased reporting, possibly indicating a level of belief by reporters that their anonymity will be protected if they report. Another facet of anonymity is perceived support by the organization for this reporting method, where greater perceived support is related to increased reporting. Greater perceived organizational protection for whistle-blowers is also related to increased reporting. Finally, counter to what previous literature theorized, more observed misconduct by leaders is related to increased reporting. Rather than a culture of silence stifling reporting, observed leader misconduct by federal employees is related to increased reporting in the 2010 MPS data.

[21] Given the cross-sectional nature of the data, arrows represent assumed causal relationships that I will test in my factorial vignette study.

Guided by these relationships, Figure 5.2 presents a general model for reporting unethical conduct. This general model, supported by previous literature and my analyses of the 2010 MPS data, highlights that both individual and organizational factors contribute to the reporting of unethical conduct.

Figure 5.2: General Model for Reporting Unethical Conduct

Limitations and Future Direction

Before testing the relationships in Figure 5.2 experimentally, I next consider the proposed relationship between trust in leaders and the reporting of unethical conduct. As the 2010 MPS data excludes "unethical" from the definition of misconduct and does not contain measures of trust in leaders, I turn to qualitative interview data to address these shortcomings. In doing so, I follow existing whistle-blowing literature and include the word "unethical" when defining misconduct for potential reporting.

A disadvantage of secondary data analyses is the inability to collect subsequent information deemed important during analyses. One such variable missing from the 2010 MPS data is gender. Previous research (Miceli et al. 2012; Near and Miceli 1996) indicates that gender is related to the reporting of unethical conduct, but this relationship is untestable in the 2010 MPS data. In my qualitative analyses, I consider the relationship of gender to observed themes.

In conceptualizing the 2010 MPS data by individual and organizational categories, I chose exclude some data in the Whistleblowing section of the 2010 MPS (see Appendix B). These data include the location of observed misconduct within the organization and the frequency of such misconduct. In the next two chapters, my qualitative analyses reveal themes that individuals associate with the reporting of unethical conduct. Should these themes merit revisiting the 2010 MPS data, I will do so subsequent to analyses of my interview data.

Chapter 6: Qualitative Analyses – Data and Methods

My analyses of the 2010 MPS data identify factors positively related to the increased reporting of unethical conduct; these include supervisory status, individual importance of anonymity, leader misconduct, organizational support for anonymous reporting and organizational protection for whistle-blowers. While these five factors are addressed in previous whistle-blowing literature[22], one potential factor is absent from this literature; trust in leaders. My primary goal for the qualitative analyses in this chapter and the next is to address the potential relationship between trust in leaders and the reporting of unethical conduct. I also explore the mechanisms underlying relationships observed in the 2010 MPS data.

Participants

Twenty-five (N=25) individuals, including students from a military service academy and a large public university as well as active-duty military members from two service branches, participate in my interviews. All participants are from the Northeast and West regions of the United States, and the three largest military services are represented.[23] While exact participant age is not captured, the students vary in year from freshman to senior and include both men and women. Active-duty military participants vary in position from junior enlisted to senior officer, include both men and women, and represent a variety of military career fields. In total, four participants are women (16%); these participants represent three of the four interview

[22] Previous literature hypothesizes a negative relationship between leader misconduct and the reporting of unethical conduct; I find a positive relation in my secondary data analyses.
[23] Including service academy students and active-duty members, the Army, Navy and Air Force are represented.

sites. This is low in comparison to the general population, but is reflective of the gender composition of the active-duty military (DoD 2013). Similar to previous research (Richardson and McGlynn 2011) I change the participants' names in my research to maintain the anonymity promised as a condition of participating in the interviews (see Table 6.1).[24]

Data Collection

Beginning with an inductive approach, I conduct interviews with military and civilian individuals[25] to determine how trust in leaders may relate to the reporting of unethical conduct; this is important due to the lack of whistle-blowing literature considering trust in leaders. The goal of these interviews is to explore potential factors affecting the reporting of unethical conduct, and how these factors may vary in different settings. I use open-ended, semi-structured interviews to inform my research question while allowing subjects to explore various themes that may emerge from the questions (Khan and Fisher 2014).

At the military service academy and civilian university, participants are recruited from various academic classes and offered incentives for participating in the research.[26] At the active-duty military sites, participants are recruited via the member's chain of command but due to existing regulation are not reimbursed in

[24] I give female participants a name that begins with the letter A, and male participants a name that begins with the letter B. No race or ethnicity is implied by any assigned name.
[25] To gain access for these interviews, I served as a research assistant in an ongoing project funded by the Army Research Institute. With Dr. Lucas and Dr. Hanges serving as co-primary investigators, this research investigates ethical leadership and organizational climate and culture at numerous civilian and military sites. In preparation for my role in this research, I obtained Institutional Research Board (IRB) approval as a research assistant on this project.
[26] Extra class credit is the incentive offered at the military service academy. At the civilian university, participants are paid $15 for a completed interview.

Table 6.1: Interview Participants

Participant	Interview Site	Seniority
Andrea	Civilian University	Junior
Bill	Civilian University	Junior
Brian	Civilian University	Seniority
Alicia	Military Service Academy	Freshman
Alison	Military Service Academy	Freshman
Bob	Military Service Academy	Freshman
Brad	Military Service Academy	Junior
Brett	Military Service Academy	Junior
Benito	Active-duty Military	Junior Enlisted
Brayden	Active-duty Military	Senior Enlisted
Blake	Active-duty Military	Senior Officer
Brady	Active-duty Military	Junior Enlisted
Bryce	Active-duty Military	Junior Enlisted
Brandon	Active-duty Military	Junior Enlisted
Ashley	Active-duty Military	Junior Enlisted
Bo	Active-duty Military	Senior Enlisted
Bruce	Active-duty Military	Senior Enlisted
Byron[ab]	Active-duty Military	Senior Enlisted
Baxter[ab]	Active-duty Military	Senior Enlisted
Benedict[c]	Active-duty Military	Senior Officer
Barry[c]	Active-duty Military	Senior Enlisted
Benjamin	Active-duty Military	Senior Enlisted
Breccan	Active-duty Military	Junior Enlisted
Brockton	Active-duty Military	Junior Enlisted
Buster[a]	Active-duty Military	Junior Officer

a: While I initially introduced myself as a graduate student to all participants, I later told these three that I am in the active-duty military. My methodology was to not mention this fact unless I was specifically asked.
b,c: These participants were interviewed in pairs.

any manner for their participation.[27] I make every effort to obtain participants who span the breadth of seniority (e.g. from freshmen to senior year in the college setting

[27] Although military members are directed to report to the interview site, before beginning the interview I emphasize that their participation is voluntary and give them multiple opportunities to opt-out of participating (including just sitting in the interview room for the allotted time).

and from junior enlisted to senior officer at active-duty military sites). I do this to capture differing perspectives that develop with varying exposure to the institution.

To afford the possibility of capturing different types of unethical conduct, my questions allow participants to envision a wide range of potential negative behaviors and address those most relevant to their situations. I use a consistent protocol (see Appendix D[28]) when conducting my interviews, ensuring reliability in that all participants answer the same questions in the same order (Khan and Fisher 2014). Open ended questions first focus participants on broad areas of institutional and individual influences on reporting, without specifically prompting for any effect their leaders or supervisors may have. If it does not develop unprompted, I ask participants if trust in their leaders would impact their decision to report unethical conduct. Themes from my interviews augment existing theory to inform predictions on the relationship between trust in leaders and the reporting of unethical conduct.

I interview participants at the school they attend or the military installation they are currently employed at. All participants consented to having their interviews recorded. In accordance with the interview protocol, participants answer questions focusing on observed unethical conduct, the reporting of such conduct including potential consequences for the reporter, trust in leadership including factors that increase and decrease this trust and reactions to trust violation, and culture. I probe for additional information when appropriate. Interviews range in length from 35 minutes to 76 minutes. A professional transcribed the audiotaped interviews; these

[28] Slight wording changes in the protocol are made for each interview site, due to cultural difference in terminology used to describe the organization and normative nomenclature for certain types of unethical conduct.

transcribed interviews result in 748 single-spaced pages of data. Transcribing interviews allows verbatim responses to be analyzed and coded.

Analyses

After reading all interview transcripts in their entirety to refresh myself with the interview content, I begin by coding 14 of the transcripts ensuring an even distribution of service academy/university students and active-duty military members.[29] My unit of analysis for coding is each instance of a particular theme; when read by itself, the instance is required to stand alone to represent a particular theme. As instances are coded, I first organize them into specific categories. As I proceed through the initial 14 interviews, I compare subsequent instances with previously coded instances. As a result, I restructure the coding scheme iteratively to incorporate new themes and consolidate infrequent themes under a more general category. To determine if saturation is reached, I then code the remaining 11 interviews[30] using the coding scheme developed from the initial 14. I did reach saturation, as no new major themes emerged; I was able to structure new instances logically under an existing theme in the coding scheme.[31] Finally, I review the instances of each theme to determine which themes are common across different interview sites and also which themes are centered among certain demographic characteristics (e.g. gender, seniority).

In this chapter I describe my interview participants and my methodology for collecting interview data. I also formulate my analyses plan. In the next chapter, I

[29] I use the MaxQDA software program to code these transcripts.
[30] All of these 11 interviews except one are from the two active-duty interview sites where I had comparatively more participants than from the military service academy and civilian university.
[31] See Appendix E for my final coding scheme.

present the results of my analyses and discuss their implication for my research question.

Chapter 7: Qualitative Analyses – Results and Discussion

I present the results of my qualitative analyses in this chapter, with a primary focus on addressing the potential relationship between trust in leaders and the reporting of unethical conduct. I also explore the mechanisms underlying the relationships observed in the 2010 MPS data. Participants in my interviews reported observing a wide range of unethical conduct[32], and based on these observations they provided insight into factors affecting whether such behavior is reported or not.

I begin by presenting the major themes of unethical conduct that participants identify at their organizations. It is important to establish the types of unethical conduct observed by participants, which give context to their subsequent discussion on the reporting of such conduct. Next, I summarize reasons why participants said this unethical conduct may go unreported. After expanding on factors previously identified in secondary data analyses, such as supervisory status, leader misconduct, organizational support for anonymous reporting and individual importance placed on anonymity, I identify two new themes related to the reporting of unethical conduct; in-group preference and the severity of the observed misconduct. Finally, I explore whether trust in leaders is related to the reporting of unethical conduct.

[32] The quotations presented in this chapter were elicited in response to an interview protocol (see Appendix D) that opened with multiple questions about unethical conduct. Unethical conduct was defined as behavior that is illegal, immoral or illegitimate, with specific examples including false accountability, lying, alcohol use, cheating/plagiarizing, sexual harassment or assault, fraternization, and degrading humor. Although the interview protocol progressed through the broader topics of leadership, trust, and culture, the majority of the initial questions centered on factors related to reporting unethical conduct. The views and conclusions expressed through quotations in this chapter should not be interpreted as representing the views and conclusions, either expressed or implied, of the Department of Defense regarding unethical conduct, specifically, or leadership, trust, or culture, in general. Additionally, the reader should not draw inferences regarding the prevalence within the Department of Defense of the specific forms of unethical conduct from this discussion.

Does Unethical Conduct Occur?

After being prompted with only the definition of unethical conduct used in my interviews, all participants except one were able to give at least one example of unethical conduct they were aware of. Subsequently, after hearing a list of hypothetical negative behaviors, all participants were able to give multiple examples of unethical conduct they were aware of. By far, the most frequent theme of unethical conduct is various instances of behavior related to alcohol; this theme is identified at all interview sites.

Underage drinking is an often-identified example of this theme, particularly at the civilian university and military service academy. For example, Bob shared this observation:

> Yeah, the underage drinking is, you know, is pretty normal…I know a lot of, a lot of people do it. I don't personally but I have plenty of friends that do.

and when prompted with my examples of unethical conduct, Bill offered this:

> Yeah, definitely underage drinking. I've seen that more than once on this campus, on campus and off campus, as well.

While underage drinking itself is unethical by nature of being illegal, there are also numerous instances where the excessive consumption of alcohol led to related unethical conduct. For example, take this story shared by Brian:

> When people get drunk, every now and then there might be some disagreements. Or I seen one time, a couple times, where there's been an argument…People have, I've seen people punch people before.

and when asked about potential sexual harassment or assault Brandon had this to say:

> It happens a lot. I think that's the saddest part about the military, it happens a lot. And I think a lot of it directly correlates with the close quarters we are forced into…And of course that it ties into the alcohol culture. There's a lot of alcohol that takes place.

Finally, drinking and driving is identified as a problem at both active-duty military sites. In some cases, those who took part in this behavior are identified as receiving punishment. In other cases, there appears to be some tolerance in the military justice system based on punishment the offender receives in the civilian legal system. As Benjamin observed:

> DUIs, I have seen DUIs hidden, and by hidden I mean we had [an E6] get a DUI and the command kept it quite, and so his civilian punishment came out. Once that came out, then the command decided, "Hey, we'll take it a certain route."…so he never got punished [in the military] for having a DUI.

The fact that alcohol-related incidents are identified most frequently may be related to an informal culture that supports the use of alcohol, which is another theme that emerges at all interview sites. Brandon had this to say:

> I know [our] culture does, it allows for a lot of…alcoholism, it allows a lot of people to indulge in alcoholism because there's, the culture itself kind of revolves around our weekends.

Buster also identified an alcohol culture in his organization. When asked how pervasive he thought this culture was, he said:

> I think that's a…military thing. I think, it's a United States thing. We're pretty heavy drinkers. I think most Western nations are pretty heavy drinkers. I think the culture of the military lends itself to heavy drinking.

Bob provided further evidence of a normative alcohol culture, offering this when asked which types of unethical conduct go unreported:

> Um, so that, [underage drinking] is definitely one that, you know, it's kind of just expected that, you know, like I said, I have friends who underage drink all the time.

Buster shared his thoughts as to why an informal culture that condones the use of alcohol may exist:

> Uh… well. I think the biggest thing is the way it's viewed. If it's not interfering with your professional side of things, which, in the military is kind of the most important thing. What is your job performance?...And, um, [this is a] stressful job. A lot of people view alcohol as a stress relief. So, it's present at most informal functions in good supply.

Buster was also quick to point out that there is no official policy endorsing the use of alcohol or any peer pressure to consume alcohol, but rather it is each individual's choice. It is possible that the number of individuals partaking in the consumption of alcohol makes it easy to participate in a group setting.

Participants at each interview site also related that their organization does not formally tolerate unethical conduct related to the use of alcohol. Bill had this to say about the stance his organization takes:

> I know the university's been pushing students to take the alcohol ed[ucation] courses online before you can, it's mandatory now, so I feel like that's a big thing, just spread of information, just information on what to drink, how many ounces you take to get drunk, or stuff like that.

Alison observed that excessive drinking is formally frowned upon as it may cast an unfavorable image on her organization, and Brandon offered a more specific example of how his organization approaches unethical conduct related to alcohol use:

> All right, so in the military we have a two alcohol-related incident limit…Whether it be your fault or not.…If it happens twice, I'll get kicked out whether I did anything wrong or not…And not only that, but now they're cracking down with DUI's, one will kick you out.

It appears that a mismatch exists between formal and informal cultures where alcohol is concerned. Formally, organizations appear to discourage using alcohol to excess and have little tolerance for unethical conduct related to the use of alcohol. Despite this official stance, it is clear that the use of alcohol, in some cases to excess, is part of the informal culture at all interview sites.

Another major theme of unethical conduct that emerges is sexual harassment and assault.[33] Like alcohol-related incidents, this theme is present at all interview sites. Multiple university and military service academy participants recalled stories of sexual harassment. For example, Alison described:

> Um, for the most part. I mean, I've had friends tell me, um, that they've been like harassed in a mild way. Like, not really harassed so much as just like, you know, somebody made an inappropriate comment to them.

and Bill was able to share this story after being prompted with only the definition of unethical conduct:

> I've seen, personally, one is Peeping Toms in bathrooms, in girl bathrooms…I've seen that first hand [here] because I live in a dorm…I've heard about it through the campus news as well, that there's been a lot of Peeping Toms…reported in many different dorms, not just mine.

Some participants are also aware of instances of sexual assault; Ashley and Benjamin reported a vague awareness of rape occurring in their organizations. Two participants, both women, shared stories of friends experiencing this type of unethical conduct. In addition to recollecting a high-profile rape case that previously occurred at her organization, Alison had a friend who was "slapped…on the butt" in an unwanted manner. Andrea shared two vivid examples of this behavior at her organization. She first recalled:

> I had a friend who was picked up in a taxi to go home after she left a bar, and this taxi driver took her to a – and she had no idea where she was – an empty parking lot and said, "Pretty girls don't have to pay, but they have to pay in different ways." And locked the doors, tried to get in the back seat with her, and thank God, she had clawed his face off, pretty much, and then just ran.

and later in the interview she added:

[33] Depending on the organization, different definitions of sexual harassment and assault exist. In my research, I use the official Department of Defense definitions; the key difference being sexual assault involves physical touching.

> I had a friend who was sexually assaulted. She was raped, and she was really not okay. Went through counseling and everything for a little while and had reported who the person was and things like that.

Unlike the alcohol theme, where there appears to be a mismatch between what formal and informal cultures espouse, there is unanimous agreement across interview sites that sexual harassment and assault is not condoned. The formal culture described at all interview sites makes this clear, as Brian shared when asked what his organization's values were surrounding sexual harassment and assault:

> Yeah, so for the most part, I think they do a very good job of having people be aware of different things like sexual assault, things of that nature.

Brett added that sexual harassment and assault are not formally tolerated by his organization and that perpetrators should be severely punished.

Supporting this theme, it is apparent organizations are making an effort to encourage the reporting of sexual harassment and assault. When asked what his organization did to make it more likely for sexual harassment to be reported, Bill offered:

> [My organization] has a has a really strong program that releases information about sexual harassment, and then teaches students about it. I feel like [other organizations] aren't as far in that process as [mine] is, so I feel that it's just this knowledge…that people use to know that it's wrong, and that you should report it, and that's not okay to do.

Complementing this formal culture, participants convey that their informal culture is also against <u>blatant</u> sexual harassment and assault. Brett thought this of the members of his organization:

> But I think if you ask, if you ask [us] like what should, if it was clearly sexual harassment or sexual assault, what should you do, I think it should be the no toleration punishment against that.

and Bob shared similar sentiments:

> Um, but you know, if someone were to, obviously walk in on, on like a rape or a sexual assault or something like that I feel like, you know, most people here would do something about that. I'd, I'd like to believe that anyways.

Finally, Brad recalled a previous sexual assault case at his organization and shared how the perpetrator was hated by members of his organization for being a predator.

Despite an informal culture against blatant sexual harassment and assault, there is some confusion as to when sexual harassment crosses the line between joking and being harassment. Bob offered this insight:

> I don't think, you know, people are as in-tuned to hearing something, like, you know, I've heard uh, like a [man] say to [woman] oh, something like, you're so fine or something like that…And um, the [woman] may not say anything about it and you know, it's not a big deal. But to her it could be a big deal in that situation.

As well, Alison expressed a mistrust of the formal culture against sexual harassment and assault by some members of her organization:

> But, um, from what I've noticed, um, just talking to, um, especially the guys, um, is there's a lot of fear of getting, like, getting [charged with sexual assault]. Like, a lot of guys tend to be of the opinion that there's a lot of girls here that would falsely accuse them of sexual assault.

Alison also felt that, despite being opposed to sexual harassment and assault, people at her organization did not want to report it for the most part. This sentiment is exemplified in a story shared by Alicia where she expresses an attitude of acceptance for what she perceives as a relatively minor infraction:

> Saturday night I was in my room and one of my friends came in and was talking to me about the same perpetrator with a totally different situation. And it was just unwanted touching…he touched her, um, butt and she came and talked to me about it and wanted to know, um, if I or my roommate had experienced anything similar, you know, and we explained that we'd all been uncomfortable. But where I was going with that is the reporting, we don't, we agreed that something like that was not significant enough to go and report.

Alicia had said earlier that she viewed rape as a more serious form of sexual assault that needed to be reported.

A third major theme of unethical conduct that emerges at all interview sites is the use of degrading humor. This is one type of negative behavior I use to prompt participants (see Appendix D), and it yielded many instances. Take Benjamin's perspective on this behavior:

> Degrading humor pretty much happens on a daily basis, but I know with our [workgroup], we always say, "If this really bothers anybody, let us know, and we'll stop," because you're always just talking trash to your friends...Some people, if it does bother them, we don't, well, I don't, anyway, usually continue down that path.

Bob provided examples of different variations of degrading humor he had heard:

> Um, I do think, you know, there's a little bit of that college atmosphere sometimes. Uh, some of my guy friends or just peers in general say uh, like pretty sexist comments sometimes…I've [also] heard, I've heard like, you know, the racist jokes before…And it's, I don't think it's ever directly said to anyone. I think it's, you know, things that are said, you know, maybe behind someone's back and never directly to them.

and Bill was aware of "gay bashing" at his organization although he previously stated that the official culture welcomed diversity.

While participants often state that their formal culture does not tolerate degrading humor, the acceptance of degrading humor in the informal culture is a common theme across all interview sites. Brandon pointed out the role that degrading humor plays in his organization:

> And it's done in good fun, it allows us to go through our day with a higher moral…It allows us to enjoy our day and enjoy each other's company more because, you know, if we just moved around like robots all day, the way [our organization's] rules are set out…this would be the most depressing job in the world. So we find ways to joke amongst ourselves and we all come from different ethnic backgrounds.

He then clarified that this type of humor is acceptable within a peer group, and when questioned as to whether he had observed it outside of his peer group he said:

> I have, but I've never seen it not addressed, where it was ended right then and there…at no point do we force the jokes on anyone or continue the jokes if someone feels uncomfortable. I mean there is instances where that's happened and that's when the rules come into play.

Brandon provided further insight as to why degrading humor may be acceptable in the culture of his organization, and expressed displeasure that change was being imposed from outside the organization:

> But we live this culture that we are okay with. And there are current regulations and rules coming into effect that are asking us to change our culture that's been in effect for hundreds of years and worked. Yes, it's crude, it's very almost, you know, like a verbally barbaric…But it's okay, we're okay with it.

Finally, Brett explained how peers may tolerate degrading humor while also signaling their disapproval of it:

> I mean, if it's really bad, uh, I don't doubt that most people will call them out. If it's like something that's like, uh, I mean, it's bad but it's not that bad, I feel like most people just wouldn't laugh at it and just be like, just like that, I feel like that person would be able to figure out that they don't think it's funny, maybe I should stop.

In addition to the three major themes already discussed, participants shared other instances of unethical conduct ranging from rule breaking and favoritism to hazing and drug use. These types of unethical conduct are not prevalent across all interview sites and only mentioned sporadically. Three additional types of unethical conduct do appear at multiple interview sites, however; these include fraternization[34], false accountability and lying or cheating. While not mentioned as often as alcohol

[34] The term fraternization is used to describe a relationship between a senior and junior member of an organization that is too familiar; this relationship may be sexual, but it does not have to be.

use, sexual harassment/assault and degrading humor, their frequency merits further discussion here.

Although mentioned at multiple interview sites, fraternization is discussed more often at one in particular. Multiple participants from this organization were able to share second-hand stories of fraternization. Perhaps this behavior is best exemplified by a story Bryce shared:

> And [fraternization] is everywhere too. Like you'd be coming out of the barracks…and they'll be, you know, [senior enlisted] like tiptoeing out, taking another walk of shame, basically.

Brandon explained that this type of behavior is easily recognized and causes problems for members of his organization:

> Nine times out of ten we spot it….we can tell immediately when it's too friendly. And it causes tension within the [workgroup] because we notice favoritism, we notice, when there's so many [assignments] handed out, nobody wants to do them. And we notice when there's one person that gets out of all of them.

False accountability is also mentioned at all interview sites. Specific instances vary from site to site; one common example is completing paperwork indicating something is accomplished when in fact it is not. This type of unethical conduct varied in severity from backdating paperwork for work previously performed but undocumented to falsely signing work as completed that in reality never was. Another example of false accountability is knowingly stating someone is present although they are absent. Bo shared his exposure to this type of behavior:

> I was in the, [a unit] here on [base], and…my last chain of command got, uh, in trouble because they were reporting this person as being here [when] in reality, no one knew where he was…and he was in California. He was [away without leave].

Finally, lying and cheating are mentioned across all interview sites but seem to be most prevalent in the academic setting. Bob had this to say:

> So, um, you know, I've heard of, I've heard of plenty of stories where people lie or cheat on a test. And you know, you see it happen, you know, and you just don't report it because, you know, like a care about this person. I don't want to see something really bad happen to this person.

Andrea echoed her experience with this type of behavior:

> [J]ust recently, I took an exam, and I was talking to someone right outside the hall who I'd actually just met through a mutual friend, and … she was, like, the bathroom check… When you get to the end and you're running out of material, and going to the bathroom and kind of check your phone, check your notes really quick, then coming back.

In summary, the three most prevalent themes of unethical conduct are alcohol-related incidents, sexual harassment and assault, and degrading humor. These behaviors are common across all interview sites. Less frequently mentioned, but present at more than one interview site, are fraternization, false accountability, and lying and cheating. It is clear that unethical conduct occurs; every participant was able to recollect some form of unethical conduct in their organization. What remains to be explored are factors related to the reporting of such conduct, but I first present participants' thoughts on why such behavior goes unreported.

Why Individuals Do Not Report Unethical Conduct

Participants shared a variety of reasons why they would not report observed unethical conduct. Some of these reasons are in line with pervious literature (Miceli and Near 2002), such as not being believed, feeling that reporting will not stop behavior that is occurring, and wanting to protect the image of the organization.[35]

[35] Participants also highlighted that they would report unethical conduct to protect the image of the organization, if they could do so without the incident becoming public knowledge.

Other, more nefarious themes also emerge, such as a calculated decision that the perpetrator will not be caught and peer pressure not to report observed unethical conduct. As highlighted in the above section on types of unethical conduct, some are more accepted in the culture of the organization and this also affects whether participants would report them or not.

More so than any of these reasons, however, two themes emerge repeatedly at all interview sites that identify why participants may be less likely to report observed unethical conduct. These themes are a peer-oriented culture and self-preservation. Participants share that they would not report unethical conduct when it was bad for their friends or bad for themselves. I now explore these two themes in-depth.

A peer-oriented culture is by far the number one theme that emerges when I ask participants about the informal culture of their organization. This speaks to individuals' desires to place their concern for peers above that for their organizations. Alison clearly made this point when discussing barriers to reporting unethical conduct:

> It's so hard because they, the culture here, like, I mean, from day one when you get here, you're kind of taught to bond together with your classmates, and watch out for them…And, that can come into a lot of conflict with having to uphold responsibility, and turn people in. Like, you feel like you're betraying them by turning them in because, you know, a lot of times we have to choose between being a [friend] and following the rules, I guess.

Complementing Alison, Brett offered this insight as to why such extreme peer loyalty exists at his organization:

> Um, it's kinda you live with them for four years, you can't live off base, you go through basic training with them…So it's kind of, you just develop bonds. And then when you see people breaking rules and stuff, you're I think less likely to report it because you've grown closer to them, you know them better

> and you don't wanna deal with the consequences of that, like breaking a friendship over something, so.

Andrea highlighted a mutual understanding between peers that, when witnessing unethical conduct, one could understand the stressors that may lead the individual to behave unethically. As Andrea explained, this mutual understanding was also a detractor to reporting:

> There's a mutual understanding and solidarity among students in general, where you can kind of see where this person is coming from, because you don't know what their exam week was like. You don't know a lot about their personal…life and everything like that, the pressures and tension that they have going on…So, you can understand from a point of, just mutual understanding of what it's like to be in that situation, that it happens sometimes…So, it's like, you don't wanna, you would never wanna report something like that, because, something like that that is understandable and something that you know that you might be apt to do if you were in a similar situation.

Benjamin pointed out that interpersonal relations affect whether an individual is reported for unethical conduct. Particularly, one's reputation as a hard worker could be a barrier to reporting:

> It's actually kinda funny. I think it's more based on if you like that person or not….Yeah, I think the guy that got the DUI and then flipped it under the rug, everybody liked him, and so he never burned any bridges. He was one of the guys. He can do his job, so you didn't really care.

Bob agreed with this outlook, saying that sometimes loyalty is given to friends over the organization, and he went on to say that it is hypothetically "much easier" to report the misbehavior of a stranger or someone you "don't like."

The second major theme that emerges as to why individuals do not report unethical conduct is self-interest. When asked about potential consequences for reporting unethical conduct, participants overwhelmingly identified negative social

outcomes as the main consequence. Bill made this point as he talked about various degrees of unethical conduct:

> With regard to cheating and plagiarism, I think that would go somewhere in the middle. I think people still has moral obligations to report that sorta thing, but they don't really wanna get involved in it because I feel like it's the same reason with drinking, where you'd be like, "Oh, you don't wanna be a snitch. You don't wanna be that guy who tells the teacher that this guy just copied his homework online."

Alison shared a similar insight, although for a more serious type of unethical conduct:

> Um, I would say, ah, like as far assault goes, I would say people still don't want to report, for the most part…Um, but there's, they're mostly, I think the biggest thing, well, really the only thing they're afraid of is, um, like, peer opinions. So, like, if anyone reports an assault, they're kind of still seen as like a trouble-maker.

Another consideration is not wanting to self-incriminate, as Brett pointed out when discussing types of unethical conduct that go unreported:

> I'd say most [members of my organization] would not report underage drinking, 'cause that, 'cause they're, if they're gonna report it, they normally have some sort of involvement in it anyways, so it's kind of…They'd get in trouble themselves.

Brad agreed with this at a similar point in his interview, saying, "I feel like acting out of self-interest, if there's something that they reported but somehow affect themselves I doubt they would report it."

Related to self-incrimination, some participants felt that by not reporting more senior individuals were protecting their image. Bob had this insight:

> [T]here's a lot of people in, like, very public, forward positons…And they have a lot of people looking up to them and they, they, I feel like they care a lot about their image. So if they feel like anything could look bad on their image or, you know, they could be viewed as um, you know, you know, negatively because of the event of them reporting something then they would not report it.

Junior individuals appear concerned with the ability of their supervisor to negatively impact their work environment, which could in turn become detrimental to their ability to advance in the organization (e.g. if their access to preferable assignments was limited, future performance evaluations could suffer). Brockton had this to say:

> I mean fear of reprisal's always going to be one of the factors that's going to hinder people from reporting things.

Direct official retaliation, such as outright lower scores on a performance evaluation, is rarely identified although positive official recognition for reporting unethical conduct is mentioned at most interview sites.

Individual and Organizational Factors Revisited

In the previous chapter, I present secondary data analyses of factors related to the reporting of unethical conduct. These analyses indicate that supervisory status, leader misconduct, perceive organizational support for anonymous reporting and individual importance placed on anonymity are all significantly related to the reporting of unethical conduct. These factors also emerge as themes in my interviews. Exploring these themes could illuminate the mechanisms by which each factor is related to the reporting of unethical conduct.

The theme of supervisory status emerges at multiple interview sites, in all cases supporting my analyses of the 2010 MPS data where supervisory status is related to increased reporting of unethical conduct. When asked what types of unethical conduct are reported at his organization, Bob had this to say:

> Um, I think when it, when someone uh, of power or authority like sees, sees the mistake then something will be done about it.

While discussing what made an individual more likely to report unethical conduct, Brian shared similar sentiments in thinking that a teacher's assistant would be more likely to report observed cheating, and Andrea thought that a resident assistant in a dormitory would be more likely to report underage drinking.

Related to supervisory status are sentiments of longevity or age. Bruce had this to say about individuals who were more likely to report unethical conduct:

> I would say the more senior personnel, it was easier for them to go ahead and put that out there. Since they've been involved with the [organization], they know how the [organization] works, versus a junior [individual] that just got in and they're not sure exactly how things work.

and Brandon felt that being with his organization for so long increased his knowledge of the rules, making infractions easier to report. Benjamin thought that reporting was related to experience that comes with increased age:

> [J]ust maturing and knowing what is right and wrong, or not being afraid of, "Well, hey, I've been in long enough now. I will speak up. I'm not timid. I'm not afraid of the senior [individual] that's gonna blast my face off if I tell him, 'Hey, your program's screwed up.'"

He went on to share that he had joined his organization at a higher-than-normal age after working in another field and felt that this experience made it easier for him to speak up if he saw something that was not right.

Leader misconduct is another theme that emerges in my interviews, again supporting my analyses of the 2010 MPS data where observed leader misconduct is related to increased reporting of unethical conduct. Bruce identified leader hypocrisy when discussing types of unethical conduct more likely to be reported. After sharing a fraternization story involving senior individuals, he had this to say when asked if it would make it more likely to be reported:

> Right, correct. They should be setting the example, leading my example. I was witness to that. To where you would have one person stand up and preach just like not drinking and driving…and then you have the junior [individuals] seeing you do the same stuff you just talked about not doing. That doesn't really set a good example as you being a leader.

Organizational support for anonymous reporting is a third theme that appears at one interview site in particular. As in my secondary data analyses, participants felt that their organization's support for anonymous reporting made it more likely that unethical conduct would be reported. Bruce identified an organization-wide survey in particular as increasing his confidence in reporting:

> We just had a [climate survey] for the command on how are things ran, how's the atmosphere, everything like that…and it's supposed to be confidential…And that goes directly to the [leader of our organization]. He reviews everything and that's kind of everybody's way out of saying this is what I've been seeing going on in the [organization], this is what I'm not comfortable with.

and Benjamin pointed out another mechanism by which anonymous reporting could occur:

> Obviously, every command has an [anonymous] box, which means you can write a note, say, "Hey, I saw this. This was wrong." and then just put a note and leave it anonymous. Then, the [leader of the organization] reads it because he's the one that has the key to the box, and then he can go forward with that.

In addition to organizational support for anonymous reporting, the theme of individual importance placed on anonymity emerges. Supporting my secondary data analyses, participants who identified anonymity as important said they would be more likely to report unethical conduct when they can remain anonymous. This theme is particularly strong at one organization, as Bill shared:

> I would say that I would report these misconducts only if it's anonymous, my name doesn't get released with the people involved at all.

Bill went on to say that he would shy away from informally confronting a wrong-doer as this would compromise his anonymity. Brian said that some level of personal protection is important to him if he were to report unethical conduct, ensuring that individuals he might report on are not aware of who was making the report. While not directly mentioning anonymity, Andrea identified concepts related to it when discussing possible reporting:

> [A]t [my organization], we actually have a very large student body. And having that clout of number behind you, you know, it's easier to amass…support to kind of oppose that kind of injustice, than it would be at, say, a smaller institution, where there's less student body and just, you feel less comfortable rocking the boat…and also the fact that…we're very distance from the leadership to that point…versus at a smaller university or institution in general…[where] you're a lot more likely to interact with those people and build a different kind of relationship, where you're scared to cross them more so.

The power of anonymity is exemplified by the social media application Yik Yak, which allows users to have an anonymous conversation with those in the same geographic area. Bob identified this forum as an excellent source of "unvarnished opinion":

> But if you went on the app you could, I mean, the truth is there. I mean, what, what the problems are. And people will vent their problems anonymously on this app…it's right there…you know, if the administration really wanted to, they could just go into this app and, and see what people's common opinions are and, you know, because it's anonymous…Whereas with reporting, I mean, your name and your face is attached to that situation if you do something.

Although technically not an avenue of officially reporting unethical conduct, the benefit of anonymity it provides is clear as compared to reporting with attribution.

New Themes Identified

In addition to illuminating mechanisms underlying factors identified in my analyses of the 2010 MPS data, participants identified the themes of in-group

preference and severity of observed misconduct as related to the reporting of unethical conduct. In summary, participants said they would be less likely to report on members of their own groups, and as the severity of the observed misconduct increased that they would be more likely to report the behavior. I next cover these two themes in detail.

In considering the peer-oriented culture across interview sites, discussions surrounding the reporting of unethical conduct clearly indicate this is a factor that prevents such reporting. In Brandon's case, he defined the in-group by relative seniority:

> So when it comes to the lower enlisted, like when I say lower enlisted, that's E4 and below…we have a certain bond and we don't tell on each other unless it becomes dangerous…we're not in the business of putting each other in situations that could cost each other our careers.

Bruce discussed similar feelings when asked why he thought individuals were not reported for falsifying job qualifications they received:

> From what I've seen, I think it's more of a buddy thing. You get in with a crew, or a couple people that you're comfortable with, and they say hey man I need this qualification, I need this signature. I'm good, don't worry about it type of thing…And you know it's not the right thing to do.

Andrea also spoke about a subgroup at her organization and how being in this group discourages reporting:

> I think that, for instance, in Greek life, this is kind of all pretty much well known, but, there's definitely an incentive, like a loyalty incentive, not to report things like hazing and things like that.

There is one interview site in particular where participants' loyalty to their peers over the organization is a very clear theme. Bob had this to say about underage drinking when asked about types of unethical conduct that go unreported:

> I have friends who underage drink all the time, I'm not going to turn them in. I'm not ever going to do that, you know.

Peer loyalty at this interview site endures against one of the most severe examples of unethical conduct encountered during my interviews; sexual assault. When asked why a peer did not initially report a case of sexual assault, Alicia shared this story about a situation that was occurring in her workgroup at the time of the interview:

> Um, I think, well, first of all, I mean, probably some shame and embarrassment, but most of all he knows that with his report, this uh, [perpetrator] will now be kicked out of the academy. And no one wants to ruin someone's career.

This is the same perpetrator who Alicia had spoken of earlier that touched her friend in an unwanted manner, and the perpetrator also had a third sexual assault incident widely known of at the interview site. The fact that this most recent infraction was initially allowed to go unreported for the sake of protecting the perpetrator's career makes a strong case for peer loyalty.[36]

As seen in Alicia's story, related to peer loyalty is not wanting peers to be involuntarily separated from the organization. This surfaced in multiple interviews at her organization, including this one with Alison:

> Um, I mean, there's, I think people, it depends, like, a lot on how good of a friend you are with the person. Because the closer you are with the person who you know broke the rules, the less you want to turn them in…Because you care about them, and you know what it's going to mean. Ah, a lot of the times, especially when you get into the more serious things that could get them kicked out, like fraternization.

Andrea was hesitant to report observed cheating if the wrong-doer was a senior, given the possible threat of separation from the organization:

[36] Ultimately, Alicia and others convinced the victim of the latest incident that it needed to be reported, and the perpetrator was in the process of being held accountable for the latest incident at the time of my interview.

> It's not worth ruining that person's life to report them to the Academic Board of Integrity and things like that, to get them kicked out of school, or to, I mean, especially if they're a senior or something. This girl was a senior. Having her get so close to graduation and then have all that money just go down the drain and ripped away from her, just for checking her cell phone to remember a few things during the exam.

The theme of protecting peers from possible separation, a consequence which occurs only for more serious misconduct, is an example of the unwillingness of participants to report unethical conduct when the punishment is viewed as too severe. This theme surfaced at all interview sites. Bob shared a story of unethical conduct he was aware of:

> I mean, I, I at least know of two or three specific examples where I have friends, um, who have upperclassmen relationships and I haven't turned them in. Um, simply because I just don't want to ruin their lives, uh, over something like that, you know. I mean, they made a dumb decision, but I don't think it's worth maybe necessarily the, the punishment that would come along with it.

Benjamin had similar feelings about fraternization at his organization, not wanting to "screw over somebody's career."

Concerning severity, a second theme that emerges related to the reporting of unethical conduct is the severity of the observed misconduct. Participants at all interview sites indicated their willingness to report unethical conduct when it became severe enough. The definition of what is severe enough varied from participant to participant, however. Buster expressed the difference in terms of harm to others:

> Now if it's a situation where someone is going to hurt themselves, you put that in the system. So they can get the help they need. That's how they get the help they need.

Sharing a similar sentiment when asked at what point he would report excessive drinking, Brockton said he would report when, "somebody's life or their wellbeing

was in jeopardy or in danger." Bill felt that seeing someone bullied or in danger of alcohol poisoning would push him to formally report the behavior, while Bob's conception of severity centered around violence.

Another way in which severity is expressed is in relative degrees of behavior. In a discussion of whether or not he would report cheating in an academic environment, Bill had this to say:

> For example, plagiarism and cheating, I wouldn't [report] it if, I feel like I'd only do it if I see this personal do it multiple times, and they're getting other people to cheat, and it's expanding from themselves…If they just cheated on [one] quiz, I feel that it's not worth to report, but if they cheated on the final exam, or the MCATs, or something like that, it has bigger repercussions. I feel that duty to report that action.

A key point Bill mentioned when considering more serious cheating was the repetition of the behavior; this form of severity came up at all interview sites. In a discussion about reporting unethical conduct, Buster identified repetitive behavior in his calculus for reporting excessive drinking:

> If there's no, if all the person is, is exceptionally drunk, and it's not a pattern, a destructive, habit pattern, you know maybe, it happens once at a big party and they go home…You know, that's it, no one says anything.

Brandon also made this point about repetitive behavior:

> Now if someone makes the mistake of doing something that we find out later, they drank and drove after, and we find out after the fact, I'm not going to go tell on them. But if it becomes a pattern and even if you've gotten away with it two or three times, I would be urged to say something, only because I care about your safety.

It is interesting to note that consideration for the offender's safety also played into Brandon's views on repetitive behavior. I revisit this relationship in the discussion section below.

Is Trust in Leaders Related to the Reporting of Unethical Conduct?

In addition to exploring mechanisms underlying previously-identified factors related to the reporting of unethical conduct, I seek to determine whether trust in leaders is related to the reporting of unethical conduct. Brandon expressed how leader misconduct, a previously-identified factor, results in loss of trust in leadership; in this case trust that is not easily regained:

> I had a [senior leader] that had an affair with one of his [followers]…[a]nd she ended up being pregnant. And she got kicked out of the military, but he being a [senior leader], and they have their own little mafia, they look out for each other and it got swept under the rug for him. He's still in the military; he should have been kicked out first. But I can't trust [him] because he's crossed a boundary that's unforgivable.

Brandon went on to say that, in the case where such a conscious decision has been made, there is no way he could ever trust the senior leader again.

Still unanswered is whether such a loss of trust is related to the reporting of unethical conduct. When asked, participants expressed two conflicting themes. The first emerges at all military interview sites; with some caveats, participants would report unethical conduct to an untrusted leader if this was the only option available. Buster had this to say about his decision to report:

> If it's something that I felt, you know, strong enough to report to anyone, I would still report it to that person.

For Buster, feeling "strong enough" about the observed misconduct would lead him to report it. Brockton expressed a similar sentiment, identifying the severity of the observed misconduct as a factor:

> I mean it would depend on, yeah it would depend on the situation that I had to report, whether or not I would go to this person that I obviously don't trust as a leader to report it. If it was something serious as, on the more severe end of

> the spectrum…then I would most likely report that to that leader regardless of how much I trust them.

Other participants felt they would have no problem reporting to an untrusted leader regardless of the situation. For Bo, it was about getting it off his chest:

> I would still trust them, in order for me to report. Just to basically, like, get it off my chest…and put it in someone else's perspective…and [get it] up higher.

For Ashley, reporting work-related misconduct about someone other than herself made her confident she could go to her leadership regardless of her trust in them. Bruce echoed this feeling about reporting work-related misconduct to an untrusted leader:

> Work-wise I don't have a problem with [reporting] because work is work, and I do still have to report up, and they have a job to do. If I do report something up to one person, and they don't take action then I'll go to the next person.

Brad's comfort in reporting to an untrusted leader was grounded in perceived support by his organization:

> Um, I mean, I feel like here especially, like, with the military background and everything that's going on…I think I could report something like [stealing] to pretty much anyone and be treated, be treated well.

Whether participants felt comfortable outright or with some qualification such as the severity of the behavior, the theme of reporting to an untrusted leader is present at all military interview sites.

A second theme running counter to this, expressed more often and across all interview sites including the civilian university, is the preference of reporting to a trusted leader. When asked about reporting unethical conduct to leadership most participants began by expressing this theme; only a subset then go on to say they would report to an untrusted leader if that was the only option. More interesting than

the preference for a trusted leader are reasons why participants say they prefer this reporting option. Many identified having a good relationship with the leader as a reason. When asked why he would prefer a trusted leader, Brockton had this to say:

> Maybe I'm just in a better, um, relationship with that person. Like, like what we were saying with the, uh, maybe somebody I'm deployed with and I'm closer too.

Bob added that how much leaders care about their followers has an impact:

> I know…friends who are in other [units] who just, you know, they say [their leaders] are, you know…total dirt bags…they're not good people. Or…they don't care about them…And if they feel like that someone's not there for them, then they're going to, it's going to be very hard for them to come forward and say something.

Brian thought having an established relationship is a reason why individuals would rather report to a trusted leader, but for him the relationship is about personally liking the leader:

> Definitely, because if a student likes a teacher, you know, and enjoys a teacher's class, they're gonna be more likely to look out for the interest of the teacher…so you know, the relationship is there. Where, you know, they can let the teacher know, hey, you know, professor, I kind of saw Johnny or whoever over there doing blah, blah, blah. You might want to keep an eye on that.

Bill stated that he would be uncomfortable reporting to a leader who he did not have a personal connection with. Related to this, he felt that having a personal connection allows him to judge whether the leader would "do the right thing" if given a report.

Perception of how a leader would handle a report is identified multiple times as a reason why participants prefer reporting to a trusted leader. Brett expressed this as a function of protecting his reputation should he decide to report something:

> Um, so I think…it's because, yeah, this is something that's gonna probably cause personal ordeal with your social relationships and stuff. So, if you're, uh, if you feel comfortable enough to trust that person that they're, they won't

> reveal more about his reporting it than necessary…and that they'll do the right thing with that information, you're a lot more likely to report that.

For Brandon, having a leader who prioritizes followers when learning of unethical conduct is the determining factor:

> I just feel like in certain situations if the leader has shown a pattern of looking out for themselves…they won't look out for those [individuals'] best interests…And I would want to take it to a leader who truly and genuinely cares about the welfare of the [individual].

Brandon went on to say that he supports a leader correcting unethical conduct with an appropriate response, but not one that destroys morale or individuals' careers.

For Benjamin, the decision to report is based on the belief that the leader would actually do something about the reported behavior:

> I think it depends on the leader for me. If I know if I report something to them and they're actually gonna do something about it, whether it's a maintenance-related issue or personnel are having issues, if they're more likely it do something with it, then yeah, I'd go to that person because I know he's gonna handle it, but if I know they're not, then I'll be like, "Why am a gonna spin my wheels? It's just wasted effort."

Related to taking action is confidence that the leader would take reported unethical conduct seriously in the first place. Buster expressed this as a concern when expanding upon hypothetical reporting to a leader he had an established relationship with, feeling that the unknown of a less-trusted leader would weigh on his decision. Alison had this to say about a particular type of unethical conduct where personal accounts often differ:

> I think if you feel that your leaders will believe you…that they won't tolerate people treating you badly for it, then maybe there would be more reporting…especially with sexual assault…just because if you think your leaders are the type of people that just think everyone lies about it, then you probably aren't going to report it.

Alison added that respecting a reporter's privacy is also a factor that makes it more likely an individual would report unethical conduct to a leader, complementing Brett's insight earlier on the manner in which a leader handles a report.

Discussion

In my analyses of the 2010 MPS data, only 9.9 percent of respondents report observing "illegal or wasteful" activities. In my interviews, almost every participant is able to provide an instance of unethical conduct after being prompted with only a definition of such behavior consistent with whistle-blowing literature. Further probing resulted in rich data on observed unethical conduct ranging from themes of degrading humor and alcohol-related incidents to sexual harassment and in some cases sexual assault. Minor themes of fraternization, false accountability and lying or cheating also emerge. Although working with a small sample size, I assume this is a strong foundation from which to explore factors related to the reporting of such conduct.

My interviews address a previously unexplored relationship; whether trust in leaders is related to the reporting of unethical conduct. Participants overwhelmingly felt that it was. For a variety of reasons, a trusted leader is preferred when reporting unethical conduct. These reasons include having an established relationship with a leader based on shared time together or friendship, having a leader who cares about followers or puts the welfare of followers before his or her own, having a leader who takes reported misconduct seriously, and having a leader who takes the appropriate action following a report. Depending on the type of unethical conduct, the appropriate action may involve maintaining confidentiality. Some of these reasons

for preferring a trusted leader are identified in the whistle-blowing literature (Near and Miceli 2016) as related to the reporting of unethical conduct, and all are important for leaders to note in maximizing the chances that members of their organization will report observed unethical conduct.

When presented with only an untrusted leader as a reporting option a significant number of participants (particularly from military interview sites) indicate they would still report unethical conduct. This decision to report to an untrusted leader is in some cases moderated by the severity of observed misconduct; in other cases, no such moderation is mentioned. As well, a known factor related to the reporting of unethical conduct (e.g. leader misconduct) is identified as related to trust in leaders. Such relationships could preclude a focal relationship between trust in leaders and the reporting of unethical conduct.

In discussing reasons why unethical conduct may be reported, participants provide support for some of the factors previously identified in my secondary data analyses; supervisory status, leader misconduct, perceive organizational support for anonymous reporting and individual importance placed on anonymity. One organization in particular had multiple methods for reporting unethical conduct anonymously, and participants from this organization identify the benefits of these reporting avenues. Another outlet, the social media platform Yik Yak, provides further evidence that an anonymous reporting channel may yield increased reporting. While not an official avenue of reporting, multiple participants said that I could get an accurate picture of the informal culture at their organization by reading comments on Yik Yak.

Participants identify two major contributors to why unethical conduct may go unreported; a peer-oriented culture and self-preservation. Self-preservation is supported by the identified desire for leaders to use discretion as appropriate when addressing reported misconduct. A peer-oriented culture could explain a new theme that emerges related to the reporting of unethical conduct, a consideration for in-group preference when deciding whether to report or not. What determines this in-group preference is not consistent across participants, with explanations including similar entry times at an organization, rank and friendship. Identifying how group boundaries are drawn in an organization may be a key contributor to predicting whether observed unethical conduct is reported or not.

As well, the type of punishment an organization assigns for reported unethical conduct could play a factor in such reporting. Contributing to an in-group preference, some participants are unwilling to report a group member if the punishment is viewed as too severe. This is particularly true when punishment equates to separation from the organization. Educating organization members on the rationale behind assigned punishments, or possibly reducing the severity of the punishment for non-critical misconduct, could assist in getting individuals to report unethical conduct.

The range of unethical conduct observed in these data is related to a second new theme that emerges related to the reporting of unethical conduct; the severity of observed misconduct. As highlighted above, this severity may moderate the relationship between trust in leaders and the reporting of unethical conduct. Severity may also moderate the relationship between reporting and the in-group preference theme. In most instances, participants express an in-group preference to not report on

members of their group. Some participants indicate they would report an in-group member, however, if a line of severity was crossed. This line is expressed in different ways, such as repetitive behavior, behavior that put the safety of group members at risk, or behavior that was harmful to self or others. Which behaviors cross that severity line are not constant across participants, and may vary based on individual and organizational influences. It is possible that, for some individuals, a peer-oriented culture blurs the severity line enough to allow in-group members to engage in unethical conduct that is ultimately harmful to themselves and others.

Limitations and Future Direction

One limitation of my qualitative data is that it is only representative of the interview sites visited, and given that interview participants are not obtained via a random sample of organization members the generalizability of these data is further restricted. Despite this, new themes of in-group preference and severity of observed misconduct are identified at all interview sites and merit consideration in my factorial vignette study. A further review of the whistle-blowing literature may provide broader support for their relationship to the reporting outcome. In addition, it is possible to construct variables representing these concepts from the 2010 MPS data. I pursue both of these avenues in the next chapter.

Chapter 8: Secondary Data Analyses of Interview Themes

In the previous chapter, I identify the themes of in-group preference and severity of observed misconduct as related to the reporting of unethical conduct. Both themes emerge as having a direct relationship with reporting, and the severity theme may also moderate the relationship between reporting and both trust in leaders as well as in-group preference. One limitation of my qualitative data is that it is only representative of the interview sites visited, and given the lack of a statistically representative sample the generalizability of these data is further restricted.

To provide broader support for the relationship between reporting unethical conduct and the themes of in-group preference and severity of observed misconduct, I further review the social psychological and whistle-blowing literatures for evidence supporting these situational factors. Recent whistle-blowing literature (Miceli et al. 2012) supports the inclusion of situational measures when considering the whistle-blowing outcome. To test hypotheses that follow from this review, I construct variables representing the respective concepts from the 2010 MPS data and incorporate these variables into analyses from Chapter 5.

Theory Development and Hypotheses

Social psychological literature supports the construction of in-groups and out-groups as a potential factor in group member behavior (Turner and Reynolds 2008). In-group preference does not necessarily imply a desire to harm out-group members, as studies indicate that individuals favoring in-group members can at the same time view out-group members neutrally or even favorably (Allport 1954; Brewer 1999; Lowery et al. 2006). Group composition may affect the preference, however, with

previous research showing that ethnic majorities (Griffiths and Nesdale 2006) and women (Rudman and Goodwin 2004) exhibit a stronger in-group preference. My interview data support previous literature in that participants express an in-group preference (e.g. not reporting unethical conduct observed within the group) without seeking to harm out-group members. While greater preference based on ethnicity or gender is not evident in my qualitative data, past research merits the inclusion of these demographics as control variables when considering in-group preference.

H5: In-group preference is related to the reporting of unethical conduct, where individuals are less likely to report on members of their in-group.

The whistle-blowing literature indicates an organization's dependence on wrongdoing (as measured by the frequency, duration and severity of observed unethical conduct) is shown to influence whether it is reported or not (Miceli and Near 2002; Miethe and Rothschild 1994). Two possibilities flow from this observation; the first is that an ingrained culture of unethical conduct deters reporting as observers consider it normative, and the second is that with more severe unethical conduct comes increased reporting as it crosses some subjective line of severity for observers. My interview data seem to support the latter. Recent whistle-blowing literature demonstrates that type and moral intensity of wrongdoing correlate with whistle-blowing intentions (Chen and Lai 2014; Near et al. 2004) and moderate the impact of leadership on whistle-blowing (Bhal and Dadhich 2011). Related to the type of wrongdoing, its severity may also factor into the decision to report or not (Vadera et al. 2009).

H6: More severe unethical conduct is related to the increased reporting of such misconduct.

Data and Measures

I use the same data as in my previous secondary data analyses, the 2010 MPS. A full description of these data is found in Chapter 4. For analyses in this chapter I consider the subset of respondents who observed illegal or wasteful activities in the past 12 months (N=3,770), with a single outcome of whether the misconduct was reported or not (regardless of the reporting avenue). I retain the individual, organizational and control variables used in analyses in Chapter 5, and additionally introduce situational variables that operationalize the location and severity of observed misconduct.

For the location of observed misconduct, I consider a question asking respondents observing illegal or wasteful activities in the past 12 months, "Where did this activity originate? (Please mark ALL that apply.)" Respondents are offered the following choices: (1) Your workgroup; (2) Outside your workgroup but within your agency; (3) Another Federal agency; (4) Contactor or vendor; and (5) Other. I construct a dichotomous variable from these responses, where 0 = outside the workgroup (any answer except 1) and 1 = inside the workgroup (answer 1 by itself or in combination with other answers).

For the severity of observed misconduct, I consider a question asking respondents observing illegal or wasteful activities in the past 12 months, "How frequently did this activity occur?" with the following possible answers: (1) Once or rarely; (2) Occasionally; (3) Frequently and (4) Don't know/Can't judge. I treat the

answer "Don't know/Can't judge" as missing data. The remaining responses range from 1 to 3, and I treat them as ordinal data.[37]

Analyses

I use logit regression models for analyses in this chapter. The logit regression model I use for analyses of the dependent variable is of the general form:

$$\log(p/1-p) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4, \text{ where } p=P(Y=1)$$

where $\log(p/1-p)$ is the outcome of interest, X_1 is a set of demographic control variables, X_2 is a set of individual variables, X_3 is a set of organizational variables and X_4 is a set of situational variables. I present logit coefficients in all tables, while in written analyses I specify odds for ease of understanding. The logit regression expressed in odds (Ω) is of the general form:

$$\Omega(X) = \exp(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4)$$

with similar groupings of independent variables.

After presenting descriptive statistics for variables operationalizing the location and severity of observed misconduct, I explore their relationship to the reporting of unethical conduct. I first consider each variable's focal relationship with the outcome of interest, and then present a more complete model. As the starting point for this complete model I use the individual, organizational and control variables from Chapter 5, after which I introduce the two situational variables.

[37] I also considered a second question asking respondents to quantify the severity of observed misconduct in dollars, but large amounts of missing data preclude its inclusion in analyses.

Results

Table 8.1 presents descriptive statistics for the situational variables operationalizing the location and severity of observed misconduct.

Table 8.1: Situational Variable Descriptive Statistics (Weighted)

Situational Variables		
Location (In-group)	48.1%	
	Mean	Std.Dev.
Severity of Observed Misconduct (1-3)	2.4	0.7

While the location variable depicts an even distribution between misconduct observed in- and out-group, the severity variable is skewed towards the value representing frequently observed illegal or wasteful activity.

Table 8.2 presents a correlation matrix of situational variables with the dependent variable and with each other. Both in-group location and severity are positively correlated with reporting unethical conduct. As well, in-group location has a moderate, positive correlation with severity.

Table 8.2: Correlation Matrix for Situational Variables with Reporting Outcome

	Reported	Location	Severity
Reported	1.00		
Location (In-group)	0.06*	1.00	
Severity	0.14*	0.14*	1.00

Pairwise correlation using weighted data. *$p<0.05$ ($\alpha=0.05$)

Table 8.3 presents logit regression analyses for the outcome of reporting unethical conduct. The full model is a replication of the full model from Table 5.4, and includes both individual and organizational variables in addition to controls. Before adding situational variables to this model, I individually consider their focal relationship with the outcome of interest. Both the location ($z=5.55$, $\alpha=0.05$, two-

Table 8.3: Logit Regression Analyses of Reporting Unethical Conduct (Unweighted[b])

	Full Model	Expanded Model
Control Variables		
Hispanic Descent, Black[a], Other[a], and Years of Education included in both models (although not shown, results are substantively similar for both models)		
Individual Variables		
Supervisor Status	0.175*	0.235*
	(0.082)	(0.090)
Length of Federal Service	-0.002	-0.007
	(0.014)	(0.015)
Importance of Anonymity	0.116*	0.128*
	(0.038)	(0.042)
Organizational Variables		
Leader Satisfaction	-0.020	0.030
	(0.042)	(0.047)
Leader Behavior	-0.037*	-0.034*
	(0.010)	(0.011)
Trust in Organization	0.089	0.102
	(0.062)	(0.069)
Support for Whistle-blowing	0.064	0.067
	(0.054)	(0.060)
Support for Anonymous Reporting	0.107*	0.111*
	(0.044)	(0.048)
Protection for Whistle-blowers	0.118*	0.114*
	(0.044)	(0.048)
Situational Variables		
Location (In-group)	-	0.344*
	-	(0.081)
Severity of Observed Misconduct	-	0.326*
	-	(0.052)
Constant	0.066	-1.234*
	(0.430)	(0.502)
N	3,689	3,190
-2LL	4,682.03	3,956.34
BIC’	216.055	171.252

*p<0.05, Unstandardized coefficients, Standard errors in parentheses
a: Reference Group: White
b: Instead of weighting, department/agency controlled for (not shown)

tailed) and severity ($z=6.48$, $\alpha=0.05$, two-tailed) of observed misconduct have a significant relationship with the reporting of unethical conduct after controlling for supervisory status and department/agency. The expanded model considers these situational variables along with individual, organizational and control variables. As both situational variables maintain their significant relationship to the reporting of unethical conduct after accounting for the other variables in the model, I present the results of the complete model.

For individual variables, the results of the expanded model are substantively the same as the full model. The relationship of supervisor status with reporting unethical conduct is significant ($z=2.61$, $\alpha=0.05$, two-tailed). On average, supervisors were 1.3 times as likely as non-supervisors to report unethical conduct after accounting for other variables in the model. The relationship of the importance of anonymity with reporting unethical conduct is also significant ($z=3.06$, $\alpha=0.05$, two-tailed). On average, a one-point increase on the importance of anonymity scale is related to a respondent being 1.1 times as likely to report unethical conduct after accounting for other variables in the model.

For organizational variables, the results of the expanded model are substantively the same as the full model. The relationship of perceived support for anonymous reporting with reporting unethical conduct is significant ($z=2.31$, $\alpha=0.05$, two-tailed). On average, a one-point increase on the perceived support for anonymous reporting scale is related to a respondent being 1.1 times as likely to report unethical conduct after accounting for other variables in the model. The relationship of perceived protection for whistle-blowers with reporting unethical

conduct is also significant (z=2.37, α=0.05, two-tailed). On average, a one-point increase on the perceived protection for whistle-blowers scale is related to a respondent being 1.1 times as likely as to report unethical conduct after accounting for other variables in the model. Although the relationship with leader behavior is significant, where more observed misconduct is related to increased reporting, there is no substantive change in odds for each additional negative behavior observed.

The addition of the situational variables makes the expanded model the best fitting model (BIC'=171.252) of all considered in my analyses. The relationship of location of observed misconduct with the reporting of such conduct is significant (z=4.24, α=0.05, two-tailed). On average, respondents are 1.4 times as likely to report misconduct observed in-group as compared to misconduct observed out-group after accounting for other variables in the model. The relationship of severity of observed misconduct with the reporting of such conduct is also significant (z=6.26, α=0.05, two-tailed). On average, a one-point increase on the severity of observed misconduct scale is related to a respondent being 1.4 times as likely as to report unethical conduct after accounting for other variables in the model.

Discussion

Analyses accounting for situational variables reveal similar relationships between the reporting of unethical conduct and both individual and organizational variables. Supervisory status, greater individual important of anonymity, more observed leader misconduct, greater organizational support for anonymous reporting and greater organizational protection for whistle-blowers remain related to increased

reporting. Given their continued significance after accounting for the situational variables, these are all factors I plan to include in my factorial vignette study.

H5 predicts that in-group preference is related to the reporting of unethical conduct, where individuals are less likely to report on members of their in-group. This hypothesis is based on the social psychological literature of group behavior and themes from my interview data. Analyses of the 2010 MPS data disconfirm this hypothesis, as there is a significant, substantive relationship between increased reporting and misconduct observed in-group as compared to out-group. One possibility for this relationship is that most misconduct was observed in-group, although Table 8.1 indicates a nearly even distribution of misconduct location. Another possible explanation is that the mechanisms underlying in-group preference are not the same as those that define workgroups for federal civilian employees. For example, suppose friendship was the actual driver of in-group preference; if workgroups for federal civilian employees are not determined by friendship, then an in-group preference would not be present across workgroups. As it stands, there is something about workgroups for federal civilian employees that makes the reporting of unethical conduct more likely when misconduct is observed within them versus without.

H6 predicts that more severe unethical conduct is related to increased reporting of such misconduct. This hypothesis is based on previous whistle-blowing literature and themes from my interview data. Analyses of the 2010 MPS data confirm this hypothesis, indicating a significant, substantive relationship between reporting and increased frequency of observed misconduct. The severity theme also

emerges in my qualitative analyses as a possible moderator to the relationship of reporting with both trust in leaders and in-group preference.[38]

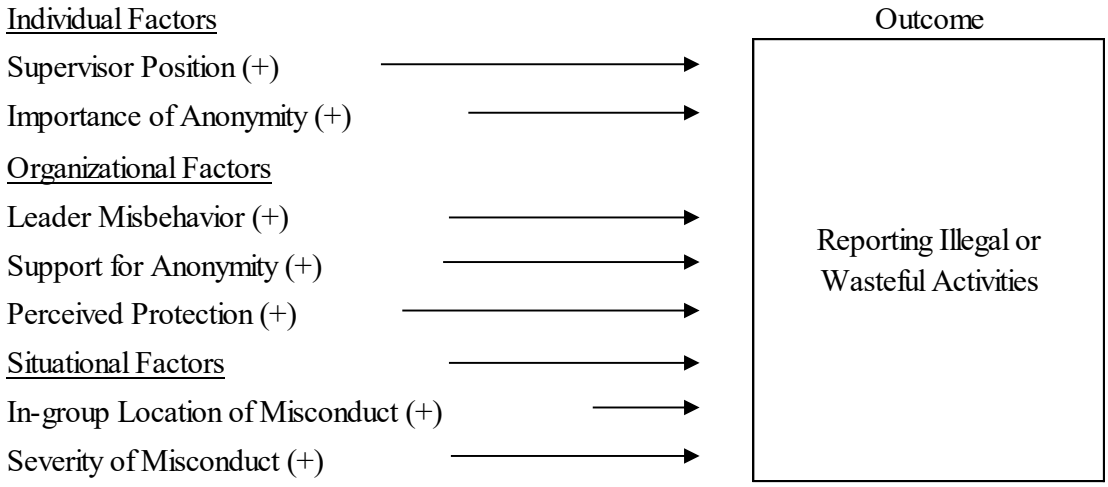
My analyses in this chapter provide broader support for the inclusion of both location and severity of observed misconduct when considering the reporting of unethical conduct. My qualitative analyses in Chapter 7 revealed these themes, but the nature of the data left some question as to their generalizability. Supported by the social psychological and whistle-blowing literatures, analyses in this chapter using representative data of federal civilian employees evidence the importance of considering both factors. In-group preference and severity of observed misconduct maintain their significant relationship with the reporting of unethical conduct after accounting for known significant factors including supervisory status, individual importance of anonymity, leader misconduct, perceived organizational support for anonymous reporting and perceived organizational protection for whistle-blowers. Accordingly, I plan to include both situational factors in my factorial vignette study.

Revised General Model for Reporting Unethical Conduct

Based on subsequent analyses of the 2010 MPS data guided by themes from my interviews, the model in Figure 8.1 is an expanded version of my previous model in Chapter 5; as before, only statistically significant relationships are shown. After including variables representing the location and severity of observed misconduct, the previous relationships of supervisory status, individual importance of anonymity, leader misconduct, organization support for anonymous reporting and organizational

[38] I tested the interaction of location and severity of observed misconduct in the 2010 MPS data with negative results.

Figure 8.1: Revised 2010 MPS Whistle-blowing Relationships



protection for whistleblowers with the reporting outcome remain valid. In addition, the added situational variables are both significantly related to reporting.[39] Situationally, both the location and severity of observed misconduct are related to the reporting of unethical conduct. Observed misconduct located in the workgroup is reported more than that located outside the workgroup, which is opposite the relationship that previous literature and my interview themes predict. An outstanding question is what actually defines group membership when considering in-group preference from past research. Finally, as seen in previous literature and my interview themes, more severe unethical conduct is related to increased reporting. Guided by these relationships, Figure 8.2 presents a revised general model for reporting unethical conduct. This revised model, supported by previous literature and my analyses of 2010 MPS and interview data, highlights that individual, organizational and situational factors all contribute to the reporting decision.

[39] Given the cross-sectional nature of the data, arrows represent assumed causal relationships that I will test in my factorial vignette study.

Figure 8.2: Revised General Model for Reporting Unethical Conduct

Limitations and Future Direction

Analyses in this chapter provide further evidence for the inclusion of in-group preference and severity of observed misconduct in my factorial vignette study. However, the relationship between trust in leaders and the reporting of unethical conduct is still unclear. Based on my interview data alone, it is unknown if trust in leaders has a unique relationship to the reporting of unethical conduct or if this possible relationship could be explained by other factors. As identified in my interviews, I also need to account for the theme of self-preservation. In the next two chapters, I present a factorial vignette study to test the focal relationship between trust in leaders and the reporting of unethical conduct while accounting for identified individual, organizational and situational factors.

Chapter 9: Vignette – Data and Methods

The decision to report unethical conduct is a social process simultaneously affected by numerous influences. A factorial vignette study is well-suited to examine this type of research question involving social judgement (Rossi and Nock 1982). In such a study, participants view a standardized vignette in which multiple factors are simultaneously manipulated in a predictable manner. The entire vignette population represents all possible combinations of factors (Wallander 2009). Participants are randomly assigned to view one or more vignette(s), a sample of the entire vignette population, allowing many manipulations to be incorporated in a single experiment (Jasso 2006).

Based on my secondary data analyses, Figure 8.1 in the previous chapter summarizes relationships between reporting misconduct and various individual, organizational and situational factors. I use these relationships as the foundation for my factorial vignette study. As well, in my analyses of vignette data I control for self-reported participant demographics.[40]

My qualitative analyses also identify the theme of self-preservation as related to the reporting of unethical conduct, and recent whistle-blowing literature supports the inclusion of personality (Miceli et al. 2012) and self-interest (Jones, Spraakman and Sanchez-Rodriguez 2014) measures when considering the whistle-blowing outcome. I use two concepts to operationalize the self-preservation theme; orientation towards Machiavellianism and orientation towards prosocial behavior.

[40] I gathered demographic information before participants were made aware of the selection criteria for participation in my factorial vignette study. As such, there is no reason to believe that participants misrepresented their reported characteristics to gain access to the vignette phase.

Previous research (Dalton and Radtke 2013; Stylianou et al. 2013) relates individuals who are higher in Machiavellianism to the decreased reporting of wrongdoing. Individuals who are higher in Machiavellianism consider primarily self-interest when making ethical decisions and use deception and manipulation to achieve their objectives.

The sociological literature of altruism indicates that social forces such as norms and social networks affect prosocial behavior (Simpson and Willer 2015), and both the individual and the situation interact when considering the effect of prosocial behavior (Simpson and Willer 2008). Previous whistle-blowing research (Dozier and Miceli 1985) categorizes whistle-blowing as a form prosocial behavior, classifying the act as a positive social behavior intended to benefit others (and potentially, but not necessarily, the whistle-blower).

Table 9.1 presents a list of all factors I consider in my factorial vignette study as potentially related to the reporting of unethical conduct.[41] I organize these factors in two categories; vignette and participant. The vignette factors are those I vary in a controlled manner across vignettes, and include organizational and situational measures from Figure 8.1 in the previous chapter. Additionally, to test the relationship between trust in leaders and the reporting of unethical conduct, I vary the level of trust in the individual to whom misconduct is reported. Finally, I vary the position and gender of the perpetrator to further test the in-group preference theme and explore possible correlation with participant characteristics. Participant factors in

[41] In seeking a compromise between including all significant factors from Figure 8.1 and limiting the number of vignette factors, I choose to omit perceived protection for whistle-blowers but include two other organizational factors (leader behavior and support for anonymous reporting).

Table 9.1: Vignette and Participant Factors

Vignette Factors
Trust in Leaders
Leader Behavior
Support for Anonymous Reporting
Severity of Observed Misconduct
Location of Observed Misconduct
Position of Perpetrator
Gender of Perpetrator
Participant Factors
Gender
Race
Age
Level of Education
Supervisor Status
Importance of Anonymity
Machiavellianism
Prosocial Behavior

Table 9.1 include individual measures from Figure 8.1 in the previous chapter, self-preservation measures and demographic characteristics.

Experimental Procedures

I used Amazon's Mechanical Turk (MTurk), a crowd-sourcing service adopted by social scientists to recruit research participants interested in completing short tasks. MTurk produces more demographically diverse samples as compared to traditional university-based settings (Paolacci, Chandler and Ipeirotis 2010; Horton, Rand and Zeckhauser 2011). However, MTurk workers tend to be younger and of higher educational attainment than survey data representative of the United States population (Huff and Tingley 2015). A recent estimate numbers MTurk workers at approximately 500,000 (Hitlin 2016), and MTurk data have proven to be of high quality based on manipulation checks, completion time, item nonresponse and lack of variation in response (Weinberg, Freese and McElhattan 2014).

For my vignette, I used a variation of a workplace scenario that research on ethical judgements (Mudrack and Mason 2013) recommends as an exemplary whistle-blowing vignette. Although recognized as superior to other vignettes in previous literature, Mudrack and Mason also identify shortcomings. One shortcoming is that the consequences of the unethical conduct are not highlighted. Explicitly stating consequences assists the participant in distinguishing between two potential unethical decisions in a whistle-blowing vignette; the decision to commit some form of unethical conduct (the desired decision to be evaluated) and the decision to report the offender (this could be seen by some participants as unethical). In addition to explicitly stating consequences, I incorporated manipulation checks to ascertain whether the consequences I stated had the desired effect of focusing the participant on evaluating the unethical conduct and not the decision to report the offender.

Another recognized shortcoming of whistle-blowing vignettes is the challenge of participants evaluating the vignette as if they were experiencing the scenario themselves. Phrasing a vignette in the second-person and asking participants what they would do leaves some question as to their emersion in the scenario, especially in the case of participants who are less likely to report unethical conduct. Instead, Mudrack and Mason recommend a third-person vignette with questions asking participants how likely they would be to take the same action as the protagonist. I used this likelihood evaluation as my outcome of interest.

My factorial vignette study occurred in two phases. In the first phase, I gathered demographic information, including employment status, and solicited

participants' views on individual and organizational factors related to the reporting of unethical conduct. Participants also completed an instrument designed to measure their orientation towards Machiavellianism. Upon completing the first phase, participants were informed they may be contacted for participation in the second phase of the study. I then used first phase data to select respondents into the second phase of my factorial vignette study. I selected only employed participants, as the unethical conduct vignette is a workplace scenario.[42] I next selected participants by gender to ensure an equal number of men and women in my second phase, in which participants answered questions on five vignettes and completed an instrument designed to measure their orientation towards prosocial behavior.[43] Selection by gender is meant to address one limitation of the 2010 MPS data, in which respondents' gender is not recorded.

Design and Participants

As shown in Table 9.1, I varied seven factors in my factorial vignette study. Table 9.2 lists these factors along with their tested conditions. Although each factor has two conditions, I did not use the supervisor/out-workgroup combination resulting in 96 possible vignette variations that participants could view. With the exception of perpetrator gender, the alternate condition for each vignette factor predicts an increase in reporting as compared to the control condition. See Appendix F for the full text of

[42] In free text responses, some first phase participants who are currently retired (and thus unemployed) relayed that their past employment experience would make their input valuable in the vignette phase. While true, I had enough currently-employed participants in the first phase to meet my needs in the second phase. I chose to use only currently-employed participants in the second phase as their connection to a workplace scenario is more salient in their lives at the time of study participation.
[43] I administered the prosocial behavior instrument in the second phase in order to prevent fatigue in the first phase. Without the prosocial behavior instrument, the first phase contained an appropriate number of questions to make response time fair for the payment agreed to by participants.

Table 9.2: Vignette Factor Conditions

	Condition	
	Control	Alternate
Vignette Factor		
-Trust in Supervisor to Whom Unethical Conduct is Reported	Low	High
-Misconduct by Supervisor to Whom Unethical Conduct is Reported	Yes	No
-Organizational Support for Anonymous Reporting	Low	High
-Severity of Observed Misconduct	Less	More
-Location of Observed Misconduct	In-workgroup	Out-workgroup
-Position of Perpetrator	Coworker	Supervisor
-Gender of Perpetrator	Woman	Man

Note: With the exception of Perpetrator Gender, the Alternate Condition corresponds to a predicted increase in reporting.

the control version of my vignette, as well as the wording changes I used for each alternate condition.

In the first phase (see Appendix G), a short advertisement on MTurk directed potential participants to a survey hosted by Qualtrics. I restricted participants to MTurk workers in the United States[44] who are at least 18 years old and had at least 97% of their previous assignments in MTurk accepted. Upon reading and agreeing to the consent form, participants were informed they would participate in a study on the reporting of unethical conduct, and were told that unethical conduct is defined as, "any action that is illegal, immoral, illegitimate or inconsistent with the values of an organization." This definition mirrors the description used in my interview protocol (see Appendix D), and in line with whistle-blowing literature (Near and Miceli 1985) is meant to specifically include immoral behavior under the umbrella of unethical

[44] As MTurk has a significant minority of workers in India, I sought to minimize cultural difference.

conduct. I expanded the definition of unethical conduct as compared to the 2010 MPS data, where respondents are only cued to consider illegal behavior.

Participants then completed the survey in Qualtrics and were subsequently verified as authentic via a unique random code received upon survey completion and entered in MTurk. Upon finishing, participants were debriefed on the type of information gathered and informed they may be contacted for the second phase of my study (but not what my selection criteria would be). Participants who successfully completed the first phase, which on average took just under 7 minutes, were paid $1.00 for their participation.[45] Due to the large number of available MTurk workers, data collection for the first phase took less than two hours. 1,175 workers began the first phase and 40 did not finish, resulting in a drop-out rate of 3.4%.

I selected all currently-employed participants passing both first-phase attention check questions[46] (N=927) for participation in the second phase of my factorial vignette study (see Appendix H). In order to obtain an equal distribution of participants by gender, men and women were directed to separate but identical versions of my second phase survey in Qualtrics.[47] Upon reading and agreeing to the consent form, participants were again presented with the definition of unethical conduct used in the first phase and informed they would view five vignettes. Participants were explicitly made aware that, although the vignettes may appear similar, no two are the same and they should carefully read each vignette.

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[45] For financial reasons, the target participation in my first phase was N=1,130 workers.
[46] My first phase survey incorporated two attention check questions that asked participants to record a specific answer. N=15 participants failed one or both of these attention check questions; I dropped these participants from consideration for the second phase.
[47] To ensure approximately 30 responses for each vignette while staying within my research budget, the target participation in my second phase was 580 workers (N=290 men and N=290 women).

Participants then randomly viewed five of the 96 vignettes.[48] Random assignment was managed by the Qualtrics program, where I specified the number of vignettes each participant should view and that Qualtrics assign the vignettes evenly to ensure sufficient data across vignettes.[49] For each vignette, participants answered five questions including manipulation checks and dependent variable measurement. After viewing the vignettes, participants completed the prosocial behavior instrument and were subsequently verified as authentic via a unique random code received upon survey completion and entered in MTurk. Upon finishing, participants were informed of the selection criteria for the second phase and were debriefed on the variations used in the vignettes. Participants who successfully completed the survey, which on average took just under 10 minutes, were paid $1.50 for their participation.

Upon initiating my second phase, 328 workers completed the vignette study in the first four days; after which, responses all but ceased. At this point, the response rate for the second phase was 35%. As this did not provide sufficient power for analyses, I sent a follow-up e-mail to all eligible workers reminding them that the second phase was open. Within a day of sending the e-mail I received sufficient responses and closed my second phase survey with a final response rate of 63%. 619 workers began my second phase survey and 38 did not finish, resulting in a drop-out rate of 6.1%. The number of responses for each vignette ranged between 28 and 33.[50]

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[48] Participants are limited to five vignettes in order to prevent fatigue in the second phase. Ideally, participants would only view one vignette to simplify subsequent analyses (see the analyses section of this chapter for further discussion). However, my research budget necessitates that participants view multiple vignettes to obtain sufficient power for analyses.

[49] By assigning the vignettes evenly, Qualtrics did not truly randomize vignette viewing. For example, in a given round of 96 vignettes if a particular vignette was chosen first it could not be viewed again until the other 95 vignettes were randomly presented.

[50] This variation in response across vignettes is partially due to dropped data from incomplete surveys. As men and women were managed by different randomizers, variation due to gender also exists.

Measures

For my dependent variable, I asked second phase participants the following question after each vignette viewed, "How likely would you be to take the same action as Sam in this vignette; that is, to report [the offender]?" Possible answers to this question are: (1) Very unlikely; (2) Somewhat unlikely; (3) Neither likely nor unlikely; (4) Somewhat likely; and (5) Very likely. I treat responses as ordinal data representing the participant's likelihood to report unethical conduct.

I separate independent variables in my factorial vignette study into two categories; vignette and participant. I construct seven vignette variables representing the vignette factors from Table 9.2. All variables are dichotomous; I code the control condition as a 0 and the alternate condition as a 1 for all seven variables.

I construct my individual independent variables from first and second phase data. In the first phase, I gathered data representing supervisory status, individual importance placed on anonymity and orientation towards Machiavellianism. For supervisory status, I asked participants, "What is your current employment status?" Possible answers to this question are: (1) Not employed; (2) Currently not employed, but actively seeking employment; (3) Employed, but <u>not</u> in a position that has supervisory responsibilities or conducts performance appraisals on other employees; and (4) Employed in a position that has supervisory responsibilities or conducts performance appraisals on other employees. I construct a dichotomous variable for supervisory status where participants answering (4) are coded as a 1 and participants answering (3) are coded as a 0; those answering (1) or (2) are coded as unemployed.

For individual importance placed on anonymity, I repeated a question from the 2010 MPS instrument asking participants, "If you were to observe or have evidence of wrongdoing, how important would it be to you that you be able to report it without disclosing your identity?" Possible answers to this question are: (1) Not important; (2) Somewhat important; (3) Important; and (4) Very important. Of note, this question is asked hypothetically and not with respect to a particular vignette. I treat responses as ordinal data.

For orientation towards Machiavellianism, in the first phase I had participants complete the Mach-IV scale (Christie and Geis 1970) that previous literature (Dalton and Radtke 2013) uses to operationalize orientation towards Machiavellianism. For a series of 20 questions (see Appendix G), I asked participants to, "read each statement carefully and then indicate the extent to which you agree or disagree with each question." Responses range from 1 = Completely disagree to 7 = Completely agree, with 4 = Neutral. Responses from 10 of the questions are reverse-coded, and I average the resulting 20 answers to construct an index representing orientation towards Machiavellianism (α=0.8492).

In the second phase, I gathered data to construct a variable representing orientation towards prosocial behavior. I had participants complete an instrument that previous research (Van Lange et al. 1997) uses to measure social value orientation. I asked participants to make nine point-distribution decisions (see Appendix H for a complete description of the instrument). Possible orientations the instrument measures include prosocial, individualistic and competitive. Participants are classified into an orientation when they make six or more consistent choices

representing that orientation. I construct a dichotomous variable representing orientation towards prosocial behavior, where participants making six or more prosocial point distributions are coded as a 1 and all others are coded as a 0.

For control variables, I gathered data in the first phase to construct variables representing gender, race, age and level of education. For gender, I asked participants, "What is your gender?" Possible responses to this question are male and female. I construct a dichotomous variable representing gender where participants answering male are coded as a 1 and participants answering female are coded as a 0.

For race, I asked participants, "What is your race/ethnicity?" Possible responses to this question include: (1) Black or African American; (2) White or Caucasian; (3) Hispanic or Latino; (4) Asian; (5) American Indian or Alaska Native; and (6) Native Hawaiian or Other Pacific Islander. These options are consistent with race categories on federal government surveys such as the 2010 MPS, with the exception of including the "Hispanic or Latino" option.[51] I allowed respondents to choose all categories that apply. Due to the large majority of my first phase respondents identifying solely as "White or Caucasian", I construct a dichotomous variable representing race where participants answering only "White or Caucasian" are coded as a 1 and all other participants are coded as a 0.

I construct an interval variable for age from a question asking participants, "What is your age?" Possible responses range from 0-100. For level of education, I asked respondents, "What is your highest education level?" Possible responses to this question include: (1) Less than a high school diploma; (2) High school, equivalent

[51] The 2010 MPS treats "Hispanic or Latino" as a separate ethnicity question.

diploma, or GED; (3) Some college credits but no degree; (4) Associates' college degree; (5) Bachelor's college degree; (6) Master's degree; (7) Professional degree (e.g. J.D., M.D., D.D.S.); and (8) Academic or scientific doctorate (Ph.D.). I treat responses as ordinal data representing the participant's level of education.

Manipulation Checks

Of the seven vignette factors, I manipulated four via differing statements in each vignette (see Appendix F); these include the gender and position of the individual committing the unethical conduct, the location of such misconduct with respect to the workgroup, and any misbehavior by the supervisor to whom such misconduct is reported. Given the factual nature of the statements in the vignettes, I assume the manipulations for these four factors are successful.

I manipulated the severity of observed misconduct by varying the type of office equipment being used at home. The less severe vignettes feature office supplies, while the more severe vignettes feature a laptop and laser printer.[52] For each vignette, I asked participants to, "assess the level of harm done…in using company property for personal use." Possible answers to this question are: (1) Very low; (2) Low; (3) Moderate; (4) High; and (5) Very high. The average response across less severe vignettes is 2.36, while the average response across more severe vignettes is 2.91.[53] I conclude that my severity manipulation is successful.

I manipulated organizational support for anonymous reporting by varying the emphasis placed on the availability of an anonymous reporting channel. In the

[52] In both cases, I presented the same consequence of the protagonist knowing, "from personal experience that they are in high demand at the office and productivity is sometime reduced as coworkers wait for resources to become available."

[53] Two-sample difference of means statistically significant (two-tailed, α=0.05).

alternate condition, I explicitly state the availability of a supported anonymous reporting channel, while I omit mentioning it in the control condition (as compared to explicitly stating such a reporting channel does not exist). For each vignette, I asked participants, "To you personally, how important would anonymity be in your decision to report such behavior?" Possible answers to this question are: (1) Not at all important; (2) Slightly important; (3) Somewhat important; (4) Very important; and (5) Extremely important. The average response across control vignettes for this factor is 4.30, while the average response across vignettes in the alternate anonymity condition is 4.26. In a free text response at the conclusion of the second phase, one participant had this to say about my manipulation, "The fact that Sam confronted the other person, then the VERY next day reported the items makes anonymity useless. Everyone would know it was Sam." This same participant offered a solution of letting some time elapse in the vignette before Sam reported the misconduct; I recommend enacting this solution in future studies using my vignette.

I manipulated trust in leadership by varying the level of trust in the supervisor to whom misconduct is reported. In the alternate condition, I explicitly state that the supervisor to whom misconduct is reported is trusted based on previous interaction, while in the control condition I state this supervisor is new at the company (as compared to stating they are untrusted). As I did not ask participants a question regarding their level of trust after viewing each vignette, I can only assume this manipulation is successful.

One feature of all vignettes is the use of a gender-neutral name for the protagonist. I chose the name Sam, which could be a nickname for either Samuel or

Samantha. As I designed an equal distribution of participants by gender, I did not want the gender of the protagonist in the vignette to affect how likely participants were to report they would take the same action as Sam. This manipulation was generally unsuccessful, as 91% of men and 89% of women reported thinking Sam was a man after viewing their five vignettes.

Finally, to gauge how participants rank the ethicality of both the decision to use company property and the decision to report this misconduct, I asked participants, "how ethical you feel each person's chosen action was in the vignette." Possible answers to these questions are: (1) Very unethical; (2) Somewhat unethical; (3) Neither ethical or unethical; (4) Somewhat ethical; and (5) Very ethical. The average response to the decision to use company property is 2.03, while the average response to the decision to report this misconduct is 4.18.[54] I conclude that participants view the decision to use company property as the primary form of unethical conduct in the vignette.

Analyses

Although I treat my dependent variable as continuous, I am unable to use ordinary least squares (OLS) regression modeling for analyses of these data. My data collection methodology had participants each view multiple vignettes, resulting in data at two distinct levels.[55] Responses are assumed to be consistent at the participant level, but not totally distinct; it is necessary to account for the relationship of both vignette and participant to the outcome of interest. The primary driver of this

[54] Two-sample difference of means statistically significant (two-tailed, α=0.05).
[55] For my analyses, the vignette level is considered level 1 and the participant level is considered level 2; so, vignette data is nested within participants.

necessity is that, by having a single participant provide dependent variable data on multiple vignettes, the OLS assumption of independent cases with uncorrelated error terms is violated. Vignette responses are not from a random sampling of unique individuals but rather nested within participants (Gideon 2012; Hox, Kreft and Hermkens 1991; Wallander 2009).

I use multi-level modeling for analyses of my dependent variable. My first model is a variance components model with fixed effects for all covariates; only the intercept is allowed to have random effects (u_{0j}) among participants. The first model is of the general form:

$$Y_{ij} = \beta_{0ij} + \beta_1 X_{1ij} + \beta_2 X_{2j}$$

$$\beta_{0ij} = \beta_0 + u_{0j} + \varepsilon_{0ij}$$

where the errors are assumed to be independent with distributions

$$u_{0j} \approx N(0,\sigma^2_{u0}) \quad \text{and} \quad \varepsilon_{0ij} \approx N(0,\sigma^2_{\varepsilon 0})$$

The βs in the equation are fixed effects, where X_1 is a set of vignette variables and X_2 is a set of participant variables. σ^2_{u0} and $\sigma^2_{\varepsilon 0}$ are the two variance parameters to be estimated, where the former is attributed to the participant and the latter to the vignette. Both the conditional distribution and marginal distribution of random effects are Gaussian (Grilli and Rampichini 2005).

I extend this model by allowing the effect of a given vignette variable to vary randomly among participants. The extended model is of the general form:

$$Y_{ij} = \beta_{0ij} + \beta_{1j} X_{1ij} + \beta_2 X_{2ij} + \beta_3 X_{3j}$$

$$\beta_{0ij} = \beta_0 + u_{0j} + \varepsilon_{0ij}$$

$$\beta_{1j} = \beta_1 + u_{1j}$$

where X_1 is the varying vignette variable, X_2 a set of other vignette variables and X_3 is a set of participant variables. In the extended model, a third variance parameter (σ^2_{u1}) is estimated for the varying vignette variable. The random effects at the participant level (u_{0j} and u_{1j}) are assumed to follow a bivariate Normal distribution with zero mean and no covariance. This model assumes homoscedastic residual variance at the vignette level (Grilli and Rampichini 2005; Rabe-Hesketh, Skrondal and Pickles 2004; Rabe-Hesketh, Skrondal and Pickles 2005).

To begin, I compare responses to demographic and individual variables for those who participated in the second phase of my study versus those who did not. Observed differences lend context to my results, as I did not randomly select participants into the second phase of my study. Next, I compare the relationship of vignette and participant variables to the outcome of interest with particular attention to trust in leaders. Based on the results of this model, I fit an extended model allowing the effect of the most substantive vignette variable to vary randomly across participants (Steenbergen 2012) and compare the relative effect sizes of various factors (Selya et al. 2012). While accounting for the nested nature of my data, my analyses reveal that both vignette and participant variables are related to the reporting of unethical conduct.

In this chapter I describe the vignette and participant data and how I construct the variables I use in my analyses. I also formulate my analyses plan. In the next chapter, I present the results of these analyses and discuss their implication for my research question.

Chapter 10: Vignette – Results and Discussion

Analyses of my vignette data provide further evidence that individual, organizational and situational factors are all related to the reporting of unethical conduct. As conceptualized in my factorial vignette study, these factors are organized at the vignette and participant level. At the vignette level, greater organizational support for anonymous reporting, more severe observed misconduct, misconduct located in the workgroup, and good conduct by the supervisor receiving the report are all related to increased reporting. At the participant level, supervisory status, greater individual importance placed on anonymity and a lesser orientation towards Machiavellianism are all related to increased reporting. I observe more substantive relationships for the severity of observed misconduct, supervisory status and orientation towards Machiavellianism. Finally, for non-supervisors greater trust in leaders is related to increased reporting.

To begin, I present the results of analyses of vignette data with particular attention to the vignette factor representing trust in leaders. Based on these results, I examine the relative effect size for each significant factor. A discussion of how the factors relate to the reporting of unethical conduct concludes the chapter.

Results

Table 10.1 presents descriptive statistics for my employed participants from the first phase differentiated by their participation in the second phase. Given that I did not randomly select participants into the second phase of my study, it is important to compare the characteristics of those who participate in the second phase versus those who did not. As compared to the participants who did not participate, those

Table 10.1: Descriptive Statistics for Vignette Study Participants

	Phase 2 Participation			
	Yes		No	
N	581		346	
Control Measures				
Gender (Man)	50.1%		59.8%	
Race (White)	81.8%		79.5%	
	Mean	Std.Dev.	Mean	Std.Dev.
Age (18-80)[a]	38.0	11.3	35.0	9.7
Level of Education (1-8)	4.2	1.3	4.2	1.4
Old Individual Variables				
Supervisor Status	33.4%		42.2%	
	Mean	Std.Dev.	Mean	Std.Dev.
Importance of Anonymity (1-4)	3.1	0.9	3.1	0.9
New Individual Variables				
Machiavellianism (1-7)[a]	3.5	0.8	3.6	0.8
Prosocial Behavior	60.6%		Not Measured	

a: Two-sample difference of means statistically significant (two-tailed, α=0.05)

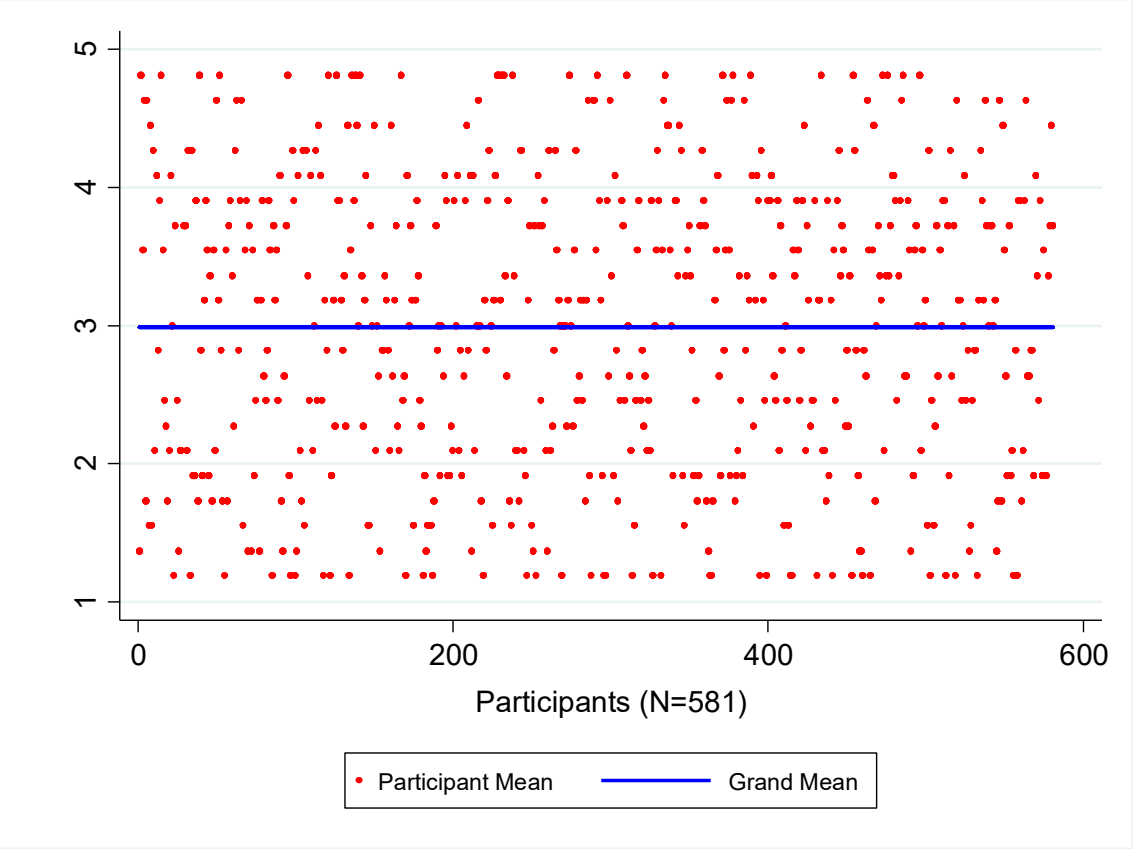
who did possess similar characteristics for the following variables: Race, Education, and Importance of Anonymity. Their scores on the Machiavellianism index are nearly similar, as well, although the different is significant.

The characteristics of the two groups differ for the following variables: Gender, Age and Supervisory Status. These differences are partially explained by the characteristics of all first phase participants and the choices I made in selecting second phase participants. When considering the total number of employed first phase participants (N=927), there are significantly more men than women and men are significantly more likely to be supervisors than women. In choosing to force an equal distribution of men and women in the second phase, I both lowered the

percentage of men and decreased the percentage of supervisors for second phase participants as compared those who did not participate.

As described in the analyses section of the previous chapter, I use multi-level modeling for analyses of my vignette data. To begin, Figure 10.1 presents a random effects analysis of variance (ANOVA) on just the outcome of interest; the likelihood that the participant would take the same action as the protagonist in the vignette and report the unethical conduct. This random effects ANOVA allows me to determine what portion of the variance in likelihood to report is due to participant differences (level 2) as compared to vignette differences (level 1). The model has 2,905 responses nested within N=581 participants.

Figure 10.1: Random Effects ANOVA of Likelihood to Report



Equating the ANOVA results to the equations from the previous chapter, β_{0ij} is the grand mean outcome score across all vignettes and β_0 is the mean outcome score for a participant across the five vignettes viewed. The level 1 error term (ε_{0ij}) represents the difference between a particular vignette outcome and a participant's mean outcome score. The level 2 error term (u_{0j}) represents the difference between a participant's mean outcome score and the grand mean. The variance associated with these two error terms allows me to distinguish what portion is due to participant versus vignette differences.

Analyses using Stata's *xtmixed* command show a grand mean (β_{0ij}) of 2.988, represented in Figure 10.1 by the blue line. For participant mean outcomes, the same figure reveals variance from the grand mean. This variance occurs at both the participant (σ^2_{u0}=1.246) and the vignette ($\sigma^2_{\varepsilon 0}$=0.646) levels; 66% of the variance is attributable to differences across participants. When compared to the null hypothesis that there is no cross-participant variation in outcome (e.g. an OLS regression model allowing only for vignette-level variation), a likelihood ratio test indicates the null hypothesis is rejected (chibar2(01)=1747.33, p=0.000) providing evidence of cross-participant variation in outcome.

Table 10.2 presents a random intercept model of the reporting outcome, having 2,905 responses nested within N=581 participants. In this model, the intercept is allowed to vary across participants while the coefficients are fixed effects. In the first model I include vignette-level factors, which are jointly significant (Wald chi2(7)=239.05, p=0.000). Individually significant vignette factors include leader behavior, support for anonymous reporting, the severity of observed misconduct, and

Table 10.2: Random Intercept Model of Likelihood to Report Outcome

	Vignette Only	Participant Only	Full Model
Vignette Factors (Level 1)			
Trust in Leaders	0.051	-	0.052†
	(0.031)	-	(0.031)
Leader Behavior	0.165*	-	0.165*
	(0.031)	-	(0.031)
Support for Anonymous Reporting	0.102*	-	0.102*
	(0.031)	-	(0.032)
Severity of Observed Misconduct	0.424*	-	0.425*
	(0.032)	-	(0.032)
Location of Observed Misconduct	0.011	-	0.013
	(0.038)	-	(0.038)
Position of Perpetrator	-0.124*	-	-0.122*
	(0.038)	-	(0.038)
Gender of Perpetrator	0.005	-	0.005
	(0.031)	-	(0.031)
Participant Factors (Level 2)			
Gender (Man)	-	-0.044	-0.043
	-	(0.097)	(0.096)
Race (White)	-	-0.018	-0.013
	-	(0.125)	(0.124)
Age	-	-0.001	-0.001
	-	(0.004)	(0.004)
Level of Education	-	0.001	-0.003
	-	(0.036)	(0.036)
Supervisor Status	-	0.220*	0.227*
	-	(0.101)	(0.101)
Importance of Anonymity	-	0.088	0.101†
	-	(0.053)	(0.053)
Machiavellianism	-	-0.307*	-0.306*
	-	(0.060)	(0.059)
Prosocial Behavior	-	0.058	0.071
	-	(0.100)	(0.099)
Constant	2.652*	3.727*	3.368*
	(0.064)	(0.382)	(0.383)
σ^2_{u0}	1.249*	1.163*	1.163*
	(0.080)	(0.076)	(0.075)
$\sigma^2_{\varepsilon 0}$	0.587*	0.646*	0.587*
	(0.017)	(0.019)	(0.017)
-2LL	8,121.31	8,312.83	8083.58

*p<0.05, †p<0.10, Unstandardized coefficients, Standard errors in parentheses

the position of the perpetrator. Comparing the remaining variance in this model with that in the random effects ANOVA, the added vignette factors account for about 3% of the total variance in the likelihood to report outcome.[56]

To account for variation in the intercept across participants, my second model introduces participant-level factors. These factors are jointly significant (Wald chi2(8)=37.53, p=0.000), with individually significant participant factors including supervisor status and orientation towards Machiavellianism. The addition of these participant factors reduces the variance associated with participants (σ^2_{u0}) to 1.163, indicating that these factors account for about 7% of the variance across participants.

As my full model includes both vignette-level and participant-level factors that are significant, I interpret the fixed effects of this model. Significant vignette and participant factors from the previous two models remain so in the full model[57], after accounting for all other factors in the full model. Compared to vignettes highlighting misconduct by the supervisor accepting a report, participants rate vignettes without such misconduct 0.17 points higher on the likelihood to report outcome. Similar differences in the reporting outcome occur when comparing higher versus lower support for anonymous reporting (0.10 point increase), more severe versus less severe observed misconduct (0.43 point increase), and misconduct perpetrated by a supervisor versus a coworker (0.12 point decrease). For participant factors, supervisors rate the likelihood to report outcome 0.23 points higher than non-supervisors and a one point increase on the Machiavellianism index is related to a

[56] I determine this percentage by calculating the reduction in the total variance ($\sigma^2_{u0}+\sigma^2_{\varepsilon 0}$) of the random intercept model as compared to the random effects ANOVA.
[57] Additionally, trust in leaders and individual important of anonymity are nearly significant.

0.31 point decrease in the likelihood to report outcome. Comparing the remaining variance in the full model with that in the random effects ANOVA, the vignette and participant factors together account for about 7.5% of the total variance in the likelihood to report outcome.

The relationship of trust in leaders with the likelihood to report outcome merits further attention, as it is nearly significant in the full model. In a reduced model of trust in leaders interacted with supervisor status, analyses reveal significant main effects; as well, these factors are jointly significant (Wald chi2(3)=7.96, p=0.047). These relationships remain after accounting for all other factors in the full model, as seen in Table 10.3. Compared to lower trust vignettes viewed by non-supervisors, non-supervisors rated higher trust vignettes 0.09 points higher on the likelihood to report outcome. This effect is non-substantive, accounting only for an additional 0.13% of the total variance in the likelihood to report outcome as compared to the full model.

The relationship of individual importance of anonymity with the likelihood to report outcome is also nearly significant in the full model and merits further attention. In Table 10.4, I modify the full model to allow a slope effect for the vignette variable representing the severity of observed misconduct. I do this to better model my data, as the severity of observed misconduct has the most substantive effect of all vignette factors in the full model. In the random slope model, an additional variance component (σ^2_{u1}) allows me to determine the variance attributed to the severity of observed misconduct.

Table 10.3: Interaction Model of Trust in Leaders with Supervisor Status

	Full Model	Interaction Model
Vignette Factors (Level 1)		
Trust in Leaders	0.052†	0.086*
	(0.031)	(0.038)
Trust in Leaders x Sup. Status	-	-0.103
	-	(0.066)
Leader Behavior, Support for Anonymous Reporting, Severity of Observed Misconduct, Location of Observed Misconduct, Position of Perpetrator and Gender of Perpetrator included in both models (although not shown, results are substantively similar to the full model in Table 10.2)		
Participant Factors (Level 2)		
Gender, Race, Age, Level of Education, Importance of Anonymity, Machiavellianism and Prosocial Behavior included in both models (although not shown, results are substantively similar to the full model in Table 10.2)		
Supervisor Status	0.227*	0.278*
	(0.101)	(0.106)
Constant	3.368*	3.356*
	(0.383)	(0.383)
σ^2_{u0}	1.163*	1.160*
	(0.075)	(0.074)
$\sigma^2_{\varepsilon 0}$	0.587*	0.586*
	(0.017)	(0.017)
-2LL	8083.58	8081.17

*p<0.05, †p<0.10, Unstandardized coefficients, Standard errors in parentheses

Table 10.4 shows a sizable variance component (σ^2_{u1}=0.633) for the severity of observed misconduct along with a logical reduction in vignette-level variance ($\sigma^2_{\varepsilon 0}$=0.429). Additionally, in this random slope model the individual importance of anonymity is significant where a one point increase on the importance of anonymity scale is related to a 0.11 point increase in the likelihood to report outcome. The random slope model best fits my vignette data (-2LL=7858.86).

Table 10.4: Random Slope Model of Likelihood to Report Outcome

	Full Model	Random Slope[a]
Vignette Factors (Level 1)		
Trust in Leaders	0.052†	0.046
	(0.031)	(0.029)
Leader Behavior	0.165*	0.167*
	(0.031)	(0.029)
Support for Anonymous Reporting	0.102*	0.110*
	(0.032)	(0.029)
Severity of Observed Misconduct	0.425*	0.418*
	(0.032)	(0.044)
Location of Observed Misconduct	0.013	0.008
	(0.038)	(0.035)
Position of Perpetrator	-0.122*	-0.126*
	(0.038)	(0.035)
Gender of Perpetrator	0.005	0.001
	(0.031)	(0.029)
Participant Factors (Level 2)		
Gender, Race, Age and Level of Education included in both models (although not shown, results from are substantively similar to the full model in Table 10.2)		
Supervisor Status	0.227*	0.244*
	(0.101)	(0.101)
Importance of Anonymity	0.101†	0.109*
	(0.053)	(0.053)
Machiavellianism	-0.306*	-0.304*
	(0.059)	(0.059)
Prosocial Behavior	0.071	0.061
	(0.099)	(0.099)
Constant	3.368*	3.372*
	(0.383)	(0.381)
σ^2_{u0}	1.163*	1.160*
	(0.075)	(0.074)
σ^2_{u1} (a: Severity)	-	0.633*
	-	(0.064)
$\sigma^2_{\varepsilon 0}$	0.587*	0.429*
	(0.017)	(0.014)
-2LL	8083.58	7858.86

*p<0.05, †p<0.10, Unstandardized coefficients, Standard errors in parentheses

Finally, Table 10.5 presents relative effect sizes for significant factors in the full model. Multi-level analyses do not allow for the computation of standardized coefficients for fixed effects. Instead, I estimate effect size by calculating the Cohen's f^2 statistic for each factor (Selya et al. 2012). Of all significant factors, the severity of observed misconduct has the largest effect.[58]

Table 10.5: Relative Effect Size for Significant Factors

	Full Model	Cohen's f^2
Vignette Factors (Level 1)		
Location of Observed Misconduct and Gender of Perpetrator included but not shown (see Table 10.2)		
Trust in Leaders	0.052†	0.368
	(0.031)	
Leader Behavior	0.165*	0.382
	(0.031)	
Support for Anonymous Reporting	0.102*	0.372
	(0.032)	
Severity of Observed Misconduct	0.425*	0.470
	(0.032)	
Position of Perpetrator	-0.122*	0.373
	(0.038)	
Participant Factors (Level 2)		
Gender, Race, Age, Level of Education and Prosocial Behavior included but not shown (see Table 10.2)		
Supervisor Status	0.227*	0.366
	(0.101)	
Importance of Anonymity	0.101†	0.366
	(0.053)	
Machiavellianism	-0.306*	0.366
	(0.059)	
See Table 10.2 for Constant and Variance Components		
-2LL	8083.58	

*p<0.05, †p<0.10, Unstandardized coefficients, Standard errors in parentheses

[58] The similar effect size for participant factors is possibly due to the random assignment design of my factorial vignette study or to the multi-level nature of my analyses.

Discussion

The most substantive finding in my factorial vignette study is the effect that the severity of observed misconduct has on the reporting decision, where more severe misconduct is related to increased reporting. Other substantive participant factors related to increased reporting include supervisory status and a lesser orientation towards Machiavellianism. Although not as substantive, vignette factors including greater organizational support for anonymous reporting, misconduct located in the workgroup, and good conduct by the supervisor receiving the report are all related to increased reporting. At the participant level, greater individual importance placed on anonymity is also related to increased reporting. Concerning my research question, greater trust in leaders is related to increased reporting only for non-supervisors.

I now discuss these findings in greater depth. As depicted in Table 9.2, I designed my factorial vignette study so that the alternate condition for each vignette factor predicts an increase in likelihood to report as compared to the control condition. The only exception is for the gender of the perpetrator in the vignette; based on the lack of gender information in the 2010 MPS data, I include this factor to explore its relationship with the reporting outcome and for possible interaction with participant gender.

In my full model, the vignette factors as a whole account for about 3% of the total variance in the likelihood to report outcome as compared the reduced random effects ANOVA. Of these factors, good leader behavior, higher support for anonymous reporting and more severe observed misconduct have the predicted effect. After accounting for the other factors in the model, participants rate vignettes 0.17,

0.10 and 0.43 points higher, respectively, on the likelihood to report outcome. A fourth factor, position of the perpetrator, has an effect opposite that expected where participants rate vignettes with misconduct perpetrated by a supervisor 0.12 points lower than vignettes where the perpetrator was a coworker. Rather than supporting the theme of in-group preference, the position factor supports the notion that fear of retaliation from an individual in power (e.g. a supervisor) may factor into the reporting decision.

The vignette factor representing trust in leaders has the predicted effect when considering only non-supervisors. Compared to lower trust vignettes viewed by non-supervisors, non-supervisors rate higher trust vignettes 0.09 points higher on the likelihood to report outcome. While this effect is small, it does highlight the additional importance that trust plays for lower-status individuals when deciding whether or not to report unethical conduct.

Other vignette factors are not related to the reporting outcome; these include the location of the observed misconduct and the gender of the perpetrator. My rationale behind including the location was to test the in-group preference theme from my qualitative analyses. In my vignettes, when the perpetrator was a coworker I vary whether he or she is a member of the protagonist's workgroup or from another workgroup. However, the discovery of the misconduct always occurs at the perpetrator's house. It is possible that my location manipulation is obscured by the constant setting for the discovery of the misconduct. Another possibility is that, similar to my secondary data analyses, workgroup membership is not a determining factor in triggering an in-group preference effect for my study participants.

The gender of the perpetrator also has no effect on the reporting outcome. This is also true when exploring the interaction between perpetrator gender and participant gender. Participant gender, along with other demographic participant factors including race, age and level of education, have no effect on the reporting outcome.

Other participant factors, including supervisor status and orientation towards Machiavellianism, did have the predicted effect on the reporting outcome. Supervisors rate the likelihood to report outcome 0.23 points higher than non-supervisors and a one point increase on the Machiavellianism index is related to a 0.31 point decrease in the likelihood to report outcome. Additionally, my random slope model indicates that individual importance of anonymity has an effect on the reporting outcome where a one point increase on the importance of anonymity scale is related to a 0.11 point increase in the likelihood to report outcome. The prosocial behavior factor did not have an effect on the reporting outcome.

Of all the factors I consider in my factorial vignette study, the one with the largest effect on the reporting outcome is the severity of observed misconduct. This is evidenced by a Cohen's f^2 statistic that is 23% greater than the next closest factor. Even after considering other vignette and participant factors, severity's effect on the reporting outcome across conditions is convincing with a 0.43 point increase in likelihood to report for participants viewing the more severe vignettes as compared to the less severe vignettes.

Limitations and Future Direction

While my factorial vignette study brings together a number of vignette and participant factors for analyses, it does have limitations. One such limitation is in the sample I obtained via MTurk, which is not representative of the general population in the United States. As seen in Table 10.1, white respondents are overrepresented as compared to the total adult population in the United States. Also, although there is a representative distribution by gender this is owing to the design of my study rather than a random sampling method. Accordingly, my vignette results alone should not be generalized beyond my sample of MTurk workers.

Free-text comments that participants voluntarily provided in the first phase of my study reveal another possible limitation. By only selecting participants who are currently employed into the second phase, I unintentionally excluded participants who in some cases had many years of experience in the workplace but are not currently employed. As one first-phase participant stated, "I am a homemaker now but have 22 years of work experience, and much experience with this topic." Another first-phase participant provided this insight, "I am unemployed, but I am retired/unemployed and I have 42 years of work experience. I could have answered [vignette] questions based on my last job." I selected based on employment status using the logic that my workplace vignette is more salient to currently-employed individuals. In hindsight, I would have been more inclusive in capturing previous work experience.

In the next chapter, I consider the results of my factorial vignette study in context with those from my analyses of the 2010 MPS data and themes from my

interviews. For some factors, the results reinforce each other providing strong support for their relationship with the reporting of unethical conduct. For other factors, a single form of analysis provides more limited support for the relationship. I also address results counter to my predictions and, when appropriate, gender considerations.

Chapter 11: General Discussion

I use multiple methods to address my research question exploring the relationship between trust in leaders and the reporting of unethical conduct. In previous chapters, I present the results of my three methods individually. In this chapter, I consider them as a whole and highlight gender considerations when interpreting the results. When relationships emerge counter to my prediction, I use previous literature to provide possible explanations for the results. Finally, based on these findings I present a final general model for reporting unethical conduct.

Sample Considerations

Before beginning a general discussion of my results, I address sampling in my research. In using three different methods to address my research question, I analyze three different samples of adults in the United States. In my secondary data analyses, this is a stratified, random sample of permanent, full-time federal employees in 24 departments and agencies of the federal government. In my qualitative section, I consider a convenience sample of available civilian and military personnel at a military service academy, a civilian university and two active-duty military sites. In my factorial vignette study, I draw from available MTurk workers over age 18 in the United States and select my vignette participants by employment status and gender. For each of my methods, these are three different samples drawn from three different populations of adults in the United States.

On one hand, having different samples limits the generalizability of my results. For each method, I base my findings only on the sample I analyze. As well, only in my secondary data analyses does random sampling allow for further

generalization to the population of permanent, full-time federal employees. With these limitations in mind, the discussions in Chapters 5, 7, 8 and 10 address applicable findings for each sample.

Theoretically, however, having different samples lends strength to my analyses. This is due to the concept of triangulation (Khan and Fisher 2014). By using multiple methods to address my research question, I am able to analyze different samples knowing the strength of one method compensates for the weaknesses of others. When findings are repeated across different samples using different methods, they provide cumulative evidence for hypothesized relationships. For each of my samples, the results are one set of observations that offer support for a more general statement of theory. By providing evidence for hypotheses and predictions derived from theory, my results may be seen as generalizable to a larger population especially if they are replicated in future studies (Lucas 2003; Lucas, Morrell and Posard 2013). The general discussion that follows seeks to capitalize on the power of triangulation.

Similarities and Differences Across Methods

To begin, I review the findings from my secondary data analyses. Guided by the literatures of whistle-blowing, power, status and attitudes, my analyses of the 2010 MPS data reveal multiple factors related to the reporting of unethical conduct. Individually, supervisor status and greater individual importance of anonymity are related to increased reporting. Organizationally, greater perceived support for anonymity and protection for whistle-blowers are also related to increased reporting. Counter to what the literature predicted, more observed leader misconduct is related

to increased reporting. Finally, situational factors related to increased reporting of unethical conduct include in-group location and greater severity of observed misconduct. I did not consider trust in leaders in my secondary data analyses due to the lack of quantifiable measures in the 2010 MPS data.

My interview data provide further evidence for the relationship between the reporting of unethical conduct and five factors; supervisor status, individual importance placed on anonymity, leader misconduct, perceived organizational support for anonymous reporting and the severity of observed misconduct. Concerning the severity of observed misconduct, which is one of the most substantive factors in my secondary data analyses, interview participants repeatedly expressed this theme as a consideration in whether they would report misconduct or not. As well, they indicated that the severity of observed misconduct may moderate the relationship between reporting and both trust in leaders as well as in-group preference.

Another theme I identify in my interview data is self-preservation. When considered alongside my secondary data, self-preservation is related to individual importance placed on anonymity, organizational support for anonymous reporting and organizational support for whistle-blowers. All of these concepts speak to the fact that, although an individual may be willing to report unethical conduct, they also consider their own well-being when doing so. It is possible that self-preservation (including anonymity considerations) may prevent an individual from saying anything out of fear of retaliation, as indicated in my secondary data analyses of reporting avenue for black respondents. It is also possible that certain organizational

policies, such as support for anonymous reporting and whistle-blowers, may overcome individual considerations and lead to increased reporting.

As in my analyses of the 2010 MPS data, participants from my interviews shared that observing leader misconduct factors into their reporting decision. Hypocrisy by those in leadership positions is a specific instance of such misconduct. Together with my secondary data analyses, this provides further evidence against the theory that a culture of silence could stifle reporting. Instead, individuals appear willing to hold those in a leadership position accountable for their actions. An exception might be if such leader misconduct involves retaliation against a whistle-blower; in that case, the misconduct may in fact suppress reporting.

One finding that differs between my secondary data and qualitative analyses is the location of observed misconduct. In my interviews, a peer-oriented culture was identified that relates to the theme of in-group preference. Participants were clear in many instances that they would not report in-group members (e.g. friends, classmates, members of similar rank).[59] Interestingly, my secondary data analyses indicate the opposite; that federal employees are more likely to report misconduct when it is observed in their workgroup. As previously discussed, one possible explanation is that the workplace does not define group membership for federal workers with respect to in-group preference. As with leader misconduct, federal workers appear willing to hold those in their workgroups accountable for their actions.

Thus far, my analyses indicate that supervisor status, the concept of self-preservation (including anonymity considerations), leader behavior, and the location

[59] Particularly severe misconduct moderated this expressed in-group preference.

and severity of observed misconduct are related to the reporting of unethical conduct. In my interviews, I also explore the relationship of trust in leaders with reporting. When presented with the option, participants were clear that they prefer to report to a trusted leader versus an untrusted leader. One caveat to this preference is that some participants, particularly in the military, expressed they would still report unethical conduct if an untrusted leader is the only option. Some participants related leader misconduct to trust in leaders, while others stated that the severity of observed misconduct may help them overcome the reporting barrier of an untrusted leader. These analyses provide partial support for my prediction that greater trust in leaders is related to increased reporting.

In my factorial vignette study, I test observed relationships from my secondary data and themes from my qualitative analyses. My vignette analyses reveal that greater trust in leaders is related to increased reporting only for non-supervisors, highlighting the additional importance that trust plays for lower-status individuals when deciding whether or not to report unethical conduct. Additionally, good leader behavior is related to increased reporting for all participants. In my vignettes leader behavior is specifically attributed to the person to whom misconduct is reported, as opposed to my secondary data analyses where leader misconduct is more of a general concept. Considering my interview themes, I constructed the vignette in this manner in an attempt to disentangle leader behavior from the concept of trust in leaders. Of the two, leader behavior has the more universal effect on reporting in my vignette analyses.

My vignette analyses support the predicted relationship of two vignette factors to the reporting of unethical conduct; organizational support for anonymous reporting and more severe observed misconduct. The severity of observed misconduct has the largest effect on the reporting outcome, with a relative effect 23% greater than the next closest factor. Another vignette factor, the position of the perpetrator, has an effect opposite that predicted by my in-group preference theme; participants said they are less likely to report unethical conduct in vignettes with misconduct perpetrated by a supervisor as compared to a coworker. I included the position of the perpetrator as another possible mechanism behind in-group preference. Rather than providing support for this proposed underlying mechanism, the position factor supports the notion that fear of retaliation from an individual in power (e.g. a supervisor) may factor into the reporting decision.

In my vignettes, one concept not related to the reporting outcome is gender. This is true for gender of the participant, gender of the perpetrator in the vignette and any interaction between the two, and is despite the fact I force an equal gender distribution when selecting participants into my vignette study. While gender may not play a role in the workplace misconduct depicted in my vignette, it is clear from my interview themes that gender does matter for certain types of misconduct. Interview participants who are women were more likely to discuss sexual harassment and assault as a form of misconduct they were familiar with, and only women shared personal stories of friends (both men and women) they were aware had experienced sexual assault.

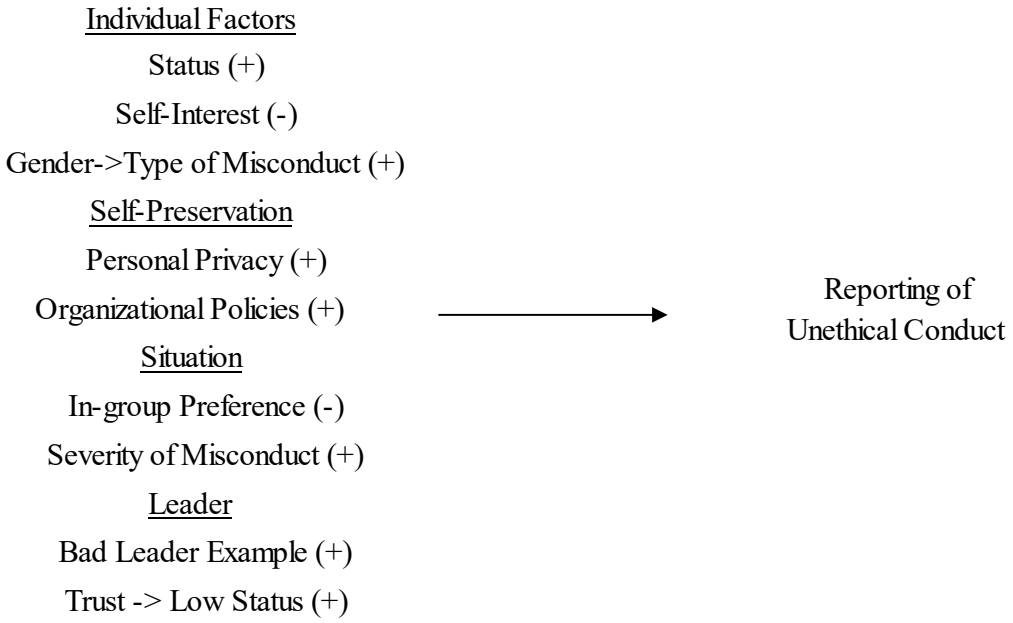
Three participant factors did have an effect on the reporting outcome in the predicted manner. Participants who are supervisors, those with a greater importance placed on anonymity and those with a lesser orientation towards Machiavellianism all are more likely to report unethical conduct. The supervisor and anonymity results reinforce relationships observed in my secondary data and qualitative analyses, providing strong evidence that supervisors and individuals placing importance on anonymity are more likely to report unethical conduct. Although not considered in other sections of my research, my Machiavellianism finding is in line with previous whistle-blowing literature.

Considering my results as a whole reveals similarities and differences across the three sections of my research. With one exception, the substantive results of which factors relate to the reporting outcome vary across methods; the exception is the severity of observed misconduct. This factor is among the most substantive in my secondary data and vignette analyses. As well, in my interviews the severity theme emerged in direct relationship to reporting in addition to moderating other themes such as trust in leaders and in-group preference.

Final General Model for Reporting Unethical Conduct

Based on the results of my vignette analyses, and considering them as a whole with my secondary data and qualitative analyses, I further revise my proposed general reporting model. Figure 11.1 presents a final general model for reporting unethical conduct. This model retains some of the structure of my revised model in Figure 8.2, while in other areas it differs based on the results of my complete findings. I choose to organize some individual factors under the theme of self-preservation, while

Figure 11.1: Final General Model for Reporting Unethical Conduct



leaving others under the broader individual category. As well, I now conceptualize two organizational factors, support for anonymous reporting and protection for whistle-blowers, as organizational policies under the theme of self-preservation.

Having summarized my findings in light of each other, in the next and final chapter I present the implications of these finding for federal workers and leaders in general. I also consider how future work on the reporting of unethical conduct could improve on my findings.

Chapter 12: Conclusion

My research addresses an important issue in society. As evidenced by the cases of Edward Snowden and CDR Strickland from Chapter 1, whistle-blowing serves an important role in exposing unethical conduct. Unfortunately, reporting such conduct is not the norm (Miethe and Rothschild 1994). My goal in researching factors related to the reporting of unethical conduct is to increase such reporting. By identifying factors related to whistle-blowing I highlight barriers to reporting that leaders and organizations may address, possibly resulting in the identification and correction of unethical conduct.

I make two contributions to the sociological body of knowledge. First, I connect the well-established literature of trust with recent research on whistle-blowing. Not only does this connection make a unique contribution to the whistle-blowing literature, but it also creates interdisciplinary ties between sociology and the fields currently attending to whistle-blowing; psychology and management. In addition to trust, the sociological literatures of power and status, attitudes, and altruism enhance my findings. Second, my factorial vignette study experimentally considers the effect of individual, organizational and situational factors on the reporting of unethical conduct, allowing me to determine the relative effect of each on the reporting outcome.

Implications for Federal Departments and Agencies

Federal departments and agencies can use my secondary data findings to improve their whistle-blowing programs. Targeting non-supervisors with increased training on the importance of stopping unethical conduct could help improve the

likelihood such employees will report observed misconduct, and realizing that greater individual importance of anonymity is related to increased reporting supports the development of more robust anonymous reporting channels. This is especially true since greater perceived organizational support for anonymous reporting is also related to increased reporting. On a positive note, federal departments and agencies should be happy that, counter to previous literature hypothesizing that a culture of silence would suppress reporting, more observed leader misconduct is related to increased reporting. This relationship supports providing positive feedback to federal employees, possibly encouraging future reporting.

Given the different avenues by which individuals may report unethical conduct, it could be argued that an organization would prefer internal reporting as it affords the chance to handle problems without involving outsiders who may impose undesired change on the organization (Near and Miceli 2016). However, internal reporting needs to be distinguished from informal reporting where a supervisor is not informed. Informal reporting by itself carries the risk that nothing is done about the misconduct, as it relies on friends or coworkers subsequently making a report to initiate action. Of particular concern in the 2010 MPS data is that, when considering participants who reported via the informal avenue, those of other race were 1.5 times as likely as white respondents to solely use this avenue. Federal departments and agencies should make a particular effort to engage this demographic, as the risk of misconduct continuing is higher when only using the informal avenue. Respondents from organizations that demonstrate support for whistle-blowing are less likely to report informally; less informal reporting is also related to increased leader

satisfaction. As well, increased leader misconduct is related to more informal and external reporting. Leader behavior and support for whistle-blowing are both factors federal departments and agencies have influence over; attending to them may give an organization the chance to address its own faults before outside intervention is required.

The finding that black respondents are more likely than white respondents to report only via external avenues and less likely than white respondents to report via informal or internal channels should be a red flag to federal departments and agencies. Black respondents are 15% of the 2010 MPS sample, a figure which slightly underrepresents their 17.5% composition of federal workers as of September 2010 (OPM 2010). Considering that black respondents report observing significantly more leader misconduct than white respondents, the fact they are more likely to only report via external avenues is a barrier to federal departments and agencies identifying and potentially correcting leader misconduct within their organization. Assuming these departments and agencies have the will to correct identified leader misconduct, they should want every member of their organization to feel comfortable reporting within the organization.

More concerning are the reasons black respondents identify are influencing their decision to report hypothetical unethical conduct. Across multiple measures, fear of retaliation is commonly expressed; this is reinforced by the retaliation experiences of actual black whistle-blowers. Other reasons include belief that the misconduct would continue even if reported and a lack of knowledge on whom to report to. These items point to a lack of knowledge among black respondents about

the reporting process, a lack of trust that reports would matter, and a lack of trust that reports would be handled without retaliation targeting the reporter. Training on the reporting process seems like the easiest of the three to address, while the other two are less straightforward.

Implications for Leaders

In summarizing 30 years of whistle-blowing research, recent literature (Near and Miceli 2016) makes the case that familiarity with the reporting process can help managers avoid external reporting and the associated costs to their organization. Managers are encouraged to investigate allegations, make the results know to those involved in the incident, correct problems that are identified and avoid reprisal against whistle-blowers. Some of these findings are echoed by my interview participants as reasons they would rather report to a trusted leader, including belief that a trusted leader takes reported misconduct seriously and takes the appropriate action following a report.

My data as a whole provide leaders an addition consideration for reporting with respect to findings on the severity of observed misconduct. This is one of the most substantive factors from my secondary data analyses, frequently mentioned by my interview participants and the vignette factor with the greatest relative effect on the reporting outcome. As expressed by my interview participants, which behaviors cross that severity line are not constant across participants and may vary based on individual and organizational influences. Leaders who can influence how severe their subordinates view a particular type of unethical conduct, possibly by personal

example or supporting organizational policies, may be able increase the reporting of this conduct by their followers.

My interview data provide further insight for leaders, particularly with respect to increasing trust, that may encourage increased reporting. When asked to share their views on who their leaders are, my interview participants relate two broad perspectives. The first centers around position; multiple participants from each interview site identified leaders as those in supervisory roles over them. In the case of military participants, this is usually a squad leader or unit commander. Students at the civilian university frequently mentioned professors or academic advisors. The second perspective is more relational, where participants focused on personal connections and mentors. Buster made this distinction:

> There's people that are technically my subordinate that I would say, lead me. [My senior enlisted leaders] know a lot of things I don't. Good mentors. So just people that can mold your behavior, not so much direct it. That would be what I would say are the leaders in the command.

Brian singled out peer leadership as important in helping other students through their days, and Bill highlighted this difference between positional and relational leadership:

> Some of my professors, they know me, I know them, but just by name, and that's pretty much it. I come to the lecture, I come to the lab, and leave, so I don't talk to them afterwards. I don't see them as a leader personally…[but] my professor in one of my classes. This past year, she also became my mentor. She helped me a lot with understanding, with my questions about grad school, with questions about taking the GRE, and doing research in psychology, all that stuff...I've talked to her about personal issues, as well.

It is in discussing leaders through the lens of personal connections and mentorship that participants provided valuable insight into methods by which leaders may increase the trust of their followers. Stated reasons participants would prefer reporting to a trusted leader include having an established relationship with a leader

based on shared time together or friendship, and having a leader who cares about followers or puts the welfare of followers before his or her own. The following interview themes expand on how the personal leader-follower relationship may increase trust.

One major theme is that leaders should get to know their subordinates personally. Brett shared this though concerning fellow cadets:

> And then in cadets, you know them a lot better, you know them on a personal level, so I'd say I really trust most cadets here.

He went on to say that "sharing their weaknesses" and "being…honest and personal" go a long way towards increasing trust.

Brian felt that being friendly and transparent are important to increase trust, as he shared in this story about a professor at his university:

> [T]hose professors that are a little more transparent are gonna' talk about things on all different levels that may not be the most professional things to talk about, but they're still relevant. Those are the ones where you have more trust towards them, or they seem like they're more trustworthy.

At the same interview site, Bill also felt that trust comes from a personal connection with an individual.

The theme of time also emerges as related to increasing trust. Leaders should not expect trust to be immediate, as Bill related:

> I didn't trust her right away. I mean, you was kinda' hesitant about going to her and talking to her about personal issues because she's a professor, and I wanted to keep it professional, but she was very open about it. She became a really close mentor to me. Yeah, over time, definitely, it built up.

He summed up the story by expressing that trust cannot be built overnight.

Related to time, shared experience over time is another way to increase trust. When asked whom he would trust with non-work issues, Brockton had this to say:

> Just like…a closer group like my, uh, people that I've been deployed with...because when you're on a detachment or deployment, you're gonna' naturally be closer with those people. It's...a much smaller group of people. So like, you're gonna' develop more relationships with those people...'cause you- you have to live with those people when you're in a situation like that...you're with them 24/7.

He finished by equating increased trust to the extended time he spent with people on deployment.

A final theme related to increased trust is setting a good example. Participants at all interview sites shared this as a way that leaders can increase trust with their followers. Ashely expressed this about one of her leaders:

> And when you see things like [hard work], you see somebody that I can look at them and…say that- she's living…by example, showing what the creed is saying you should do.

Brad also felt that setting a good example and following the rules are ways for leaders to increase trust. Alison provided specific ways leaders can set a good example, including not tolerating harassment or crude humor towards others.

Competence in one's job was commonly shared as another way to set a good example. Bill put it this way:

> I trust [my advisor]…to help me select the right classes for my major and minor so that I graduate on time…I trust that she knows what she's talking about, and my professor would know what she's talking about when she's helping us with the research questions.

Buster also expressed that leaders need to know their job well enough to do it, and to be able to give direction to their subordinates.

Other concepts from my interview data related to increasing trust include treating information confidentially when appropriate, having good interpersonal skills and having leaders who put the interests of their followers ahead of their own. My

interview participants also shared ways that leaders can decrease trust. Some are the exact opposite of the increasing trust themes, including not leading by example, perceived incompetence in the assigned job, breaking confidentiality and perceived negative motives.

Two other themes are most prominent as related to decreased trust; leaders who do not support their followers and unethical conduct by leaders. Concerning not providing support, Brocton shared this example of what would decrease his trust in leaders:

> I would say [if] someone asked me to do something that it wasn't- either it wasn't my job or I didn't know exactly how to do it- and then I go to one of my [leaders] and I ask them, "Hey, I know you know how to do this, would you mind pulling this up or help me source this out for this person?" And they say, "No. You can find someone else to do it."

Ashley felt leaders who merely supervise their subordinates doing work without pitching in when appropriate are less trusted, and Bill felt the same of leaders who might let him down by saying one thing and doing another. Brandon provided this specific example that caused distrust for him:

> [A] good leader is someone that stands up for his platoon even when it's against someone higher rank[ing] than them…But we have certain [enlisted leaders] that just take whatever's thrown at them, because they say, oh I guess they figure I don't have to do the manual labor. My soldiers are going to do it…They'll get it done and I look good for it…And so then we lose trust in him because we're trusting you to look out for our best interests.

The second major theme related to decreased trust is various forms of unethical conduct by a leader. When asked what would cause leaders not to be trusted, Alison shared these examples of such conduct:

> Um, I guess if like I saw them doing irresponsible things, or like if they started to, like, you know, drink a lot on school nights, and be late to formation.

She separately expressed that lying and favoritism would also cause leaders not to be trusted. Brad felt that leaders who go on a "power trip" or talk down to their subordinates in a degrading manner also merit less trust. Brandon provided this powerful example of unethical conduct he witnessed:

> I had a [senior enlisted leader] that had an affair with one of his soldiers…she ended up being pregnant. And she got kicked out of the military, but he being a [senior enlisted leader] and they have their own little mafia, they look out for each other and it got swept under the rug for him. He's still in the military; he should have been kicked out first.

Brandon went on to say that he could not trust his senior enlisted leader because he crossed a boundary that is "unforgivable."

Brandon's unwillingness to forgive highlights another important aspect of trust; how does a leader regain trust once it has been lost? Like Brandon, a few other participants said it would be hard to regain trust once lost. This was particularly true for more severe breaches of trust. The most commonly expressed theme for regaining trust is a change in behavior. Leaders who apologize, take responsibility for their actions, and correct the behavior that caused the breach of trust might have the possibility of regaining trust with their subordinates. Participants also point out that this process takes time, and open communication throughout is necessary.

One final aspect of my interview data is relevant for leaders who want to encourage the reporting of unethical conduct. When asked what leaders can do to increase reporting, participants focused on themes similar to those shared when discussing trust. To encourage reporting, leaders should care about their subordinates without expressing aloofness or arrogance, put their subordinates' needs before their own, listen well and have good people skills, take reports seriously and not disregard

reported incidents for self-serving reasons, seek the knowledge and experience necessary to address the situation, handle the report in a professional and objective manner and avoid draconian responses.

Limitations and Future Direction

As mentioned in the discussion sections of my secondary data and vignette analyses, I am unable to replicate the in-group preference finding from my qualitative analyses. The in-group preference theme was transmitted very clearly by my interview participants, who expressed their unwillingness to report unethical conduct by those they considered friends, those they considered classmates (in the case of the military service academy and civilian university) and those of the same rank (in the case of military participants). Another possible group membership is in the workplace, as this vignette participant expressed in a free-text comment:

> [Reporting is a] very tough decision to make regarding other employees. Nobody should steal, that is the bottom line, but I also would feel equally bad about hurting someone's career.

My initial failed test of this theme involves the 2010 MPS data, where in-group membership could be operationalized by workgroup. I conclude that, for federal workers, workgroup membership did not trigger the in-group preference. I also pursue workgroup membership as a factor in my vignette analyses, again with negative results. In hindsight, I would have focused on two different group boundaries; shared experience and friendship. In re-examining my qualitative data, these two concepts better encompass what I summarize as an in-group preference theme. Instead of varying workgroup membership, future vignette studies should

vary whether the protagonist is friends with the perpetrator or whether they have some sort of shared experience at the company.

Future studies should also vary the type of misconduct in the vignette. This is supported by previous whistle-blowing literature (Near et al. 2004), but in my factorial vignette study I chose to only pursue the severity theme from my qualitative analyses. By also varying the type of misconduct, individual factors such as gender could possibly be made relevant. As evidenced by my interview data, gender matters for misconduct such as sexual harassment and assault. In future vignette studies, two degrees of this type of misconduct could be used; sexual assault and rude sexual jokes. By varying both the type and severity of misconduct, the relative effect of gender to other reporting factors could be determined.

Moving forward, sociology is well-positioned to make further contributions to the whistle-blowing literature because of its focus on group processes. Specifically, my negative findings for in-group preference and participant gender merit further attention. Future work reexamining these two factors could provide evidence for their relationship to the reporting of unethical conduct. Such potential findings would shed additional light on the mechanisms underlying the decision to report unethical conduct.

Appendices

Appendix A – 2010 Merit Principles Survey Weighting Methodology

Survey Weighting

Post-Stratification weighting is designed to compensate for that fact that persons with certain characteristics are not as likely to respond to the survey. For example, historically supervisors in the Federal government have a higher probability of responding than non-supervisors and may respond at a rate of 60/40 that of non-supervisors. Because the survey over-represents supervisors to and under-represents non-supervisors in the population a weight is used to compensate for this bias.
There are many respondent characteristics that are likely to be related to the propensity to respond. However, the Merit Principle Survey, like most other large surveys of the Federal government weight only on Agency and Supervisory status.

The Merit Principles Survey 2010 data set available for public use includes a weighting variable named STRAT_Weight. We recommend that any analyses conducted to make government-wide generalizations be weighted using this weighting variable.

Survey Data Analysis: Calculating and Interpreting Weights

- Only need one set of weights for all analyses
- Weights are based on agency return rate and size of workforce
- Formula for determining weights from Kraut (1996) Organizational Surveys:

  weight = W1/W2

  where W1 =strata population/total population W2 = # of strata returns/total # returned

  example: Forest Service population = 24,723
  Total population = 1,404,106
  Forest Service returns = 273
  Total returns = 13,657
  WI = 24,723/1,404,106 = .017607645

  W2 = 273/13,657 =.019989749
  weight = Wl/W2 =.017607645/.019989749 =.88083372

- The only time you will not want to use weights is if reporting data within a single stratum.
- Response rate formula for response rate = # returns/# delivered

  example:
  Forest Service = 273 returned surveys, 741 delivered
  surveys return rate = 273/741 = .36842 = 37%

Appendix B – 2010 MPS Instrument[60]

MERIT PRINCIPLES SURVEY 2010
U.S. MERIT SYSTEMS PROTECTION BOARD

Dear Federal Colleague:

Your opinion counts! The U.S. Merit Systems Protection Board (MSPB) asks that you take a few minutes to participate in our Merit Principles Survey 2010, a Government-wide survey of Federal employees that covers a variety of workforce issues, including prohibited personnel practices and whistleblower protections issues, along with other workplace issues that impact employees' abilities to carry out the missions of your agency. Because you are part of a random sample of Government employees, your views about your work and work environment will represent those of the larger Federal workforce. This is an opportunity for you to inform policy by voicing your opinions and concerns about workforce issues.

This survey is an important part of MSPB's responsibility to assess the soundness of Federal merit systems. Your responses will help us recommend to the President, Congress, agency leaders, and other decision makers how to improve the Federal workplace. The information you share will make a positive difference!

Your responses to this survey are voluntary and strictly confidential. Only MSPB staff and our survey support contractor staff will have access to the surveys and no data will be disclosed to anyone that could be used to identify individual participants.

On average, the survey will take about 30 minutes to complete. It may be completed at your work site or at home. Additional information about the Merit Principles Survey is available by clicking www.mspb.gov/studies. If you have questions about this survey, please email us at MPS2010@mspb.gov or call our survey hotline at 1-888-581-7922.

Thank you! We appreciate your help.

Sincerely,

John Crum, Ph.D.
Director, Office of Policy and Evaluation

[60] I only present the portions of the instrument containing questions used for data in my research.

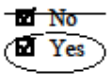
Privacy Statement

MSPB wants to assure survey participants that your involvement in the Merit Principles Survey 2010 is both voluntary and confidential. This Privacy Statement identifies MSPB's authorization to conduct the survey and explains how we will manage the data we receive.

- The purpose of collecting this information is to study how well the Federal Government is managing its workforce in adherence to the merit system principles. The results of the survey will be shared with the President, Congress, and other Federal decisionmakers to be used in developing policy that supports both merit and mission accomplishment.
- Collection of the information is authorized by 5 U.S.C. § 1204.
- Your responses to this survey are completely voluntary. There is no penalty if you choose not to participate. However, we encourage your participation to ensure that our data is complete and representative of the Federal workforce.
- Only MSPB staff and our survey support contractor staff will have access to individually completed surveys. In accordance with the Privacy Act of 1974 (Public Law 93-579), no data will be disclosed that could be used to identify individual participants.

Marking Instructions

- Place a √ in the box next to your response.
- Please use a No. 2 pencil or blue or black ink.
- Please print when you write in your response.
- To change your answer, cross out the incorrect answer and put a √ in the correct box. Also draw a circle around the correct answer.



Definitions of Survey Terms

Executives are members of the Senior Executive Service or equivalent.

Leaders are an agency's management team. This includes anyone with supervisory or managerial duties including supervisors, managers, and executives.

Organization means an agency, office, or division.

Supervisors are first-line supervisors who do not supervise other supervisors; typically those who are responsible for employees' performance appraisals and approval of their leave.

Team leaders are those who provide employees with day-to-day guidance in work projects, but do not have supervisory responsibilities or conduct performance appraisals.

Work unit means an employee's immediate work unit headed by the employee's direct supervisor.

Demographics

1. **How many years have you been a Federal civil service employee?**
   - ○ Under 1 year
   - ○ 1-3 years
   - ○ 4-7 years
   - ○ 8-11 years
   - ○ 12-15 years
   - ○ 16-19 years
   - ○ 20-23 years
   - ○ 24-27 years
   - ○ 28-31 years
   - ○ 32-35 years
   - ○ More than 35 years

2. **Are you Hispanic or Latino?**
   - ○ Yes
   - ○ No

3. **Racial category or categories in which you most belong? (Please mark ALL that apply.)**
   - ○ American Indian or Alaska Native
   - ○ Asian
   - ○ Black or African American
   - ○ Native Hawaiian or Other Pacific Islander
   - ○ White

4. **What is your current education level?**
   - ○ Less than a high school diploma
   - ○ High school, equivalent diploma, or GED
   - ○ Some college credits but no degree
   - ○ Associates' college degree
   - ○ Bachelor's college degree
   - ○ Master's degree
   - ○ Professional degree (e.g. J.D., M.D., D.D.S.)
   - ○ Academic or scientific doctorate (Ph.D.)

5. **W hat is your Supervisory status?**
   - ○ Non-Supervisor (You do not supervise other employees)
   - ○ Team Leader (You are not an official supervisor; you provide employees with day-to-day guidance in work projects, but do not have supervisory responsibilities or conduct performance appraisals)
   - ○ Supervisor (You are responsible for employees' performance appraisals & approval of their leave, but you do not supervise other supervisors.)
   - ○ Manager (You are in a management position and supervise other supervisors.)
   - ○ Executive (Member of the Senior Executive Service or equivalent)

6. **Under what pay system are you working?**
   - ○ Non-Supervisor (You do not supervise other employees)
   - ○ General Schedule
   - ○ Wage Grade
   - ○ Executive (Senior Executive Service)
   - ○ Other

7. **If you selected other, which best describes your pay plan?**
   - ○ Occupation-specific pay plan
   - ○ Agency specific pay performance or pay banding system (wide bands with progression based primarily on performance ratings)
   - ○ Agency specific, but similar to the General Schedule (pay system of narrow grades and steps with progression based primarily on tenure)
   - ○ Not sure or other

8. **What is your parental status? (This includes biological parent, adoptive parent, stepparent, foster parent, custodian of a legal ward, in loco parentis over, or actively seeking custody or adoption of a person under the age of 18, or 18 or older but incapable of self-care because of physical or mental disability.)**

   ○ I am a parent
   ○ I am not a parent

9. **Do you have caregiving responsibility (though not in the role of "parent" as described above) for a person 18 years or older, who may or may not live with you, (e.g., a related adult such as a parent, grandparent, aunt, uncle, sibling, step or half relation, in-law, or unrelated adult with whom you have a legal or otherwise significant relationship, etc.) AND who is incapable of, or needs significant assistance with self-care, transportation, household management, or other similar support.)**

   ○ I am a caregiver of such a person
   ○ I am not a caregiver of such a person

Engagement

Please indicate your level of agreement or disagreement with the following statements.

	Strongly Agree ↓	Agree ↓	Neither Agree Nor Disagree ↓	Disagree ↓	Strongly Disagree ↓	Don't Know/NA ↓
1. My agency is successful in accomplishing its mission	o	o	o	o	o	o
2. The work I do is meaningful to me	o	o	o	o	o	o
3. My work unit produces high quality products and services	o	o	o	o	o	o
4. Overall, I am satisfied with my supervisor	o	o	o	o	o	o
5. Overall, I am satisfied with managers above my immediate supervisor	o	o	o	o	o	o
6. I know what is expected of me on the job	o	o	o	o	o	o
7. My job makes good use of my skills and abilities	o	o	o	o	o	o
8. I have the resources to do my job well	o	o	o	o	o	o
9. I would recommend my agency as a place to work	o	o	o	o	o	o
10. I have sufficient opportunities (such as challenging assignments or projects) to earn a high performance rating	o	o	o	o	o	o
11. Recognition and rewards are based on performance in my work unit	o	o	o	o	o	o

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/NA
12. I am satisfied with the recognition and rewards I receive for my work	O	O	O	O	O	O
13. I am given a real opportunity to improve my skills in my organization	O	O	O	O	O	O
14. I am treated with respect at work	O	O	O	O	O	O
15. My opinions count at work	O	O	O	O	O	O
16. A spirit of cooperation and teamwork exists in my work unit	O	O	O	O	O	O
17. At my job, I am inspired to do my best work	O	O	O	O	O	O
18. My supervisor provides constructive feedback on my job performance	O	O	O	O	O	O
19. My supervisor provides timely feedback on my job performance	O	O	O	O	O	O
20. I have the opportunity to perform well at challenging work	O	O	O	O	O	O
21. How likely is it that you will leave your agency in the next 12 months?	O	O	O	O	O	O

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/NA
22. Are you or will you become eligible to retire within the next 12 months?	O	O	O	O	O	O
23. The performance and/or conduct of other employees are the primary reasons my job performance is not higher	O	O	O	O	O	O
24. The performance and/or conduct of my supervisors and managers are primary reasons my job performance is not higher	O	O	O	O	O	O
25. Barriers to success, such as constraining rules or work processes, under-informed coworkers, or office politics, are the primary reasons my performance is not at a higher level	O	O	O	O	O	O
26. Lack of resources, such as more staff, a larger budget, or more equipment and supplies, is a primary reason my performance is not at a higher level						

10. Please indicate your level of agreement or disagreement with the following statements.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/NA
a. I feel highly motivated in my work	O	O	O	O	O	O
b. The give and take of public policy making doesn't appeal to me	O	O	O	O	O	O
c. Meaningful public service is important to me	O	O	O	O	O	O
d. I am not afraid to go to bat for the rights of others even if it means I will be ridiculed	O	O	O	O	O	O
e. I am prepared to make enormous sacrifices for the good of the agency	O	O	O	O	O	O
f. I am often reminded by daily events about how dependent we are on one another	O	O	O	O	O	O
g. Making a difference in society means more to me than personal achievements	O	O	O	O	O	O

Merit Systems Principles and Prohibited Personnel Practices

1. My organization...

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/NA
a. ...recruits a diverse pool of applicants for job vacancies	O	O	O	O	O	O
b. ...holds fair and open competition for job vacancies	O	O	O	O	O	O
c. ...selects the best-qualified candidates when filling jobs	O	O	O	O	O	O
d. ...treats employees fairly	O	O	O	O	O	O
e. ...takes steps to prevent prohibited discrimination	O	O	O	O	O	O
f. ...takes steps to rectify prohibited discrimination	O	O	O	O	O	O
g. ...pays employees fairly	O	O	O	O	O	O
h. ...recognizes excellent performance	O	O	O	O	O	O
i. ...rewards excellent performance	O	O	O	O	O	O
j. ...holds employees to high standards of conduct	O	O	O	O	O	O

My organization...

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/NA
k. … puts the public interest first	O	O	O	O	O	O
l. … uses the workforce efficiently and effectively	O	O	O	O	O	O
m. …eliminates unnecessary functions and positions	O	O	O	O	O	O
n. …makes good use of employees' skills and talents	O	O	O	O	O	O
o. …focuses employee attention and efforts on what is most important	O	O	O	O	O	O
p. …provides employees with the resources needed to get the job done	O	O	O	O	O	O
q. …addresses poor performers effectively						
r. …retains its best employees						
s. …provides employees with necessary training						
t. …provides employees with opportunities for growth and development						

My organization...

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/NA
u. …protects employees against reprisal for whistleblowing	O	O	O	O	O	O
v. … protects employees against reprisal for exercising a grievance, complaint, or appeal right						
w. … protects employees against arbitrary action						
x. … does not engage in favoritism						
y. …protects employees from political coercion						
z. …has made it clear that it prohibits discrimination based on a person's sexual orientation						

Continue on next page

2. **<u>In the past two years</u>, have you been treated fairly in each area listed below?**

	Yes	No	Don't Know/NA
a. Career advancement	O	O	O
b. Awards	O	O	O
c. Training	O	O	O
d. Performance appraisals	O	O	O
e. Job assignments	O	O	O
f. Discipline	O	O	O
g. Pay			

3. **For each item below, please indicate the option that you think best describes the situation.**

In the past two years, an agency official (e.g. supervisor, manager, senior leader, etc.) in my work unit has…

	This has NOT occurred in my work unit	This has occurred in my work unit, but I was not personally affected by this	I was personally affected by this	Don't Know/NA
a. …discriminated in favor or against someone in a personnel action based upon race	O	O	O	O
b. …discriminated in favor or against someone in a personnel action based upon age	O	O	O	O
c. …discriminated in favor or against someone in a personnel action based upon religion	O	O	O	O

In the past two years, an agency official (e.g. supervisor, manager, senior leader, etc.) in my work unit has…

	This has NOT occurred in my work unit	This has occurred in my work unit, but I was not personally affected by this	I was personally affected by this	Don't Know/NA
d. …discriminated in favor or against someone in a personnel action based upon sex	O	O	O	O
e. …discriminated in favor or against someone in a personnel action based upon national origin	O	O	O	O
f. …discriminated in favor or against someone in a personnel action based upon handicapping condition	O	O	O	O
g. …discriminated in favor or against someone in a personnel action based upon marital status	O	O	O	O
h. …discriminated in favor or against someone in a personnel action based upon political affiliation	O	O	O	O
i. …discriminated in favor or against someone in a personnel action based upon sexual orientation	O	O	O	O
j. …discriminated in favor or against someone in a personnel action based upon status as a parent or caregiver	O	O	O	O
k. …discriminated against someone in a personnel action on the basis of off-duty conduct which was entirely unrelated to the job	O	O	O	O

In the past two years, an agency official (e.g. supervisor, manager, senior leader, etc.) in my work unit has…

		This has NOT occurred in my work unit ↓	This has occurred in my work unit, but I was not personally affected by this ↓	I was personally affected by this ↓	Don't Know/NA ↓
l.	…tried to pressure someone to support or oppose a particular candidate or party for elected office	o	o	o	o
m.	…tried to influence someone to withdraw from competition for a position for the purpose of helping or injuring someone else's chances				
n.	…tried to define the scope or manner of a recruitment action, or the qualifications required, for the purpose of improving the chances of a particular person				
o.	…obstructed someone's right to compete for employment				
p.	… solicited or considered improper employment recommendations				
q.	… advocated for the appointment, employment, promotion, or advancement of a relative				
r.	… advocated for appointment, employment, promotion, or advancement of a personal friend of the agency official				

In the past two years, an agency official (e.g. supervisor, manager, senior leader, etc.) in my work unit has…

		This has NOT occurred in my work unit ↓	This has occurred in my work unit, but I was not personally affected by this ↓	I was personally affected by this ↓	Don't Know/NA ↓
s.	…took or threatened to take a personnel action against an employee because the employee disclosed a violation of law, rules, or regulations or reported fraud, waste, or abuse	o	o	o	o
t.	... took or threatened to take a personnel action against an employee because the employee filed an appeal or grievance				
u.	…knowingly violated a lawful form of veteran's preference or veteran's protection laws				
v.	… inappropriately favored a veteran				

Continue on next page

Whistleblowing

For the purpose of this section, the term "wrongdoing" refers to the creation or toleration in the workplace of a health or safety danger, unlawful behavior, fraud, waste, or abuse.

1. Please indicate your level of agreement or disagreement with the following statements.

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know/NA
1. My agency actively encourages employees to report wrongdoing.	O	O	O	O	O	O
2. If I disclosed wrongdoing, I would be praised for it at work.	O	O	O	O	O	O
3. I feel that I could disclose wrongdoing without any concerns that the disclosure would make my life harder.	O	O	O	O	O	O
4. My agency has educated me about the purpose of the Office of the Inspector General	O	O	O	O	O	O
5. My agency has educated me about how I can anonymously disclose wrongdoing	O	O	O	O	O	O
6. My agency has educated me about what my rights would be if I disclosed wrongdoing						

7. In your opinion, how adequate or inadequate is the protection against reprisal for federal employees who report wrongdoing?

- ○ Very adequate
- ○ Adequate
- ○ Neither adequate nor inadequate
- ○ Inadequate
- ○ Very inadequate
- ○ Don't Know/Can't Judge

8. If you were to observe or have evidence of wrongdoing, how important would it be to you that you be able to report it without disclosing your identity?

- ○ Very important
- ○ Important
- ○ Somewhat important
- ○ Not important
- ○ Don't Know/Can't Judge

9. To what extent do you understand the role of each of the following organizations when it comes to responding to reports of wrongdoing?

	Great Extent ↓	Some Extent ↓	Little Extent ↓	Not at All ↓
a. The U.S. Office of the Special Counsel (OSC)	O	O	O	O
b. The Government Accountability Office (GAO)	O	O	O	O
c. Your agency's Office of the Inspector General (OIG)	O	O	O	O
d. The Occupational Safety and Health Administration (OSHA)	O	O	O	O

10. If you were to report wrongdoing to one of the following organizations, and asked that your identity be kept confidential, to what extent do you believe that the organization would keep your identity secret?

	Great Extent ↓	Some Extent ↓	Little Extent ↓	Not at All ↓
a. My agency's Office of the Inspector General (OIG)	O	O	O	O
b. The U.S. Office of the Special Counsel (OSC)	O	O	O	O
c. The Occupational Safety and Health Administration (OSHA)	O	O	O	O
d. The Government Accountability Office (GAO)	O	O	O	O
e. The U.S. Congress				
f. The Media				

11. If you were to report wrongdoing to one of the following organizations, to what extent do you believe the organization would give careful consideration to your allegations?

	Great Extent ↓	Some Extent ↓	Little Extent ↓	Not at All ↓
a. My agency's Office of the Inspector General (OIG)	O	O	O	O
b. The U.S. Office of the Special Counsel (OSC)	O	O	O	O
c. The Occupational Safety and Health Administration (OSHA)	O	O	O	O
d. The Government Accountability Office (GAO)	O	O	O	O
e. The U.S. Congress	O	O	O	O
f. The Media	O	O	O	O

12. If tomorrow you were to observe a health or safety danger, unlawful behavior, fraud, waste, or abuse, to what extent do you think that each of the following would factor into your decision on whether or not to report the wrongdoing?

	Great Extent ↓	Some Extent ↓	Little Extent ↓	Not at All ↓
a. Concern that I would be suspended, demoted, or fired	O	O	O	O
b. Concern that I had sufficient proof	O	O	O	O
c. Concern that it might not be serious enough	O	O	O	O
d. Concern that the event might not rise to the level of fraud, waste, abuse, unlawful behavior, or a safety or health danger	O	O	O	O

If tomorrow you were to observe a health or safety danger, unlawful behavior, fraud, waste, or abuse, to what extent do you think that each of the following would factor into your decision on whether or not to report the wrongdoing?

	Great Extent ↓	Some Extent ↓	Little Extent ↓	Not at All ↓
e. Belief that nothing *would* be done to stop it	O	O	O	O
f. Belief that nothing *could* be done to stop it	O	O	O	O
g. Belief that it would not happen again				
h. Belief that someone else had already reported it	O	O	O	O
i. Concern that I would be seen as disloyal	O	O	O	O
j. Concern that it might negatively impact my relationship with my co-workers	O	O	O	O
k. Concern that it might get someone in trouble	O	O	O	O
l. Concern that it might harm the reputation of my organization/agency	O	O	O	O
m. Concern that it might cause other things to be investigated	O	O	O	O
n. Concern that it might affect my performance appraisal	O	O	O	O
o. Concern that it might affect my ability to get a performance award	O	O	O	O
p. Concern that it might affect my ability to get training	O	O	O	O
q. Concern that it might affect my ability to get a promotion	O	O	O	O
r. Concern that management might become less tolerant of any small mistakes I might make	O	O	O	O

If tomorrow you were to observe a health or safety danger, unlawful behavior, fraud, waste, or abuse, to what extent do you think that each of the following would factor into your decision on whether or not to report the wrongdoing?

	Great Extent ↓	Some Extent ↓	Little Extent ↓	Not at All ↓
s. Concern that management might become less willing to grant me any favors that are optional for them	O	O	O	O
t. Concern that I might be retaliated against in another way not mentioned above	O	O	O	O
u. A lack of knowledge about to whom I should report it	O	O	O	O

13. How important, if at all, would each of the following be in encouraging you to report an illegal or wasteful activity?

	Very Important ↓	Somewhat Important ↓	Neither Important Nor Unimportant ↓	Somewhat Unimportant ↓	Unimportant ↓	Don't Know/Can't Judge ↓
a. The activity might endanger people's lives	O	O	O	O	O	O
b. The activity was something you considered serious in terms of costs to the Government	O	O	O	O	O	O
c. Something would be done to correct the activity you reported	O	O	O	O	O	O

How important, if at all, would each of the following be in encouraging you to report an illegal or wasteful activity?

	Very Important ↓	Somewhat Important ↓	Neither Important Nor Unimportant ↓	Somewhat Unimportant ↓	Unimportant ↓	Don't Know/Can't Judge ↓
d. The wrongdoers involved in the activities would be punished	O	O	O	O	O	O
e. You would be protected from any sort of reprisal	O	O	O	O	O	O
f. You would be positively recognized by management for a good deed	O	O	O	O	O	O
g. Your identity would be kept confidential by the people to whom you reported the activity	O	O	O	O	O	O
h. The activity was something you considered to be a serious ethical violation, although the monetary costs associated with it were small	O	O	O	O	O	O
i. You would be eligible to receive a cash award	O	O	O	O	O	O

14. How likely would you be to "blow the whistle" when the wrongdoer is:

	Very Likely ↓	Somewhat Likely ↓	Neither Likely Nor Unlikely ↓	Somewhat Unlikely ↓	Very Unlikely ↓	Don't Know/Can't Judge ↓
a. Your supervisor	O	O	O	O	O	O
b. A higher level supervisor	O	O	O	O	O	O
c. A coworker (in your work group)	O	O	O	O	O	O
d. A Federal employee outside your work group	O	O	O	O	O	O
e. A contractor or vendor	O	O	O	O	O	O
f. A political appointee in your agency	O	O	O	O	O	O

15. During the last 12 months, did you personally observe or obtain direct evidence of one or more illegal or wasteful activities involving your agency? (Note: Do not answer "yes" if you only heard about the activity in the media or heard about it as a rumor.)

- O Yes
- O No

If you answered no to question 15, please skip to the disabilities section on page 17, if you answered yes to question 15, please continue on the next page.

16. **If you answered yes to question 15, then please select the activity below that represents the most serious problem you personally observed. (Please mark only one.)**

- ○ Stealing Federal funds
- ○ Stealing Federal property
- ○ Accepting bribes or kickbacks
- ○ Waste caused by ineligible people receiving funds, goods, or services
- ○ Waste caused by unnecessary or deficient goods or services
- ○ Use of an official position for personal benefit
- ○ Waste caused by a badly managed program
- ○ Unfair advantage in the selection of a contractor, consultant, or vendor
- ○ Tolerating a situation or practice which poses a substantial and specific danger to public health or safety
- ○ Other serious violation of law or regulation

17. **Where did this activity occur or originate? (Please mark ALL that apply.)**

- ☐ Your workgroup
- ☐ Outside your workgroup but within your agency
- ☐ Another Federal agency
- ☐ Contractor or vendor
- ☐ Other

18. **If a dollar value can be placed on this activity, what was the amount involved?**

- ○ More than $100,000
- ○ $5,000-$100,000
- ○ $1,000-$4,999
- ○ $100-$999
- ○ Less than $100
- ○ A dollar value cannot be placed on the activity
- ○ Don't know/Can't judge

19. **How frequently did this activity occur?**

- ○ Once or rarely
- ○ Occasionally
- ○ Frequently
- ○ Don't know/Can't judge

20. **Did you report this activity to any of the following? (Please mark ALL that apply.)**

- ☐ I did not report the activity *(skip to disabilities section on page 17)*
- ☐ Family member or friend
- ☐ Co-worker
- ☐ Immediate supervisor
- ☐ Higher level supervisor
- ☐ Higher level agency official
- ☐ Agency Inspector General (IG)
- ☐ Office of Special Counsel (OSC)
- ☐ Government Accountability Office (GAO)
- ☐ Law enforcement official
- ☐ Union representative
- ☐ News media
- ☐ Congressional staff member or member of Congress
- ☐ Advocacy group outside the Government
- ☐ Other

21. **If you DID report this activity, were you identified as the source of the report?**

- ○ Yes, I was identified
- ○ No, I was not identified *(skip to disabilities section on page 17)*

22. If you were identified, what was the effect on you personally as a result of being identified? (Please mark ALL that apply.)

- ☐ I was given credit by my management for having reported the problem
- ☐ Nothing happened to me for having reported the problem
- ☐ My supervisor was unhappy with me for having reported the problem
- ☐ Someone above my supervisor was unhappy with me for having reported the problem
- ☐ I was threatened with reprisal for having reported the problem
- ☐ I received an actual reprisal for having reported the problem

23. Within the last 12 months, have you personally experienced some type of reprisal or threat of reprisal by management for having reported an activity?

- ○ Yes
- ○ No (*skip to disabilities section on page 17*)

24. Did the reprisal or threat of reprisal take any of the following forms? (Please mark ALL that apply.)

I was threatened with this ↓ / This was done to me ↓		
a. Poor Performance Appraisal	○	○
b. Denial of Promotion	○	○
c. Denial of opportunity for training	○	○
d. Denial of award	○	○
e. Assignment to less desirable or less important duties	○	○
f. Transfer or reassignment to a different job with less desirable duties	○	○
g. Reassignment to a different geographical location	○	○
h. Suspension from my job	○	○
i. Fired from my job	○	○
j. Grade level demotion	○	○
k. Shunned by coworkers or managers	○	○
l. Verbal harassment or intimidation	○	○
m. Required to take a fitness for duty exam	○	○
n. Other	○	○

Continue on next page

Table C.1: Full Correlation Matrix with Report/No Report Outcome

	Report.	Hisp.	Black[a]	Other[a]	Educ.	Service Length	Sup. Status	Anon.	Lead. Sat.	Lead. Behav.	Org. Trust	WB Supp.	Anon. Supp.	WB Protect.
Reported	1.00													
Hispanic	0.06*	1.00												
Black[a]	-0.01	-0.08*	1.00											
Other[a]	0.03	0.07*	-0.17*	1.00										
Education	-0.01	-0.07*	0.04*	0.05*	1.00									
Service Length	-0.03	-0.02	-0.01	-0.05*	-0.10*	1.00								
Supervisor Status	0.02	-0.02	-0.01	-0.02	0.11*	0.13*	1.00							
Anonymity	-0.03	0.02	-0.04*	-0.01	0.01	-0.03	-0.05*	1.00						
Leader Satisfaction	0.00	-0.02	-0.02	-0.02	0.02	0.00	0.08*	-0.04*	1.00					
Leader Behavior	-0.05*	-0.12*	-0.09*	-0.02	0.07*	0.00	0.09*	-0.02	0.38*	1.00				
Trust in Organization	0.03	-0.07*	-0.06*	-0.03	0.05*	-0.04*	0.18*	-0.11*	0.48*	0.55*	1.00			
Support for WB	0.04*	0.00	0.01	0.02	0.02	0.00	0.13*	-0.15*	0.45*	0.41*	0.63*	1.00		
Anonymity Support	0.07*	0.01	-0.06*	-0.02	0.02	-0.04*	0.05*	-0.09*	0.20*	0.28*	0.34*	0.37*	1.00	
WB Protection	0.03	0.04*	-0.02	0.03	0.00	0.08*	-0.11*	-0.17*	-0.37*	-0.44*	-0.64*	-0.60*	-0.36*	1.00

Pairwise correlation using weighted data. *p<0.05 (α=0.05)

a: Reference Group: White

Table C.2: Correlation Matrix for Reporting Avenue Outcomes

	Informal	Internal	External	External Only
Hispanic	0.03*	-0.01	0.08*	0.11*
Black[a]	-0.07*	-0.09*	0.07*	0.13*
Other[a]	0.00	-0.03	0.01	0.01
Education	-0.04*	0.04*	-0.01	0.01
Service Length	-0.03	-0.03*	-0.04*	-0.02
Supervisor Status	-0.09*	0.08*	-0.04	-0.03*
Anonymity	-0.01	0.06*	0.06*	0.00
Leader Satisfaction	-0.09*	0.02	-0.09*	-0.03*
Leader Behavior	-0.06*	0.05*	-0.20*	-0.19*
Trust in Organization	-0.04*	0.08*	-0.18*	-0.12*
Support for WB	-0.05*	0.05*	-0.09*	-0.03
Anonimity Support	0.02	0.07*	0.02	0.00
WB Protection	0.08*	-0.02	0.17*	0.10*

Pairwise correlation using weighted data. *$p<0.05$ ($\alpha=0.05$)

a: Reference Group: White

Table C.3: Preliminary Analyses of Organizational IVs (Weighted)

	Leader Satisfaction	Leader Behavior	Trust in Organization	Support for WB	Anonymity Support	WB Protection
Control Variables						
Hispanic Descent	-0.053	-2.229 *	-0.246 *	0.004	0.030	0.172 *
	(0.062)	(0.292)	(0.054)	(0.060)	(0.057)	(0.069)
Black[a]	-0.062	-1.440 *	-0.199 *	0.037	-0.166 *	-0.034
	(0.047)	(0.220)	(0.041)	(0.045)	(0.043)	(0.052)
Other[a]	-0.064	-0.439 *	-0.104 *	0.048	-0.092 *	0.079
	(0.047)	(0.219)	(0.041)	(0.045)	(0.043)	(0.052)
Years of Education	0.010	0.136 *	0.021 *	0.006	0.012	0.001
	(0.007)	(0.034)	(0.006)	(0.007)	(0.007)	(0.008)
Constant	2.900 *	15.977 *	2.326 *	2.431 *	2.167 *	3.576 *
	(0.111)	(0.519)	(0.097)	(0.107)	(0.101)	(0.122)
N[b]	3,747	3,767	3,746	3,743	3,753	3,766
R^2	0.002	0.030	0.015	0.001	0.005	0.003

*p<0.05, Unstandardized coefficients, Standard errors in parentheses

a: Reference Group: White

b: Different sample sizes due to missing values in organizational IVs.

Appendix D – Sample Interview Protocol[61]

Interview Protocol

Begin orientation after check-in and getting food. ***Give each participant an informed consent information handout*** *before starting.*

*****Say the following:*

Hello. Thanks for coming to participate in our research.

I'm ____ from ____ , and I'll be guiding our interview today.

I'm part of a team of researchers studying leadership and organizational climate and culture. We're studying these topics at your academy and other organizations as well. The research project is funded by the Army Research Institute.

I want to go over a few important points about your participation. These are explained more fully on your informed consent form handout - please read this if you haven't already. The study will last about 50 minutes. I'll be asking questions about culture and leadership at the Academy, and related issues. Some of these issues may be sensitive, particularly issues about negative behaviors. There are no right or wrong answers - we simply want your perspectives. We've provided information about available resources in case they will be helpful.

We're taking steps to assure privacy of your identity and confidentiality of what is said to the maximum extent possible. We will not be collecting any names, and we ask that you do not provide any names, whether your own or others. However, there are exceptions to privacy and confidentiality. Your information may be shared with appropriate authorities if you or someone else is in danger, or we are required to do so by law. Active-duty military personnel are involved in this project, and they are required to report information about suspected honor offenses (meaning lying, cheating, or stealing) and potentially illegal or criminal behavior. Unless the incident is public knowledge, we ask you not to mention anything that may potentially identify an individual or group involved (for example, team or squadron). If you mention potentially identifying information about an incident, it may then require reporting. In all cases, we ask that you don't mention any names.

[61] All terms identifying the specific research site have been modified to maintain confidentiality.

We also need your help to maintain privacy and confidentiality. This depends on you not telling others outside of this study who participated or what was said. Do we have your agreement to this? *(Obtain verbal assent from the individual or group.)*

If you're okay with it, I'd like to audio-record our discussion so we have more accurate data. We'll transcribe audio recordings into text, and then destroy the original recordings. We'll only use a confidential number key to keep track of the conversation — no names will be involved. We'll keep electronic copies of the transcripts and notes indefinitely, but we'll destroy paper copies and other records according to Academy policy. Only members of the research team will have access to the data.

We've provided relevant contact information in case you have questions or concerns about the research. We also remind you that your participation is completely voluntary, you may stop at any time, and there is no penalty for stopping or choosing not to participate.

So now please let me know if you consent to participate in this research. This means you certify that you are you are at least 18 years old, the research has been explained to you, your questions have been fully answered, and you freely and voluntarily choose to participate in this research project.

Please say "yes" if you consent to participate.

(Ensure that any questions have been addressed.)

Now, do I have your consent to audio-record the discussion? Please say "yes" if you consent to audio-recording.

(Only begin to audio-record after gaining verbal permission)

Identify my name, interview number and day of week.

Before we start, can you state your class year?

Now I have some questions…

Probing and follow-up questions may be asked as appropriate. Ask about other military experiences, if relevant.

1. I'd like to begin by discussing unethical conduct. For the purposes of this interview, unethical conduct is defined as behavior that is illegal, immoral or illegitimate; basically anything inconsistent with the values of the [service

academy]. Can you give me some examples of unethical conduct at the [service academy]?
(examples include false accountability, lying, underage drinking, not stepping in when your [friend] is excessively drinking, DUI/DWI, cheating/plagiarizing, sexual harassment or assault, fraternization in dormitories, and degrading humor)

2. What is an example of unethical conduct that cadets are likely to report? Why do you think this is? Are there things about the [service academy] that make this behavior more likely to be reported? Are there things about individual cadets that make them more likely to report this behavior?

3. What is an example of unethical conduct that cadets are not likely to report? Why do you think this is? Are there things about the [service academy] that make this behavior not likely to be reported? Are there things about individual cadets that make them unlikely to report this behavior?

4. What are possible negative consequences for reporting unethical conduct?

5. Would you feel comfortable formally reporting unethical conduct? Why or why not?

6. Would you feel comfortable calling out unethical conduct informally? Why or why not?

7. Do you know of anyone who has faced negative consequences for formally or informally reporting unethical conduct? If so, can you give me an example (or, can you tell me what you think would happen if someone called out a negative behavior)?

8. I'd like to switch the focus now to the leadership at the [service academy]. Who do you consider your leaders?

9. To what extent do you trust your leaders?
    a. What things increase or decrease your trust in these leaders?

10. (Only ask if leader behavior wasn't brought up in #9) What kinds of behaviors by your leaders violate your trust in them?

11. What do your leaders do to restore trust after they have violated it?
    a. Is this effective?
    b. What would be most effective?

12. (Only ask if trust in leadership wasn't brought up in #2 or #3) Do you think trust in leaders impacts cadets' decisions to report unethical conduct? How (or why not)?

13. For you, would trust in your leaders impact your decision to report unethical conduct? How (or why not)?

14. What do leaders do that encourages the reporting of ethical conduct?

15. What do leaders do that discourages the reporting of ethical conduct?

16. Finally, I'd like to talk about the culture at the [service academy]. What is the formal culture of the [service academy] – its official norms, values and practices?

17. What about the academy's informal culture—what are its unofficial norms, values, and practices?

Debriefing

- We talked about a range of issues relating to ethical leadership and organizational culture. We appreciate your openness and help with our research.

- We're hoping to inform future research with our findings

- We want to remind you to please maintain privacy of participation and confidentiality of what was said today.

- If you need them, please refer to counseling resources and contact information on the consent sheet. Do not hesitate to get in touch if you have questions or concerns.

- Do you have any questions for me?

- Thank you for participating – I appreciate your time.

Appendix E – Final Coding Scheme

Themes	Total Instances:	692
Unethical Conduct		1
Fraternization		7
Hazing		3
Lying		6
Cheating		6
SHARP		14
Alcohol		17
Drugs		1
False Accountability		6
Gundecking		4
Degrading Humor		11
Favoritism		2
Sharing Personal Information		1
Breaking Rules		1
More Likely to Report		1
Leader Acting Hypocritically		1
Older or More Mature		1
Length of Service		1
Spite for Offender		2
Position of Authority		7
Rules Support		5
Training on How to Report		1
Zero Tolerance Policy		3
Protect Ingroup or Like Family		3
Personal Values		4
Previous Experience With Violation		1
Personal Benefit		1
Excessive Interference with Personal Life		2
Anonymity		3
Trust in Leader - Handle Situation		3
Good Communication		2
Impact on Others		4
Impact Image of Unit		1
Impact Image of Service		1
Severity of Behavior		15
Abuse of Power		1
Pattern of Behavior		7

Less Likely to Report	0
Doesn't Affect Observer	1
Individual Tolerance for Confrontation	2
Won't Get Caught	2
Won't Be Believed	2
Won't Change Anything	1
No Bad Consequence for Behavior	4
Punishment Too Severe	7
Peer Bonding	16
Peer Pressure	2
Limited Number of People Know	1
Culturally Normative	8
Differs by Subgroup	4
Embarrassing to Command	2
Disrupts Operations	1
Personally Detrimental	15
Fear of Reprisal	2
Consequences of Reporting	3
Change Units	2
Interpersonal Conflict	4
Unfair Treatment by Supervisor	4
Positive Reinforcement	3
Negative Social	24
Peers Will Talk About It	4
Formal Reporting	1
Anonymity	4
Strength of Evidence	4
Severity of Conduct	10
Take Fall to Protect Peer	1
Not Senior Person With Secret	1
Tolerance for Confrontation	1
Trust in Supervisors	3
Report to Knowledgeable Individual	1
Officers versus Cadets	1
Report Regardless of Trust in Leader	7
Preference for Trusted Leader	8
Protect Reporter	1
Do Right Thing With Report	5
Confidentiality When Able	1
More Likely to Take Report Seriously	3

Informal Reporting		1
	Results in Positive Working Environment	2
	Some More Comfortable Than Others	2
	Supported by Command Policy	1
	Preference vs. Formal Reporting	12
	Avoid Draconian Consequences	2
	Catch Behavior Early	2
Leaders		3
	Equate to Power	1
	Impact Culture	3
	Observed Misbehavior	2
	Positional	16
	Job vs. Rank	2
	Different Than Role Model	1
	Relational	4
	Mentor	6
	Increase Reporting	0
	Open Door Policy	1
	Care About People	3
	Take Report Seriously	2
	Staying Positive	1
	Professional	1
	Objective	1
	Knowledgeable/Experienced	2
	Rational Action	1
	Listening	1
	People Skills	3
	Decrease Reporting	0
	Draconian Consequences	1
	Project Negative Attitude	1
	Place Self/Unit Above People	3
	Seem Like They Don't Care	1
	Aloofness	1
	Arrogance	2
Trust in Leaders		3
	Honesty	1
	Know Them Personally	8
	Helpful	2
	Take Care of People/Selfless	2
	Know Job	4
	Take Responsibility	2

	Interpersonal Skills		3
	Sets Good Example		4
	Confidentiality When Appropriate		2
		Suppress Rumors	1
	Work vs. Personal		5
	Time		2
		Deployed Together	1
	Homophily		1
		Same Gender	1
	Regardless of Rank		3
	Decrease		0
		Micromanaging	1
		Don't Provide Support or Let Down	6
			Look Out for Self First 1
			Go Back on Word 1
		Don't do Job	2
			Incompetence 3
			Refuse to do Job 1
		Favoritism	2
			Repetitively Assign Bad Duties 1
		Break Confidentiality	3
		Unethical Behavior	6
		Not Leading by Example	3
		Leader Personal Life Problems	2
		Insincere Actions	2
		Leader Overcompensated	1
		Don't Take Responsibility	1
		Perceived Negative Motives	1
	Regain		0
		Hard to Regain Once Lost	3
		Change Behavior	8
			Takes Being Held Accountable 1
			Takes Time 1
		Apologize	1
		Take Responsibility	2
		Open Communication	1
Formal Culture			4
	Value People		1
	Equity Valued Over Performance		1

	Liberal Attitudes		1
	Encourage Innovation		1
	Accept Diversity		3
	Support SHARP Reporting		3
	No Tolerance for Misbehavior		10
		Alcohol Related	5
	Protect Others		1
	Maintain Physical Standard		2
	Open Door Policy With Leadership		1
		Anonymous Chanel	1
	Unit Philosophy		2
	Mission Accomplishment		10
		Specialization vs. Jack-of-all-Trades	1
	Different Across Subgroups		13
	Chain of Command		5
	Core Values		9
	Accountability		1
Informal Culture			1
	Elite Mentality		1
	Different Across Subgroups		2
	Peer Accountability		2
	Value People		5
	Rank Equates to Power		1
	Bend Rules to Get Job Done		4
	Treat Outgroup Differently		4
		Marginalize People Exiting Military	1
	Women in Military		2
		Physical Standards	1
	Acceptance of Degrading Humor		8
		Gender Degrading Humor or Sexual Harassment	4
	Collectivism/Peer Culture		19
		Hide Unethical Conduct	2
		Personal Business is Known to All	2
		Equate to Family	11
	New Military		8
		Individualism	3
			Entitlement Mentality 1
			Aren't Responsible for People Off Duty 1
			Favoritism/Individualism to Get Ahead 2

Lack of Pride		2
	Mission not Rewarding	2
Alcohol Culture		7
	Not Mandatory	1
	Related to Stress	1
Cynicism		7
Mistrust of SHARP		2
Zero Tolerance for SHARP		2
	Consideration for Social Consequences	1
Hardship		0
	Value Time Off	2
	Long Hours/Hard Work	4
	Family Separation	1

Note: Number of instances are for the N=14 interviews coded using MaxQDA

Appendix F – Control Vignette and Variations

The colored text in the control vignette indicates factors my study is varying. The text below the vignette lists the wording for each factor in the alternate condition.

Sam is invited to a social event at the home of a coworker; this is someone who is in the same workgroup as Sam (and performs a similar job [Note: omit wording in parentheses for supervisor/in-group conditions]). While at the social event, Sam notices several piles of supply items from the office including notepads, printer paper, and boxes of pens. When questioned, the colleague explains that she often brings work home from the office and even if she uses some of the work supplies for personal projects, she sometimes uses personal items for work-related efforts so it all washes out in the end. Although the supplies don't total a substantive amount, Sam knows from personal experience that they are in high demand at the office and productivity is sometime reduced as coworkers wait for resources to become available. Sam also wonders what else the colleague may "borrow" for personal use. [Insert anonymity text here in alternate condition] The manager to whom such misconduct is reported is new at the company, and Sam has yet to personally interact with this manager. However, Sam is aware of instances of misconduct involving this manager and other company employees. Taking all of this into consideration, at work the next day Sam decides to report the fact that the colleague is using company property for personal use.

<u>Alternate Condition Wording</u>
Trust: Based on previous interactions, Sam trusts the manager to whom such misconduct is reported.
Misconduct: To Sam's knowledge this manager has always displayed exemplary personal conduct.
Anonymity: Sam's company has an established system for anonymously reporting unethical conduct that the company actively supports.
Severity: a work laptop and laser printer set up on the dining room table; the office equipment; The laptop and printer are high-value items, and
Location: Although they perform similar jobs at their company they work in unrelated departments.
Perpetrator Position: an immediate supervisor from work; supervisor; supervisor; supervisor
Perpetrator Gender: he; he; he

Appendix G – Factorial Vignette Study Phase 1

(Lines indicate a new page.)

[The participant is first presented with a consent form]

Thank you for participating in the first phase of our study on factors related to the reporting of unethical conduct. For the purposes of this study, unethical conduct means any action that is illegal, immoral, illegitimate or inconsistent with the values of an organization. Also, with respect to reporting such conduct, anonymous means that you can take an action without your identity being publicly revealed.

To begin with, please answer the following background questions.

1. What is your gender? male/female

2. What is your race/ethnicity?
(please mark all that apply)

1="Black or African American", 2="White or Caucasian", 3="Hispanic or Latino", 4="Asian", 5="American Indian or Alaska Native", 6="Native Hawaiian or Other Pacific Islander"

3. What is your age? 0-100

4. What is your highest education level?

1="Less than a high school diploma", 2="High school, equivalent diploma, or GED", 3="Some college credits but no degree", 4="Associates' college degree", 5="Bachelor's college degree", 6="Master's degree", 7="Professional degree (e.g. J.D., M.D., D.D.S.)", 8="Academic or scientific doctorate (Ph.D.)"

5. What is your current employment status?

1="Not employed", 2="Currently not employed, but actively seeking employment", 3="Employed, but not in a position that has supervisory responsibilities or conducts performance appraisals on other employees", 4=" Employed in a position that has supervisory responsibilities or conducts performance appraisals on other employees"

Next, please indicate your level of agreement or disagreement with the following statements. If unemployed, please answer N/A.

1="Strongly Disagree", 2="Disagree", 3="Neither Agree Nor Disagree", 4="Agree", 5="Strongly Agree", 6="N/A"

6. My employer actively encourages employees to report wrongdoing.

7. If I disclosed wrongdoing, I would be praised for it at work.

8. I feel that I could disclose wrongdoing at work without any concerns that the disclosure would make my life harder.

9. My employer has educated me about how I can anonymously disclose wrongdoing.

10. My employer has educated me about what my rights would be if I disclosed wrongdoing.

Next, please answer the following questions on the reporting of unethical conduct.

11. If you were to observe or have evidence of wrongdoing, how important would it be to you that you be able to report it without disclosing your identity?

1="Not important", 2="Somewhat important", 3="Important", 4="Very important"

12. In your opinion, how adequate or inadequate is the protection against reprisal for employees at your workplace who report wrongdoing? If unemployed, please answer N/A.

1="Very inadequate", 2="Inadequate", 3="Neither adequate nor inadequate", 4="Adequate", 5="Very adequate", 6="N/A"

13. How likely would you be to report wrongdoing when the wrongdoer is your supervisor? If unemployed, please answer N/A.

1="Very unlikely", 2="Somewhat unlikely", 3="Neither likely nor unlikely", 4="Somewhat Likely", 5="Very likely", 6="N/A"

14. How likely would you be to report wrongdoing when the wrongdoer is a peer-level coworker? If unemployed, please answer N/A.

1=“Very unlikely”, 2=”Somewhat unlikely”, 3=”Neither likely nor unlikely”, 4=”Somewhat Likely”, 5=”Very likely”, 6=”N/A”

Finally, please read these 20 statements carefully and indicate the extent to which you agree or disagree with each question.

1=”Completely Disagree, 2, 3, 4=”Neutral”, 5, 6, 7=”Completely Agree”

24. The best way to handle people is to tell them what they want to hear.

25. When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which might carry more weight.

26. Anyone who completely trusts anyone else is asking for trouble.

27. It is hard to get ahead without cutting corners here and there.

28. Honesty is the best policy in all cases.

29. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.

30. Never tell anyone the real reason you did something unless it is useful to do so.

31. One should take action only when sure it is morally right.

32. It is wise to flatter important people.

33. All in all, it is better to be humble and honest than important and dishonest.

34. P.T. Barnum was very wrong when he said there’s a sucker born every minute.

35. People suffering from incurable diseases should have the choice of being put painlessly to death.

36. It is possible to be good in all respects.

37. Most people are basically good and kind.

38. There is no excuse for lying to someone else.

39. Most people forget more easily the death of their father than the loss of their property.

40. Most people who get ahead in the world lead clean, moral lives.

41. Generally speaking, men won't work hard unless they're forced to do so.

42. The biggest difference between most criminals and other people is that criminals are stupid enough to get caught.

43. Most people are brave.

[Items 25, 28, 31, 33, 34, 36, 37, 38, 40 and 43 will be reverse-coded, and then the answers of these questions averaged, to calculate an index of Machiavellianism]

Thank you for your participation in the first phase of this study. We are interested in factors related to the reporting of unethical conduct. Besides gathering demographic information, you were presented with questions to gauge your views on organizational support for whistle-blowing and the importance you place on anonymity and type of offender (e.g. peer or supervisor) with respect to whistle-blowing. You also answered questions intended to measure your orientation towards prosocial behavior and Machiavellianism. We will contact you if separately via MTurk if you are selected to participate in phase two of our study. If you are not contacted by December 31st, 2016, your will only participate in the first phase.

If you have any questions about the research or have trouble receiving payment, you can contact Michael Norton (**nortonma@umd.edu**), the Principle Investigator of the study, or the University of Maryland Institutional Review Board (**irb@umd.edu).**

We would value any comments you have on this phase of our study.

[Free text box here]

Please enter your MTurk account number:
[participants enter their account number]

You must enter this code [19972017] into Amazon MTurk to receive payment for your participation.

Click here to complete your participation in the first phase of the study.

Appendix H – Factorial Vignette Study Phase 2

(Lines indicate a new page.)

[The participant is again presented with a consent form, identical to the first phase.]

Thank you for participating in the second phase of our study on factors related to the reporting of unethical conduct. For the purposes of this study, unethical conduct means any action that is illegal, immoral, illegitimate or inconsistent with the values of an organization. Also, with respect to reporting such conduct, anonymous means that you can take an action without your identity being publicly revealed.

Next, you will be presented with a series of five vignettes. Following each vignette, you will answer five questions about the actions of the characters in the vignette. Although some vignettes may seem similar, we ask that you carefully read each vignette as no two vignettes are identical.

[Participants are randomly assigned five vignette variations. See Appendix H for all variations.]

Indicate how ethical you feel each person's chosen action was in the vignette:

1. The decision by the coworker to use company property for personal use.

1="Very unethical",2="Somewhat unethical",3="Neither ethical or unethical",4="Somewhat ethical",5="Very ethical"

2. The decision by Sam to report the coworker.

1="Very unethical",2="Somewhat unethical",3="Neither ethical or unethical",4="Somewhat ethical",5="Very ethical"

Now, please answer these three questions:

3. How likely would you be to take the same action as Sam in this vignette; that is, to report your coworker?

1="Very unlikely", 2="Somewhat unlikely", 3="Neither likely nor unlikely", 4="Somewhat Likely", 5="Very likely"

4. To you personally, how important would anonymity be in your decision to report such behavior?

1="Not at all important", 2="Slightly important", 3="Somewhat important", 4="Very important", 5="Extremely important"

5. Please assess the level of harm done by the coworker in using company property for personal use.

1="Very low", 2="Low", 3="Moderate", 4="High", 5="Very high"

[Note: In some vignette variations, coworker is replaced by supervisor.]

Next, please answer the following question about the vignettes:

6. In the vignettes, Sam was the individual that reported the "borrowed" company property. What was Sam's gender?

1="male", 2="female"

Finally, we ask you to imagine that you have been randomly paired with another person, whom we will refer to simply as the "Other." This other person is someone you do not know and that you will not knowingly meet in the future. Both you and the "Other" person will be making choices by circling either the letter A, B, or C. Your own choices will produce points for both yourself and the "Other" person. Likewise, the other's choice will produce points for him/her and for you. Every point has value: The more points you receive, the better for you, and the more points the "Other" receives, the better for him/her. Here's an example of how this task works:

	A	B	C
You get	500	500	550
Other gets	100	500	300

In this example, if you chose A you would receive 500 points and the other would receive 100 points; if you chose B, you would receive 500 points and the other 500; and if you chose C, you would receive 550 points and the other 300. So, you see that your choice influences both the number of points you receive and the number of points the other receives. Before you begin making choices, please keep in mind that there are no right or wrong answers—choose the option that you, for whatever reason, prefer most. Also, remember that the points have value; The more of them you accumulate, the better for you. Likewise, from the "other's" point of view, the more points s/he accumulates, the better for him/her.

For each of the nine choice situations, select A, B, or C, depending on which column you prefer most:

15.	A	B	C
You get	480	540	480
Other gets	80	280	480

16.	A	B	C
You get	560	500	500
Other gets	300	500	100

17.	A	B	C
You get	520	520	580
Other gets	520	120	320

18.	A	B	C
You get	500	560	490
Other gets	100	300	490

19.	A	B	C
You get	560	500	490
Other gets	300	500	90

20.	A	B	C
You get	500	500	570
Other gets	500	100	300

21.	A	B	C
You get	510	560	510
Other gets	510	300	110

22.	A	B	C
You get	550	500	500
Other gets	300	100	500

23.	A	B	C
You get	480	490	540
Other gets	100	490	300

[Participants are classified when they make 6 or more consistent choices. Prosocial choices are 15c, 16b, 17a, 18c, 19b, 20a, 21a, 22c, 23b; individualistic choices are 15b, 16a, 17c, 18b, 19a, 20c, 21b, 22a, 23c; and competitive choices are 15a, 16c, 17b, 18a, 19c, 20b, 21c, 22b, 23a]

Thank you for your participation in this study. We interested in factors related to the reporting of unethical conduct. You were chosen for participation in the second phase of the study based on your employment status. To ensure sufficient numbers for analysis, our team wanted an equal number of men and women to participate in the second phase. In the second phase, you were presented with multiple vignettes depicting unethical conduct, with variations in the following factors: level of trust in the manager to whom unethical conduct is reported, misconduct by the manager to whom unethical conduct is reported, the availability of an anonymous reporting avenue, the severity of the unethical conduct, whether the unethical conduct occurred without or outside of a workgroup, the relationship of the perpetrator to the reporter (peer or supervisor) and the gender of the perpetrator. We hope to see how varying these factors affects the reporting of unethical conduct. We also asked you which gender you associated Sam with; we chose a gender-neutral name for the reporter in an attempt to neutralize this from affecting your answers.

If you have any questions about the research or have trouble receiving payment, you can contact Michael Norton (**nortonma@umd.edu**), the Principle Investigator of this study, or the University of Maryland Institutional Review Board (**irb@umd.edu).**

We would value any comments you have on the vignettes you just read, or any comments in general on this phase of our study.

[Free text box here]

Please enter your MTurk account number:
[participants enter their account number]

You must enter [20071997] into Amazon MTurk to receive payment for your participation.

Click here to complete your participation in the second phase of the study.

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