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Fighting dirty in an era of corporate dominance: Exploring personality as a moderator of the impact of dangerous organizational misconduct on whistleblowing intentions

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Fighting dirty in an era of corporate dominance: Exploring personality as a moderator of the impact of dangerous organizational misconduct on whistleblowing intentions

Keith A. Price

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Approved by:

Dana Kendall Ph.D.
Associate Professor,
Industrial-Organizational Psychology,
Seattle Pacific University
Dissertation Chair

Kristen R.V. Thornton Ph.D.
People Analytics Lead,
Zillow

Thane Erickson Ph.D.
Professor of Clinical Psychology
Seattle Pacific University

Reviewed by:

Robert B. McKenna Ph.D.
Chair, Industrial-Organizational
Psychology, Seattle Pacific University

Katy Tangenberg Ph.D.
Dean, School of Psychology, Family &
Community, Seattle Pacific University

Dedication

I would like to dedicate this work to the whistleblowers whose stories are detailed in the following pages, and to those whistleblowers whose stories are yet unknown. These individuals were willing to shoulder immense risk to challenge powerful institutions, and to expose widespread corruption. Their sacrifice in pursuit of a more just world stands as an enduring example for all.

Acknowledgements

To my wife Josephine, and my son Hudson, for their unending patience, love, and support throughout this journey.

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Finally, to my entire research team, who have all provided a space to explore and debate these complex issues around corruption and whistleblowing, and who have been unendingly supportive throughout the entire study.

WHISTLEBLOWING INTENTIONS

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Abstract

As instances of corporate wrongdoing continue to rise globally, the opportunity and need for individual whistleblowers to act as a check on corporate power are also rising. Whistleblowing efforts represent a unique challenge to the power asymmetry that exists between an individual employee and the organization. Due to the serious, pervasive harm to employees and consumers that can stem from organizational misconduct, efforts to identify indicators of whistleblowing likelihood can potentially provide a significant means of prevention. This study used a vignette method to present two different levels of harm occurrence, by manipulating the timing of the consequences of a hypothetical and specific type of organizational wrongdoing. This was done to strengthen the causal inferences between the urgency to address the wrongdoing and whistleblowing likelihood. Across the two levels of harm, I anticipated that individual differences would be more pronounced in the highly ambiguous situation and would dissipate in the less ambiguous situation. Building on past research that found positive relationships between personality traits and both whistleblowing likelihood (Brink et al., 2015) and whistleblowing behavior (Bjørkelo et al., 2010), I predicted that two personality attributes of potential whistleblowers —agreeableness and conscientiousness— would moderate this relationship. A sample of 250 participants was recruited using the crowdsourcing platform, Prolific. To analyze the data, I ran several moderated multiple regressions to determine whether personality moderates the relationship between the occurrence of organizational misconduct and whistleblowing likelihood. The results indicated that agreeableness did not moderate the relationship between organizational misconduct and internal whistleblowing (IWB) preferences ($B_{\text{harm occurrence*agreeableness}} = -.14$, $p = .54$), or

between misconduct and external whistleblowing (EWB) preferences ($B_{\text{harm occurrence*agreeableness}}$ = -.07, p = .73). Similarly, conscientiousness did not moderate this relationship for IWB ($B_{\text{harm occurrence*conscientiousness}}$= .04, p = .82) or for EWB whistleblowing ($B_{\text{harm occurrence*conscientiousness}}$ = -.03, p = .88). However, significant bivariate correlations were identified between both personality traits and IWB preferences (i.e., for agreeableness: r = .19, p =.003; and for conscientiousness: r = .23, p < .001). Practical implications stemming from the findings are discussed, including identifying the characteristics of individuals who are more sensitive to wrongdoing behavior and are willing to shoulder personal risk to stymie its deleterious consequences to human welfare. Finally, limitations of the current study are addressed along with a presentation of future directions for the scientific study of the relatively rare phenomenon of whistleblowing.

Keywords: whistleblowing, whistleblowing likelihood, organizational misconduct

CHAPTER I

Introduction

Organizations have evolved to a state of unprecedented power and influence with modern society (Roach, 2007), thereby expanding the potential for them to engage in varying forms of misconduct. Unfortunately, the incentives for doing so are vast and are facilitated by a wide array of facilitating systems and stakeholders (Schnatterly et al., 2018; Smith-Crowe & Warren, 2014). The prevalence of organizational misconduct has become so commonplace that Anand et al. (2004) theorized that many employees within these organizations have become relatively desensitized, allowing it to continue through the combined processes of rationalization and socialization.

Fortunately, organizational misconduct has also been countered by individuals willing to accept a high level of personal risk and well-being to expose the misconduct. Within the past decade, polarizing figures such as Edward Snowden and Julian Assange have demonstrated the power of a single actor to bring to light the harmful practices of some of the largest and most powerful organizations in the world (Schultz & Harutyunyan, 2015). Employees are becoming empowered to engage in whistleblowing behavior with government leaks increasing threefold under the Trump Administration in the US (Savage & Sullivan, 2017), and increased whistleblowing abroad (Freshfields Bruckhaus Deringer LLP, 2017).

Whistleblowers are a unique phenomenon, as they not only possess the ability to expose misconduct; but in some cases, prevent future harm to human wellbeing from occurring. The possibility of harm reduction represented the underlying motivation for this study and underscored the need for further understanding of not only why individuals

choose to whistleblow, but when they choose to do so. To illustrate the tremendous

potential for harm reduction through effective whistleblowing, two salient cases are

presented below. In both instances, a whistleblower, who was especially sensitive to

wrongdoing at its onset, could have prevented substantial harm to millions of people.

The first case involved whistleblower Katharine Gun, who was an employee of

the British intelligence unit, the Government Communication Headquarters (GCHQ) in

2003. She discovered a memo between the United States National Security Agency

(NSA) and the GCHQ, requesting assistance in surveilling United Nations (UN) officials'

telecommunications. The purpose of this surveillance was reportedly to gain a strategic

advantage in the effort to gain UN security council approval for the Iraq invasion. Gun

subsequently leaked this memo to the press, exposing the operation at considerable risk to

both herself and her family. Although the Iraq invasion did ultimately take place, Gun's

whistleblowing efforts prevented a UN-sanctioned invasion and any further human costs

that could have occurred with such action (Fuller, 2013).

The second case involved Wells Fargo employee Jessie Guitron, who was fired in

2010 after making numerous internal whistleblowing attempts concerning the company's

fraudulent behavior. She had identified mandated quotas for customer accounts and the

practice of opening accounts for customers without their knowledge, which lead to

increased financial hardships for the unsuspecting customers, including impact to credit

scores. In 2016, the US government ultimately intervened and brought a formal case

against Wells Fargo ("Whistleblower: Wells Fargo fraud", 2018).

Both scenarios demonstrated the potential for an appropriately timed

whistleblowing event to prevent harm. They also featured individuals who demonstrated

a higher degree of sensitivity to organizational wrongdoing than their peers. It was this distinction that was my primary interest and the focus of this study. Whereas the type of wrongdoing varies across organizations, most styles of misconduct generally follow a rather predictable pattern of gradual escalation over time through an array of rather subtle organizational factors. This pattern can lead employees to slowly rationalize observed misconduct and leaders to escalate the commitment after increasingly risky decisions. (Anand et al., 2004; Armstrong et al., 2004).

Given this trend, the need for employees to be attuned to indicators of organizational misconduct early-on, to act sooner rather than later, is even more important. Therefore, the purpose of this investigation was to provide insight into various predictors of the likelihood of employees choosing to blow the whistle in response to organizational wrongdoing. The primary goal was to strengthen the scientific understanding of how the misconduct is perceived by employees (Ahmad et al., 2014; Mesmer-Magnus & Viswesvaran, 2005) and if/how they choose to respond (Waytz et al., 2013).

To identify individuals' thresholds for deciding to blow the whistle, I proposed an experimental study in which the timing of an organization's misconduct was a manipulated, independent variable. Participants were asked to imagine themselves in the role of an employee at a large technology company who discovers evidence of corporate misconduct. Then the misconduct was described as either causing eventual harm (future harm scenario), or current and ongoing harm to other people (current harm scenario). The essence of the misconduct in both scenarios involved the transfer of large amounts of user data to a foreign research group without user consent, and with the express purpose of

altering U.S. election outcomes. In the future harm scenario, the transfer would occur in one week. In the current harm scenario, the transfer had already occurred by the time it was discovered. Each participant was randomly assigned one of these two scenarios and then responded to an assessment of personality variables that have been shown to predict whistleblowing in prior research. Additionally, the political orientation and news consumption habits of the participants were assessed, to control for additional influences of the highly relevant and polarizing subject matter of the scenarios on the participants' responses.

The practical outcome for the findings from this study is to provide external authorities and stakeholders (e.g., journalists, investigative governmental entities) with a means of identifying individuals who are more sensitive to wrongdoing behavior and who are more likely to take external whistleblowing actions prior to the full expression of negative consequences of the corporate misconduct, thereby greatly reducing harm to both the organization and the public. By contrasting the responses of individuals faced with an urgent, current harm scenario against those who receive a more ambiguous future harm scenario, the individual differences of participants who choose to engage in mitigative actions in the future harm scenario can be revealed. Furthermore, this study can inform organizational leadership about the process by which whistleblowers evaluate wrongdoing events and choose to act. Specifically, equipping leaders who wish to promote organizational integrity to understand and welcome the value of these individuals and the potential to avoid future harm by elevating their voices is paramount.

The following sections presented a review of relevant literature that further explored the possibility of a moderating effect of personal attributes on the effect of

corporate wrongdoing on the likelihood the employee to blow the whistle. Next,

hypotheses and underlying rationale were presented. Finally, the methods for testing the

propositions were described. Please see Figure 1 for a preview of the hypothesized model

that was tested.

Literature Review

There were several areas within previous whistleblowing research that informed

the underlying premises of the hypotheses presented in this study. Broadly, the

relationship between the employee and organization needed to be examined to identify

the characteristics of organizational misconduct and subsequent employee responses.

Furthermore, the variation in employee response patterns will provide the framework for

the hypotheses in this study and will further aid in the process of disentangling the

individual difference predictors from situational ones. Consequently, I explored the

elements of this relationship individually and divided them into two overarching

domains. First, the origins and prevalence of organizational wrongdoing and the

outcomes of unrestrained organizations in society today were presented. This domain also

included a discussion of the mechanisms that allow upstanding organizations to descend

into corruption. Second, the theory, activity, and outcomes of whistleblowing events were

explored in detail. Finally, the unique characteristics of specific incidences of

organizational misconduct and how individuals respond were presented as a lead-in to the

hypotheses for the current study.

What is Organizational Wrongdoing?

In this section I provided an overview of organizational wrongdoing, with the

goal of establishing the prevalence of this type of wrongdoing worldwide. A functional

definition of organizational wrongdoing was provided for use within this study. Previous

frameworks that have been used to categorize types of misconduct are also discussed.

Additionally, the evolution of corruption within organizations and the consequences of

corruption were explored.

Prevalence of Organizational Misconduct

As mentioned previously, whistleblowing efforts are on the rise globally

(Freshfields Bruckhaus Deringer LLP, 2017). Additionally, increases in leaking and

whistleblowing behavior have been observed within the United States (Bade &

Hamberger, 2019; Savage & Sullivan, 2017). These observations of whistleblowing

efforts indicate a growing, systemic rise in corporate wrongdoing. Unfortunately, the

incentives for organizations to engage in unsavory behavior continue to outweigh the

costs. In an investigation of nongovernmental organizational wrongdoing worldwide,

Gibelman and Gelman (2004) found that despite increased visibility of such wrongdoing

(i.e., media exposure of misconduct) and increased accountability mechanisms,

wrongdoing remains prevalent.

Empirical investigations into organizational misconduct are also notoriously

difficult to conduct. Kaleck and Saage-Maaß (2010) examined the existing array of legal

precedents and enforcement procedures worldwide and found that these efforts were

generally insufficient to address the breadth of organizational misconduct. Furthermore,

in an exhaustive review of the existing whistleblowing protections in the U.S. (i.e., the

Sarbanes-Oxley whistleblower provisions), Moberly (2012) found that these provisions

have been largely insufficient to prevent wrongdoing and to protect whistleblowers. The

inherent challenges to both identifying deviant behavior and implementing legal

corrective action, leave potential victims of organizational misconduct in a vulnerable

state because the current enforcement infrastructure is inadequate and in need of reform.

Organizational Misconduct Defined

Greve et al. (2010) conceptualize organizational misconduct as "behavior in or by

an organization that a social-control agent judges to transgress a line separating right

from wrong; where such a line can separate legal, ethical, and socially responsible

behavior from their antitheses" (p. 56). This broad definition underscores the complexity

of the behavior and the inherent difficulty in assessing organizational actions and

implementing corrective actions. However, this definition also lacked the specificity

needed for this study. Additional clarity is provided by Vaughan (1999), who

differentiates organizational misconduct from other negative organizational events (i.e.,

mistakes or disasters). Vaughan notes that organizational misconduct can be

characterized as events that feature "acts of omission or commission by individuals or

groups of individuals acting in their organizational roles who violate internal rules, laws,

or administrative regulations on behalf of organization goals" (p. 288). For this current

study, the definition of organizational misconduct features elements from the

conceptualizations above, with organizational misconduct defined as behavior by an

individual or faction within an organization that harms or has the potential to harm

people, both employees, customers, and other external stakeholders. This distinction was

necessary because a focus on harm to human welfare, as opposed to misconduct

involving the organization's financial losses or legal restrictions, introduces a salient

moral imperative to act in the defense of human wellbeing.

Types of Misconduct

Another aspect of organizational misconduct that is relevant to the current study is a framework for evaluating the various types of misconduct within the realm of harm. Identifying a unifying taxonomy for organizational misconduct has been proven challenging for past researchers. Lefkowitz (2009) addresses this issue by providing an extensive review of research concerning organizational misconduct. He provides a concise overview of six common conceptualizations of organizational misconduct. This is especially relevant to this study as it provides a broad framework that captures the potential breadth of misconduct that may occur. The six broad types of organizational misconduct are: (a) unethical behavior, (b) incivility, (c) organizational deviance, (d) corruption, (e) organizational misbehavior, and (f) counterproductive workplace behavior (see p. 65). Unethical behavior refers to actions that violate moral principals within an organization (e.g., violations of a given organization's established ethical code of conduct). Incivility features violations of social norms and can refer to behaviors that are intentionally rude or hostile. Organizational deviance and organizational misbehavior both concern actions that contravene organizational norms. In this context, organizational deviance refers to effects produced by an organization, whether intentional or not, that deviate from the core functions of the organization and cause harm to either employees or the broader public. In a similar vein, the organizational misbehavior involves actions by employees in an organization that purposefully disregard established organizational practices and norms. Conversely, corruption refers to actions that contradict public norms, where wrongdoing within an organization can spread to a point at which the public trust in the organization is diminished. Lastly, counterproductive workplace

behaviors involve actions by organizational members that intentionally break organizational norms or rules, thereby negatively impacting the organization.

Lefkowitz also identified the potential for each of these representations of organizational misconduct to harm either people, the organization, or both. It was this potential for multiple levels of harm that was of interest when developing a manipulation of the consequences of an incident of wrongdoing. As discussed previously, wrongdoing is inherently difficult to define and even more difficult to prevent. Nonetheless, this broad framework provided a means to identify potential sources of misconduct and primarily focused on harm to others as the primary feature and outcome of the wrongdoing.

Consequences of Misconduct

The consequences of continued wrongdoing are far-reaching, compounding, and result in negative outcomes for the organization and beyond. Research from Shadnam and Lawrence (2011) established a theory of moral collapse within institutions and suggest that the breakdowns in regulatory and ideologic processes lead to eventual widespread organizational corruption. Moreover, Linstead et al. (2014) characterize the negative outcomes of corrupt organizational behavior as the *dark side* of organizations. They suggest that organizations can evolve to a deviant state, where misconduct and corruption is widespread, when systems and non-conforming processes become routine. These outcomes further underscore the need for corrective mechanisms within compromised organizations.

To summarize, organizations that have a consistent track record of engaging in wrongdoing are likely to be undeterred by existing regulatory methods. Furthermore, the processes that lead to widespread organizational misconduct are complex and may be

comprised of individual actions, ineffective organizational systems, or some combination

of both. This complexity of the nature of organizational misconduct underscores the

difficulty faced by third-party investigators, who must attempt to definitively establish

that wrongdoing occurred and identify the parties responsible for the wrongdoing within

non-transparent organizations. These difficulties further reinforce the value of an isolated

whistleblowing event as the information exposed by the whistleblowing can be used to

quickly identify the source and nature of the misconduct. Finally, although there are a

multitude of transgressions that can be committed by organizations, I choose to identify

misconduct that harms individuals as the focal type of wrongdoing for this study.

Whereas several prior studies have featured misconduct that is characterized by relatively

tangible, monetary consequences (e.g., Bowen et al., 2010; Brink et al., 2015), the focus

on human welfare in the current study provides participants with a greater moral

imperative to take action to mitigate/prevent the full expression of consequences. As the

evidence and examples cited above illustrate, misconduct of this nature is a current,

salient reality worldwide.

What is Whistleblowing?

In this section, I have provided a detailed examination of the whistleblowing

phenomenon. I began by exploring definitions from the current literature for

whistleblowing before putting forth a conceptualization for the act of whistleblowing for

the current study. Second, I presented the key elements of whistleblowing theory and the

internal mental processes that influence an employee's decision to act, including a brief

review of past formative whistleblowing research, grouped into organizational,

situational, and personal predictors. Under the personal factor domain, personality traits

will be discussed in depth as certain personality traits are potential moderators evaluated

in this study. Finally, I wove together evidence to make the case that whistleblowing can

serve as a significant catalyst for organizational change.

Whistleblowing has been 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 effect action" (Near & Miceli,

1985; p. 4). Internal whistleblowing involves an employee reporting to organizational

leaders or supervisors, whereas external whistleblowing involves reporting to entities

outside an organization (Park, Blenkinsopp, Oktem, & Omurgonulsen, 2008). A further

distinction between these two approaches to reporting can be drawn by examining the

outcome of each. For example, internal whistleblowing efforts can be considered helpful

to an organization and can be conceptualized as being constructively deviant (Galperin,

2012). Conversely, external whistleblowing is not typically beneficial to an organization

and often results in a greater net impact due to increased visibility and scrutiny from

external entities (Dworkin & Baucus, 1998). For this study, while both internal and

external whistleblowing intentions were assessed, the focus was on external

whistleblowing efforts as these represent a powerful check on corporate misconduct

(Pemberton et al., 2012).

Why Do Employees Take the Risk? Predictors of Whistleblowing

The first known theoretical model that identified the predictors of whistleblowing

behavior was developed by Near and Miceli (1985). Broadly, they specified the cognitive

processes used by people who choose to whistleblow. Drawing from both expectancy

theory (Vroom, 1964) and reinforcement theory (Skinner, 1953), they devised a model

for understanding whistleblowers' motivations. Through the lens of expectancy theory, a

potential whistleblower evaluates the prospect that their actions will result in the

organization ceasing the misconduct and whether there will be positive versus negative

outcomes for the whistleblower. Furthermore, the application of reinforcement theory to

the whistleblower decision making process provides additional insights when

wrongdoing is a discriminative stimulus. Specifically, wrongdoing that has been

successfully addressed by past whistleblowing efforts will encourage future

whistleblowing behavior. Conversely, when wrongdoing is unimpeded by these efforts,

inaction will be reinforced as an acceptable response.

As the research on whistleblowing progressed, both individual and situational

factors have been identified and added to the original efforts by Near and Miceli (1985).

To capture the breadth of these studies, I organized the following sections into three

broad domains of whistleblowing factors: organizational characteristics that facilitate or

deter whistleblowing efforts, individual characteristics associated with whistleblowing

propensity, and the outcomes of whistleblowing efforts. Unless otherwise indicated, all

factors discussed below positively predict whistleblowing likelihood.

Organizational Characteristics.

A fitting starting point for an investigation into the factors that influence

whistleblowing behaviors is at the organizational level. To further understand the impact

of organizational corruption; the question of the extent to which an organization

encourages or deters whistleblowing activity can shed light on employee reporting

preferences when exposed to wrongdoing. Numerous studies have examined the role of

organizational structures and processes in whistleblowing behavior. Research by Near et

al. (1993) examined the role of the organization using both power and justice theories and

found that organizations that featured internal legal processes (i.e., established internal

whistleblowing protocols and reporting standards, procedures to mitigate retaliation) for

whistleblowers experienced more favorable consequences of the whistleblowing incident

and for the organization overall than organizations that did not employ internal processes.

They also noted that the level of support for whistleblowing behavior from supervisors

and top management helped to mitigate the risk of retaliation against the whistleblower.

These findings are also echoed in research by Lavena (2016) on whistleblowing within

U.S. federal agencies. She found that not only supervisor support but also organizational

cultures of openness and respect were negatively associated with whistleblowing events.

She proffered a few explanations for this finding, including the possibility that workplace

cultures with these positive attributes result in fewer incidences of misconduct. The

findings from both studies underscore the importance of facilitating structures within

organizations that allow employees to report wrongdoing internally without fear of

retaliation from either supervisors or coworkers.

There are additional structural and environmental factors that predict the

likelihood of whistleblowing activities. For example, the sector in which an organization

exists can influence whistleblowing routes used by employees. Research from Nayır et al.

(2018) found that employees within the public sector were more likely to use internal,

non-anonymous reporting channels while private-sector employees preferred external and

anonymous avenues. Moreover, Pillay and Dorasamy (2011) built a theory identifying

environmental forces that can hinder the success of a whistleblowing effort, including

rigid organizational and governmental structures and large power distances between the

whistleblower and leadership. Additionally, the behavior of a whistleblower's

subordinates was also identified as a barrier to whistleblowing efforts due to the potential

for the whistleblower to be viewed as a disloyal group member.

In summary, the structure of an organization, the internal processes available to

employees to report wrongdoing, and the support of management can all influence

whistleblowing activity. The organizational features that signal favorable outcomes for

employees who blow the whistle can provide insights into the reporting route the

employee will take and the employee anonymity preferences. Organizations that signal

hostility towards potential whistleblowers are more likely to experience external

whistleblowing events. It was these hostile organizations that were of focal interest

within this study as employees exposed to wrongdoing would have fewer recourses

available. The next section explored the characteristics of individuals within these

contexts that distinguish whistleblowers from non-whistleblowers.

Individual Characteristics

This section explored the characteristics of whistleblowers that have been

identified in past research efforts. This information was vital to this study as it further

distinguished the individuals that were most likely to respond from those who would not.

I began this section with the characteristics of whistleblowers that are easily observed

(e.g., organizational position) and progressed toward the more abstract characteristics

(e.g., personality, moral reasoning).

The identification of whistleblowing predictors can be found in research

conducted by Vadera et al. (2009). They identified that higher levels of job performance,

organizational position, pay level, education, and placing value on whistleblowing were

all positive antecedents of whistleblowing efforts. These characteristics further add to the profile of an employee who is more likely to act if exposed to misconduct. Another identifying feature of a potential whistleblower is organizational power, which can be further conceptualized in terms of role legitimacy and employee support (Miceli & Near, 2002). More specifically, individuals who have a high level of role legitimacy and are supported by co-workers, will not only be more likely to perceive whistleblowing as a viable action but will also be more confident that their actions will lead to the termination of organizational wrongdoing (i.e., experience an effective whistleblowing event).

Moving to relatively more abstract whistleblower attributes, a positive connection has been theorized between individuals who possess prosocial attitudes and whistleblowing activity (Dozier & Miceli, 1985). These researchers conceptualize whistleblowing as a type of prosocial behavior, ideally resulting in overall benefit to others. They further suggest that the motivation for one to engage in prosocial behavior is influenced by a variety of moral conflicts, as a potential whistleblower weighs the benefits of an action for others (i.e., acting in a purely altruistic manner) against the potential personal risks. These findings further inform the current study as Dozier and Miceli (1985) theorized that the preferences of employees to engage in prosocial whistleblowing behavior are influenced by both personality and situational characteristics. This interplay between situation and personality will be discussed further in the rationale leading to the current study's hypotheses.

Employee Perceptions of Organizational Misconduct

The question of whether a whistleblower feels morally compelled to act represented another potentially valuable avenue to explore. Zakaria (2015) makes the

case that both deontological and teleological evaluations of wrongdoing are antecedent

factors that positively influence whistleblowing intentions. This framework, drawn from

two separate moral philosophies, is particularly relevant to this study as it provides a way

to conceptualize the internal challenges faced by a potential whistleblowing by outlining

the tension that exists between deontological evaluations (i.e., evaluations based on

existing rules) and teleological evaluations (i.e., evaluations based on consequences) of

organizational misconduct. The moral reasoning of employees also influences their

perceptions of retaliation that may be associated with a whistleblowing event

(Liyanarachchi & Newdick, 2009). These studies further illuminate the internal conflict

that potential whistleblowers face and the competing moral evaluations considered before

the decision to act. The relationship between moral reasoning and whistleblowing is

complex and influenced by numerous environmental and situational factors.

Employees within organizations where wrongdoing occurs are firsthand observers

of misconduct and often the victims as of it as well. The response of these employees to

wrongdoing is useful to explore as it can ultimately drive employees to take decisive

actions to address the wrongdoing. To begin the investigation into employee responses,

the model for employee responses to organizational wrongdoing by McLain and Keenan

(1999) provides an excellent foundation. Their model suggests that there are three key

steps in the employee decision making process concerning whether to whistleblow: (a)

awareness, (b) judgement, and (c) a response.

This model was useful within this current investigation because of the breakdown

in employee judgements of wrongdoing helps to explain why whistleblowing responses

are rare. Unfortunately, an employee response to organizational misconduct that has

become increasingly common is to rationalize the misconduct and allow it to continue

(Anand et al., 2004; Bandura, 1999; Carsten & Uhl-Bien, 2013). Furthermore, many

individuals choose not to whistleblow when they believe that nothing will change if they

do (Brown et al., 2008).

Will the Result be Worth the Risk? Employee Perceptions of Whistleblowing Outcomes

The final consideration in this section was whether a whistleblowing event would

lead to intended outcomes and the cessation of wrongdoing. This echoes the role of

expectancy theory discussed earlier, as this assessment is the crux of an individual's

decision to whistleblow. This is a crucial factor that a potential whistleblower must

evaluate as the act of whistleblowing involves a high level of personal risk, as these

efforts represent a unique challenge to the power asymmetry that exists between an

individual employee and the employer. External investigations into organizational

misconduct face a multitude of challenges when attempting to observe suspect behaviors

internal to an organization (Kaleck & Saage-Maaß, 2010). This inherent difficulty can

elevate the importance of a whistleblowing event in which the external entities gain

unfettered access into the internal workings of an organization.

When whistleblowing occurs, the organization that is guilty of misconduct can be

harmed in the short-term. However, this harm may be temporary and can provide the

organization with the opportunity to correct its behavior and to engage in reparations for

harmed parties (Anand et al., 2004; Miceli et al., 2012). Aside from the ability for

whistleblowing efforts to check organizational conduct, these efforts can also serve as a

prosocial function by mitigating future harm done by an organization (Tsahuridu, 2011).

When an employee decides to blow the whistle, especially when an external route is used, society stands to reap substantial benefits. For organizations guilty of misconduct, an effective whistleblower can provide insights into the organization that both external investigators and the broader public would not have obtained otherwise. Furthermore, the occurrence of a whistleblowing event can potentially prevent further harm conducted by the organization.

Hypotheses and Rationale

The current study represents an additional step in the ongoing research efforts to disentangle the complex interplay between individual and situational attributes that inform the whistleblowing decision. According to Lewin's (1943) field theory, an individual's behavior or intention can be conceptualized as the combination of both individual characteristics and situational factors at a given point in time. When this model is applied within a whistleblowing context, it helps to explain the wide range of individual responses to situations involving wrongdoing, and underscores the inherent challenges faced by researchers investigating whistleblowing behaviors. When researchers have examined the situational context for organizational wrongdoing, both environmental factors (e.g., the influence of other employees and leaders, the organizational attitudes towards whistleblowing) and the type of wrongdoing have been identified as predictors of employee responses. Near et al. (2004) found that the type of wrongdoing observed had a significant effect on employee reporting actions. Specifically, they identified that employees were more likely to whistleblow under more serious infractions (e.g., sexual harassment) than when exposed to misconduct involving theft or company waste. Furthermore, employees choose not to report wrongdoing if they do not

believe it will result in the organization ceasing the misconduct. These findings further

underscore the impact of situational factors on individual behavior and the potential for

misconduct to rise to a level that will result in consistent whistleblowing responses from

most employees. The next section explored the characteristics of wrongdoing that can

create situations that demand action, alongside factors that lead to inaction and

ambiguity.

Manipulating the Temporal Immediacy of Organizational Misconduct

Although the studies described above have explored variations of the relationship

between wrongdoing and employee responses, the tipping point at which an employee

perceives the misconduct as worthy of reporting remains unclear. The focus of this study

was to examine the responses of participants across two situations that vary with respect

to the harmful consequences of the organization's misdeeds and, by extension, the

urgency warranted to take meaningful action. Specifically, the intent was to explore how

an individual's unique frame of reference informs their reporting choices as the harm

resulting from the misconduct escalates. A framework that helps to explain the factors

that influence employee decisions was created by Jones (1991). Jones theorized that the

responses of individuals in ethically complex situations are dependent on the moral

intensity of the situation. He posits that "every ethical issue can be represented in terms

of its moral intensity, a construct that includes six components: magnitude of

consequences, social consensus, probability of effect, temporal immediacy, proximity,

and concentration of effect" (p. 374). Although all six factors play a role in predicting an

employee's decision making framework, the magnitude of consequences, the probability

of effect, and the temporal immediacy of a wrongdoing scenario are the most applicable

within a whistleblowing context and best inform the research objectives of this study. The

magnitude of consequences can be conceptualized as the totality of harm that will occur

because of wrongdoing and the probability of effect is the assessment of whether the

wrongdoing observed will result in the predicted harm. Temporal immediacy refers to an

individual's perception of the temporal lag between the observed wrongdoing and the

subsequent harm. Wrongdoing situations that feature a brief temporal gap between the

wrongdoing itself and the deleterious consequences represent cases of greater temporal

immediacy, whereas longer time lags will result in relatively lower levels of temporal

immediacy.

Research by Singer et al. (1998) further uncovers the role of moral intensity in

contributing to employee decisions to whistleblow. They found that two of the moral

intensity dimensions—the magnitude of the consequences of wrongdoing and the

likelihood that the consequences of wrongdoing would be realized (i.e., probability of

effect)—were positively related to whistleblowing. They also found that after reading

hypothetical scenarios involving varying levels of harm stemming from misconduct,

empathy felt by participants for potential victims was a positive predictor of

whistleblowing intentions. These findings suggest that as individuals' perceptions of the

deleterious consequences of the misconduct increase, so does their sense of urgency to

report it. Applied within the context of this study, this indicated the potential to hold the

misconduct (i.e., magnitude of the consequences) constant while manipulating the

temporal immediacy of the misconduct for participants. As Jones (1991) states, "the

magnitude of consequences will be discounted in accordance with the temporal distance

of the predicted effects…as the time period between the act in question and its expected

consequences expands, the probability that the act will actually cause the predicted harm

declines" (p. 376). This provided further rationale for the choice to only manipulate

temporal immediacy in this study, as the nature of this manipulation would subsequently

influence the perception of harm (i.e., more distal consequences may be perceived as less

probable by participants). Furthermore, this approach also allowed for the selection of

any type of organizational misconduct for the study and provided an opportunity to

generate multiple scenarios by varying the proximity of harm.

Thus, for the current study I created two scenarios that depict an identical type of

organizational misconduct but differed due to the temporal immediacy of the

consequences of the misconduct. By distinguishing between reporting behaviors in

response to wrongdoing that is causing current harm and wrongdoing that will cause

future harm if left unchecked, the conditions under which certain employees choose to act

could be better understood. At greater levels of temporal immediacy (i.e., misconduct

causing current and ongoing harm); I expected to observe an increase in the likelihood of

whistleblowing behavior, as a demonstration of the whistleblower's attempt to

circumvent the damage.

Hypothesis 1. Employees will be more likely to blow the whistle when the

organization's misconduct is causing current harm than they will in situations

where harm will occur in the future.

Urgent Situations Mask Individual Differences in Predicting Whistleblowing

In the current harm scenario, I expected that individual difference predictors of

whistleblowing would be less noticeable. Conversely, in the future harm scenario when

the temporal urgency is diminished, individual differences would be much more

pronounced. This prediction was informed by research from Beaty et al. (2001), which

explored the role of individual differences (i.e., personality traits) and contextual

performance under strong versus weak situations. They found support for Mischel's

(1977) assertion that strong situations will diminish the visibility of individual

differences; whereas under weak situations, individual differences would be more

pronounced. This distinction between the elements of the situation that prompt different

behaviors have been characterized as situational strength. Meyer et al. (2010) define

situational strength as "as implicit or explicit cues provided by external entities regarding

the desirability of potential behaviors" (p. 122). Thus, the presence of an environmental

cue can exert may pressure on certain individuals, eliciting a subsequent behavior. The

degree to which a situation can be considered strong or weak is dependent on the

ambiguity present in the situation, with strong situations featuring distinct indicators of

appropriate responses, and weak situations featuring little guidance for what behavior is

expected (Judge & Zapata, 2015).

This distinction was crucial within this study because the goal of manipulating the

timing of the consequences (i.e., temporal immediacy) of the wrongdoing was to identify

the types of individuals who would act prior to the harm occurring. Specifically, under

conditions of current harm, I expected to observe a greater likelihood of individuals

indicating that they would blow the whistle. Thus, as the overall magnitude and

likelihood of the consequences of organizational wrongdoing are elucidated to an

individual, they should be compelled to act (Singer et al., 1998). However, under

conditions of future harm, the potential whistleblower may find themselves in a relatively

more ambiguous position.

Added to the complexity of the details of the wrongdoing itself are the social

norms in the organization and the presence of other employees. Latané and Nida (1981)

examined the social inhibitions that prevent an individual from intervening in a crisis.

The authors found both a dampening effect of individual differences in instances when

the situation posed a clear threat and avoidance behaviors (i.e., diffusion of responsibility,

social influence, and audience inhibition) when the threat was less clear. They concluded

that in situations where harm is clear and salient, virtually everyone volunteered to help

the person in need, regardless of whether they were alone or in the company of others. A

recent meta-analysis conducted by Fischer et al. (2011) reported evidence consistent with

this conclusion—namely that in non-ambiguously threatening situations, the presence of

bystander effects is diminished.

Similarly, within the job performance context, Judge and Zapata (2015) found

that in strong situations (i.e., work scenarios with clear expectations) personality effects

were muted whereas, in weaker situations (i.e., work scenarios with ambiguous

expectations), employee personality more strongly predicted performance. These findings

suggest that personality will predict performance more strongly in some situations than

others. Extending this argument to include the situationally contingent relationship

between personality and voluntary organizational citizenship behaviors (OCB's),

research conducted by Meyer et al. (2014) found that in weak situations, both

agreeableness and conscientiousness more strongly predicted OCB's than in strong

situations. In summary, in weaker situations that involve acting in a prosocial manner for

the benefit of the organization, personality may be a stronger predictor of behavior than in situations where there is less ambiguity or when there are clearer behavioral expectations.

This potential for individual differences to predict behavior more strongly in less threatening situations raised the possibility of a moderating role of individual differences (i.e., personality traits) in how scenarios depicting relatively less harmful occurrences of organizational misconduct were developed for this current study. Consequently, the broader purpose of exploring behavior in scenarios depicting lesser harm was the potential to discover indicators of whistleblowing propensity before the escalation of harm, thereby mitigating future risk. The following sections explored the moderating role of personality traits within the relationship between observed harm and whistleblowing responses.

The Moderating Role of Employee Personality

One of the key variables included in this study as a potential moderator of whistleblowing behavior is personality, commonly conceptualized and assessed using the five-factor personality trait structure (Costa & McCrae, 1992; Goldberg, 1999; Soto & John, 2017). The five-factor personality structure is particularly valuable within this study as it provides a relatively stable and easily observable profile of an individual. This method can provide insight into critical behavioral indicators, especially when applied within a whistleblowing context.

The Big Five and Whistleblowing: A Case for Trait Activation. Past research efforts have studied the relationship between the five-factor personality model and whistleblowing. When examining the effect of personality on whistleblowing, Bjørkelo et

al. (2010) found that low levels of agreeableness and high extraversion were predictors of

whistleblowing behavior. Moreover, Brink et al. (2015) found that extraversion and

conscientiousness were positive indicators of whistleblowing likelihood. Although these

studies identified main effects for personality traits on whistleblowing, the argument for

potential moderating effects of these traits warrants additional investigation.

Turning again to extant research supporting the relationship between personality

and job performance as a model (i.e., Barrick & Mount, 1991; Ones et al., 2007), it is

noteworthy that, although personality traits have been consistently found to partially

explain the variance in job performance, the variance explained is rather scant (e.g., for

conscientiousness, the corrected validity coefficient is approximately .20 or 4% of

variance explained). However, adding the moderating role of context is an opportunity to

potentially explain more variability in employee behavior. As aforementioned, Judge and

Zapata (2015) identified enhanced predictive ability for personality traits in weak

situations. Moreover, Tett and Burnett (2003) provide an explanation for the interaction

effects between personality and the situation using Trait Activation Theory. Specifically,

they posit that when an individual encounters a situation featuring cues that are relevant

to one of their personality traits, that trait will be elicited. Furthermore, they argue:

"…the greatest variance in trait-expressive behavior may be expected in weak situations

where extrinsic rewards are modest or ambiguous but only in those situations that are

relevant to the given trait" (p. 502). Thus, although there is little research on the

moderating role of personality within a whistleblowing context, there have been

empirical findings in adjacent subfields of organizational science to suggest that

personality traits can act as moderators when individuals are exposed to relevant

situational cues within a sufficiently weak or ambiguous situations that would evoke the

manifestations of those traits.

Agreeableness. Research conducted by Bjørkelo et al. (2010) identified the

presence of a main effect of (low levels of) agreeableness and whistleblowing behavior.

They suggest individuals with low agreeableness are more prone to speak out against

wrongdoing and that "whistleblowers are employees who dare to jeopardize how they

look in the eyes of others for the sake of stopping wrongdoing at work" (p. 386). When

evaluating the trait of agreeableness as a potential moderator, the distinction in behavior

for an individual with low levels of agreeableness versus one with high levels of

agreeableness when exposed to wrongdoing can be understood by considering which

individual is more likely to violate group norms. Highly agreeable individuals are

characterized as those who are highly influenced by interpersonal relations and have a

desire for sustained, positive relationships with those around them (Graziano & Tobin,

2002). Research conducted by Graziano et al. (1996) also found that highly agreeable

individuals tend to view conflict differently, in pursuit of maintaining relationships, than

those who are less agreeable. They state that "agreeable people may be more highly

motivated to maintain positive relations with other people, and this motive system may

induce agreeable persons to generate positive perceptions and attributions to otherwise-

provocative behavior" (p. 832). Conversely, research from Witt et al. (2002) found that

individuals who have lower levels of agreeableness are less concerned with interpersonal

relations and are unlikely to comply with organizational politics (e.g., placating leaders to

avoid conflict). Thus, under conditions involving future harm, individuals who have low

levels of agreeableness should be more willing to violate group norms and engage in

counter normative behavior (i.e., whistleblowing). In contrast, those who are highly

agreeable may be more willing to comply with group norms rather than risk the

disapproval of the group. The disapproval of a group for an individual's counter

normative behavior is a form of social control and can be a powerful deterrent to norm

violation (Chekroun & Brauer, 2002). Less agreeable individuals may be less subject to

the influence of a group's social control. However, I expected the effects of

agreeableness to diminish in the current harm condition as the urgency of the situation

takes precedence.

Hypothesis 2. Agreeableness will moderate the effect of the timing of harm on

whistleblowing likelihood. In the future harm condition, those who are less

agreeable will be more likely to whistleblow than those who are more agreeable.

Additionally, in the current harm condition, the magnitude of the effect of

agreeableness on whistleblowing likelihood will be smaller than it will be the

future harm condition. See Figure 2 for a visual depiction of this proposed

moderation.

Conscientiousness. Individuals with high levels of conscientiousness are

characterized as being highly organized, prone to purposeful action, dependable,

responsible, and persistent when faced with challenges (Barrick et al., 1993). The trait of

conscientiousness has been found to be positively related to whistleblowing intentions

(Brink et al., 2015). They surmised that highly conscientious individuals would have a

greater level of self-discipline and would engage in critical thinking prior to acting.

Expanding on this past research, I explored the potential for high levels of conscientiousness to act as a moderator that strengthens the association between the timing of the harmful misconduct and the decision to whistleblow. Research conducted by Kaplan et al. (2010) found that highly conscientious individuals have an increased ability to detect organizational threats. They argue that highly conscientious people, who are relatively more diligent and hardworking, could be more attuned to potential threats in the environment than their less conscientious counterparts. Highly conscientious people have not only been found to be more perceptive of potential risk but are also to be more likely to engage in risk reduction behaviors than those with moderate and low levels of conscientiousness (Hampson et al., 2000). The tendency of highly conscientious individuals to be risk-averse has also been demonstrated within the context of workplace safety. Specifically, a meta-analysis conducted by Beus et al. (2015) examining the role of personality traits and workplace safety found conscientiousness to be negatively associated with unsafe behaviors. Finally, research from Van Gelder and De Vries (2016) found that highly conscientious individuals are unlikely to be enticed by, or participate in, occupational crime. Conversely, they found that those with low conscientiousness were less likely to consider long term consequences of risky behavior and were more prone to engage in unethical activity.

Together these findings provide support for the notion that when highly conscientious individuals are exposed to conditions involving future harm or illicit behavior, they may be more inclined to employ strategies to prevent harm associated with misconduct than their less conscientious coworkers. In situations involving current harm, in which the situation is relatively unambiguous and the detrimental effects of the

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organization's misconduct are ongoing in the present, I expected the association of

conscientiousness with reporting likelihood to diminish.

> Hypothesis 3. Conscientiousness will moderate the effect of the timing of harm on
> whistleblowing likelihood. In the future harm condition, those who are more
> conscientious will be more likely to whistleblow than those who are less
> conscientious. Additionally, in the current harm condition, the magnitude of the
> effect of conscientiousness on whistleblowing likelihood will be smaller than it
> will be the future harm condition. See Figure 3 for a visual depiction of this
> proposed moderation.

CHAPTER II

Method

Participants

Inclusion Criteria

Participants were 18+ years of age and lived within the United States. Ideally, participants would have been employed part or full time within an organization; nonetheless, the potential to capture whistleblowing perspectives from individuals who are unable to work, are self-employed, or have been recently laid off would also help to inform this study. Thus, current employment and work experience for participants were captured using several demographic questions examining industry, organizational size, and years of professional working experience.

Recruitment

The data was collected using the online survey platform Prolific. Prolific is an online marketplace in which registered participants are recruited based on criteria outlined by the researchers and compensated for completing surveys. For the current study, participant compensation was set at a living wage of 15 dollars (US) per hour.

Procedure

After the participants accepted the invitation to the study, they were directed to the survey located on Qualtrics. Based on pilot data, it was expected that the entirety of the survey would require an average of approximately 9 minutes for participants to complete. After agreeing to the specifications outlined in the informed consent, they were asked a series of demographic questions (see Appendix C). Next, participants were randomly assigned to one of the two scenarios using a Qualtrics randomizer function and

asked to imagine themselves as an employee in that situation. Then they were asked three

follow-up questions that serve as comprehension checks. Next, the participants responded

to a series of questions from the Attitudes and Cultural Orientation Questionnaire (Park,

Blenkinsopp, Oktem, & Omurgonulsen, 2008) that captured their intentions to blow the

whistle in the given situation. After completing the Big Five Inventory (BFI-2; Soto &

John, 2017), participants were thanked and provided a unique verification code for

compensation.

Sample Size and Power

Aguinis (2004) suggests that the appropriate sample size for a moderated multiple

regression is between 150 and 200 participants. Given this recommendation represents a

minimum threshold and to account for potential missingness, a total sample of 250 was

the target for this study. Each condition will be assigned 125 participants, which will

improve power, the stability of the standard error estimates, and reduce the probability of

type II heteroscedasticity.

Manipulation and Measures

Organizational Wrongdoing Scenarios

This study used a vignette method to expose participants to hypothetical scenarios

involving organizational misconduct and analyze their responses. There have been

multiple studies that have explored whistleblowing intention using survey methods (see

Mesmer-Magnus & Viswesvaran, 2005 for an exhaustive review of whistleblowing

research efforts); however, few have used vignettes as a means of varying certain aspects

of the situation surrounding a type of organizational misconduct in an attempt to

strengthen causal inferences. Bjørkelo and Bye (2014) suggest that hypothetical vignettes

involving potential wrongdoing or survey questions involving various types of

wrongdoing are the two main methods of assessing whistleblowing likelihood.

The Use of the Vignette Method in Past Whistleblowing Studies. Ellis and

Arieli (1999) used three hypothetical situations involving various types of wrongdoing to

determine the likely response of Israeli military personnel. Park, Blenkinsopp, Oktem,

and Omurgonulsen (2008) used a single hypothetical scenario in which participants

imagined that they discovered their employer was engaging in tax evasion and then asked

them to indicate the likelihood that they would blow the whistle. Similarly, Liyanarachchi

and Adler (2011) used a vignette approach with three separate scenarios in which the

participants were placed in a third-person perspective and asked to indicate the likelihood

that a fictional character would blow the whistle. Participants were exposed to all three

scenarios involving various types of accounting misconduct and their responses were

combined into a composite that was meant to reflect their whistleblowing attitudes.

Park, Im, and Keil (2008) introduced an additional level of complexity to

vignette scenarios involving fault reporting within an information technology role by

manipulating both time urgency for reporting and personal responsibility for the fault

within the vignette conditions. Brink et al. (2015) used a similar vignette approach in

which levels of the financial impact of the wrongdoing to an organization were

manipulated to increase the level of misconduct in the scenario. Finally, the study design

that most closely resembles the one to be employed in the present study was conducted

by Andon et al. (2018), who manipulated two levels of financial incentives for employees

who report wrongdoing to ascertain if that variable would affect the reporting likelihood.

They also examined the participants' perceptions of the seriousness of the wrongdoing as a moderator.

In summary, there is a solid precedent in past research for employing the vignette method in which participants imagine themselves in a scenario and report what they believe they would do under those specific circumstances. It must be noted that a substantial critique leveled on this method is that participants are likely overestimating their propensity to blow the whistle because there is no real-life risk associated with their decision. Admittedly, this is one of the primary challenges associated with conducting scientific research on a sensitive and relatively rare phenomenon such as whistleblowing behavior. Nonetheless, it is hoped that even when accounting for an overestimation of whistleblowing likelihood (i.e., range restriction on the dependent variable), the findings could still yield some valuable insights into the ways that individuals judge the nature of organizational misconduct and make the choice as to whether to report it.

Vignette Method for the Current Study. The current approach builds on these past efforts but featured some unique distinctions. First, I did not include scenarios depicting different types of misconduct. Instead, scenarios were crafted to intentionally vary the timing of the harmful consequences for an identical incident of misconduct. I modeled the scenarios based on two recent events: the Katharine Gun story detailed earlier in this manuscript and the Cambridge Analytica whistleblower, Christopher Wylie (Cadwalladr, 2018). Participants were randomly assigned to a scenario that represented one of two conditions: a scenario in which the organizational misconduct is resulting in current, ongoing harm and a scenario in which the misconduct will cause the same level of harm but occurring in the future.

The scenarios involved the discovery of evidence of personal data misuse by an employee (i.e., the participant) at a large technology company. The difference between the two vignettes was the occurrence of wrongdoing with the first vignette (future harm scenario) explicitly stating that the misuse would occur within one week of the discovery. For the second vignette (current harm scenario) the wrongdoing had already occurred. All other vignette information was intentionally kept identical with only the timing of the harm manipulated. See Appendix C for the vignettes as they were presented to the participants.

Manipulation Checks. Each of the two vignettes was followed by a reading comprehension check question and two questions that were meant to gather evidence for the construct validity of the scenarios. Specifically, the final two questions assessed the participants' understanding of the nature of the wrongdoing depicted and ensured they perceived that the scenarios differed in terms of the timing of the harm (see Appendix C).

Whistleblowing Likelihood

The Whistleblowing Attitudes and Cultural Orientation Questionnaire (Park, Blenkinsopp, Oktem, & Omurgonulsen, 2008) was developed to assess a variety of whistleblowing behaviors and the relationship between the behaviors and participant attitude, cultural orientation, and nationality. Because whistleblowing attitudes are of key interest in this study, the cultural orientation subscales were not be used in official hypothesis testing. However, these subscales were employed in the data collection and used in exploratory analyses to potentially inform follow-on research.

Measure Description. This questionnaire consists of 24 items with 14 items assessing whistleblowing attitudes and 10 items assessing cultural orientation. For the 14

whistleblowing attitude items, participants are asked to rate the items using a 5-point

Likert scale ranging from 1 (*strongly disapprove*) to 5 (*strongly approve*). The 14

whistleblowing items are also categorized by whistleblowing route: internal, external,

identified, anonymous, formal, and informal. An example of a whistleblowing attitude

item is, "He reports wrongdoing but doesn't give any information about himself" (p.

932). In this study, the 14-item scale was modified slightly with each item changed from

the gendered pronoun *he* to *I* for each item, placing the participants into a first-person

perspective. For each question, the language used to describe participant actions was also

changed for consistency (i.e., for questions that state "*I report*", the language was

changed to "*I will report*"). Further, the Likert scale anchors were changed from *approve*

to *agree* to maintain continuity with the other measures in this study. For analysis, the

items corresponding to the internal and external whistleblowing routes were averaged to

create two separate composite scores (i.e., questions 1-3 for internal whistleblowing and

questions 4-6 for external whistleblowing). These two items, internal whistleblowing

(IWB) and external whistleblowing (EWB) were the focal dependent variables in this

study. The other four whistleblowing routes in this measure were collected for

exploratory analysis.

Reliability and Validity Evidence. The Whistleblowing Attitudes and Cultural

Orientation Questionnaire was administered to a sample of social science undergraduate

students (54.5% male; 45.5% female) from South Korea, Turkey, and the United

Kingdom ($N = 759$). In the 2008 study, the Cronbach's alpha coefficients for the

whistleblowing items under each whistleblowing route were: internal ($\alpha = .72$), external

($\alpha = .61$), identified ($\alpha = .67$), anonymous ($\alpha = .64$), formal ($\alpha = .51$), and informal ($\alpha = $

.59). When used in this study, the alpha coefficients for each subscale were: internal (α = .93), external (α = .79), identified (α = .82), anonymous (α = .72), formal (α = .71), and informal (α = .83). Additionally, in a subsequent study, Park et al. (2014) conducted an exploratory factor analysis (i.e., principal components analysis with varimax rotation) for the internal, external, identified, and anonymous subscales and reported sufficient evidence to support four distinct whistleblowing attitudes, accounting for a combined 85% of the variance.

Personality

The Big Five Inventory (BFI-2) created by Soto and John (2017) is a self-report personality assessment used to identify each of the five personality domains and their associated facets.

Measure Description. This assessment is comprised of 60 items, a reduction from the previous 110 item five-factor inventory. Participants will respond to each item on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The 60 items are categorized into the personality domains: (a) extraversion (12 items), (b) agreeableness (12) items), (c) conscientiousness (12 items), (d) negative emotionality (12 items), and (e) open-mindedness (12 items). An example item from the conscientiousness subscale reads: "Is persistent, works until the task is finished." For analysis, the items corresponding to each personality domain will be combined and averaged to create a composite score. See Appendix C for the full measure.

Reliability and Validity Evidence. Internal consistency was assessed using Cronbach's alpha across two separate samples, an online sample and a student sample respectively with alpha coefficients reported as: extraversion (α = .88/.88), agreeableness

(α = .83/.85), conscientiousness (α = .88/.86), negative emotionality (α = .90/.90), and

open-mindedness (α = .84/.85). When used in this study, the alpha coefficients for each

of the 5 subscales were: extraversion (α = .87), agreeableness (α = .84), conscientiousness

(α = .90), negative emotionality (α = .91), and open-mindedness (α = .85).

The authors demonstrated convergent and discriminant validity across each of the

5 domains by evaluating domain level correlations between the BFI-2 and five other

personality measures (i.e., BFI, BFAS, Mini-markers, NEO-FFI, and NEO PI-R; see Soto

& John, 2017). They reported strong convergent validity between the BFI-2 and existing

measures and indicated that the monotrait-heteromethod correlations were much stronger

than both heterotrait-heteromethod and heterotrait-monomethod correlations. They also

conducted an exploratory factor analysis employing a principal components extraction

with Varimax rotation to determine factor loading for each of the five domains and found

that each item loaded onto its associated domain factor for both samples (i.e., all loadings

were .39 or better for the online sample and .45 or better for the student sample). This

was followed by a confirmatory factor analysis where the authors indicated acceptable

model fit as the comparative fit index (CFI) for both online and student samples ranged

from .902 to .952, and the root-mean-square error of approximation (RMSEA) ranged for

.054 to .081.

Covariates: Political Orientation and News Consumption

Due to the unique politically sensitive nature of the vignettes created for this

study, there was the possibility the variance observed in participant whistleblowing

responses would be partially explained by either the participant's political orientation or

the extent to which the participant was aware of current events. Because the election

meddling efforts in the 2016 election favored the more conservative candidate, the

potential influence of participant political orientation was an important consideration.

Thus, individuals identify as more liberal could have been more concerned with future

election meddling and thereby more inclined to whistleblow than those who are more

conservative. Likewise, individuals who frequently consume news may better understand

the potential ramifications of election meddling. These individuals may be more likely to

perceive the misconduct as problematic and choose to whistleblow than those who do not

consume news and are less aware of current events.

Aguinis (2004) has demonstrated through several data simulations that moderations

featuring a categorical predictor interacting with a continuous predictor are typically

small and difficult to detect. Because news consumption and political affiliation could

theoretically account for additional variability in the dependent variable (i.e.,

whistleblowing likelihood), I included both variables as controls in order to explain more

irrelevant variance in the dependent variables, thereby increasing the likelihood of

finding a significant moderation. Both covariates were assessed using two, single-item

measures. The political orientation question was developed by Haidt and Graham (2007)

and the news consumption measure was created by the author expressly for this current

study. The political orientation question features a single item that states: "Please indicate

your political orientation." Responses to this item are captured using a 7-point Likert

scale ranging from 1 (*extremely conservative*) to 7 (*extremely liberal*). The news

consumption question states: "Please indicate the extent to which you follow national and

political news reporting." This measure features a 10-point sliding scale ranging from 1

(*does not consume any news*) to 10 (*daily news consumption*).

CHAPTER III

Analyses

After successfully collecting a dataset of 250 cases using the prolific platform, I prepared the dataset for analysis through a structured data cleaning process. These preparation steps are detailed in the following section. Next, I transformed the focal study variables (i.e., BFI-2 factors, whistleblowing attitudes) into composite scores. After correcting the reverse coded items on the BFI-2, I created average scores for each of the 5-factor domains, and each of the whistleblowing routes (i.e., internal whistleblowing and external whistleblowing).

The next step was to test the statistical assumptions for both the moderated multiple regression analyses and independent t-tests. The procedures are detailed in the section below. I then generated descriptive statistics for the dataset and created Table 2 to provide demographic information and Table 3 to report variable means, standard deviations, correlations, and internal consistencies. Next, I tested the three core hypotheses in the study. For the first hypothesis, I used a series of independent t-tests to determine the mean differences in whistleblowing outcomes between both experimental conditions. To test hypotheses two and three, I ran moderated multiple regressions for each whistleblowing outcome (i.e., internal and external) to determine whether the personality traits of agreeableness and conscientiousness were moderators. In these analyses, the experimental condition represented the independent variable (IV) and whistleblowing outcomes of both internal and external whistleblowing were the dependent variables (DV). Finally, I conducted several exploratory analyses to ascertain if the remaining five-factor traits (i.e., extraversion, open-mindedness, and negative

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emotionality), along with news consumption and political orientation, moderated the

relationship between the experimental condition and both internal and external

whistleblowing outcomes. Finally, both news consumption and political orientation were

entered as covariates into the full moderation models for agreeableness and

conscientiousness across both whistleblowing outcomes.

Results

Data Preparation

Upon completion of the data collection process on Prolific, I began the data

cleaning process by first removing the automated system outputs (e.g., IP addresses,

unique response identifiers) after screening for duplicate cases. No duplicate cases were

identified, resulting in a sample of 250 cases, featuring 125 cases in each of the vignette

conditions.

Missingness

To assess for missingness, I began with a visual assessment of the dataset to

screen for missing values, followed by a frequency analysis to determine item-level

missingness for each variable. Following the guidelines provided by Olinsky et al. (2003)

for determining acceptable missingness levels, I determined that none of the cases that

had less than 24% complete data at the case level and therefore all cases were acceptable

for inclusion in analyses. I used Microsoft Excel to determine the percentage of

missingness by case and found only 44 contained missingness at the item level. Of those

cases, all but two had 1-2% missingness (i.e., 1-2 items), with one case missing 3% and

another, 8%. To assess scale-level missingness, I used frequency counts in SPSS to

identify missing values. Across all variables, none exceeded 24% missingness. Finally, I

used Little's MCAR test (Baraldi & Enders, 2010) to assess for any patterns of item-level

missingness. The results were non-significant $\chi^2(3706) = 3797.26$, $p = .15$, indicating no

reason to suspect data were not missing completely at random. Thus, all cases and

variables met the threshold for inclusion in both preliminary and primary analyses for this

study.

Outliers

The data was assessed for outliers using procedures outlined by Field (2013) and

Orr, Sackett, and Dubois (1991). Using the SPSS frequency analyses and histogram

graphics for each variable, I performed a visual inspection for outliers within the dataset.

After completing this analysis, no responses were identified as extreme outliers, which

indicated that the data was appropriately suited for further analysis and that no winsoring

was required.

Testing Statistical Assumptions

Then the following assumptions for the independent t-tests and moderated

multiple regressions were checked: (a) linearity, (b) independence, (c) normal distribution

of residuals, (d) homogeneity of variance (Field, 2013). To test the assumptions of

linearity, independence, and normal distribution of residuals, I ran frequency tests for all

the focal study variables and used visual inspections of histogram outputs to identify

anomalies. Additionally, I ran simple linear regressions between the predictor and

outcome variables to obtain histogram outputs of residual values for these variables.

After running these tests, I was able to determine that none of the above assumptions had

been violated. I tested the assumption of homogeneity of variance for each independent t-

test, using the Levene's test method, which features an acceptance criterion of .05 or

higher to confirm that this assumption was not violated and that equal variances could be

assumed. For each of the t-test analyses in this study, Levene's was non-significant, and

there were no statistically significant correlations. Finally, type 2 heteroscedasticity was

assessed through visual inspections of the regression histogram outputs between the

predictor and outcome variables mentioned above. Furthermore, the risk of type 2

heteroscedasticity was further reduced by ensuring equal group sizes for each vignette

scenario.

Procedures for Testing Hypothesized Moderations

To assess each proposed moderation in both hypotheses two and three, I used the

PROCESS macro in SPSS to conduct each analysis. To capture the breadth of potential

whistleblowing intentions in these analyses, I utilized both IWB and EWB outcome

measures. For each hypothesis below, I have included a separate moderation analyses for

each of the whistleblowing outcomes. To test each of the following 4 moderations (i.e., 2

analyses for hypothesis two, and 2 analyses for hypothesis three), I used the SPSS

PROCESS macro model 1 (Hayes, 2013). For all the moderation analyses, I centered the

predictors in PROCESS in order to reduce multicollinearity. In each moderation analysis,

the two-level scenario (i.e., current and future harm) was modeled as the predictor, with

IWB and EWB as the dependent variables. The agreeableness and conscientiousness

variables were each entered as moderators within their associated models.

Preliminary Analyses

I began the preliminary analysis by generating both descriptive statistics for the

demographic variables (see Table 2) and running bivariate correlations for the focal study

variables in SPSS (see Table 3). Additionally, I calculated the alpha coefficients for each

scale used and have provided the results for each variable in Table 3. It is worth noting

that the external whistleblowing scale ($\alpha = .79$) did not reach the ideal alpha threshold of

>.80 (Gliem & Gliem, 2003; Cortina, 1993). The questionable precision of this measure

can potentially have a dampening effect on power in the moderation analyses (Aguinis,

1995). Next, I checked to see whether the random assignment of participants into vignette

scenarios was truly random by running a series of independent t-tests for each of the

variables listed in Table 3 and to ascertain if there were any significant correlations

between those variables and the assigned scenario.

 To assess the manipulation check questions, frequency counts and independent t-

tests were used to determine the mean differences in condition responses. The first served

both as a reading comprehension check and a way to evaluate the perceived temporal

immediacy of the misconduct, requiring participants to indicate whether the data transfer

had already occurred. Because this question elicited a binary response (i.e., yes/no) where

participants were asked, frequency counts were used to assess the success rate of

participants who correctly identified the nature of the wrongdoing detailed in each

vignette. For the future harm vignette, 3 participants (2%) failed the reading

comprehension check, and 8 participants (6%) failed in the current harm vignette.

Following the guidelines from Aronow et al. (2016), the participants who failed this

manipulation check were not excluded from the primary analyses, as the practice of

dropping participants who fail post-treatment manipulation checks can introduce

unknown bias. The authors demonstrated through simulations that when all participants

are included, the estimates of the manipulation effects are more accurately assessed,

provided that random assignment is used. However, when individuals who do not pass

post-treatment manipulation checks are removed from subsequent analyses, the results

can be akin to treatment correlated attrition. For example, those who passed the

manipulation check may be systematically different in unknown ways from those who

failed, thereby introducing confounds that harm causal inferences. Thus, in this current

study, participants were retained regardless of whether they passed the manipulation

checks.

Next, I ran independent t-tests to determine the extent to which participant

perceptions of both harm and severity differed significantly across the scenarios. For

perceptions of the severity of the organization's wrongdoing, the future harm scenario (M

= 8.04, SD = 2.03) was rated slightly higher than the current harm one (M = 7.97, SD =

2.42); however, the difference was not significant $t(248)$ = .25, p = .80, d = .03. For harm

perceptions, the future harm scenario (M = 6.66, SD = 2.75) was rated slightly higher

than the current harm scenario (M = 6.61, SE = 2.89); however, the difference was not

significant $t(248)$ = .16, p = .87, d = .02.

Because of the non-significant mean differences between both perceptions of

severity between scenarios, I followed the t-tests above with an internal analysis as

recommended by Aronson et al. (1990). This was conducted using two multiple

regression analyses, each with one of the manipulation check questions used as the

independent variable in place of the experimental condition. The first analysis evaluated

the relationship between both perception of severity and perception of harm predicting

internal (IWB) whistleblowing intentions respectively, and the second analysis evaluated

the same variables predicting external (EWB) intentions (see Table 4). For the IWB

outcome, neither perception of severity ($B = .06$, $p = .16$) or perception of harm ($B = -.02$,

$p = .57$) were significant predictors. Conversely, perception of severity ($B = .08$, $p = .02$)

and perception of harm ($B = .09$, $p = .001$) significantly predicted EWB.

Thus overall, the participants rated the wrongdoing in the vignettes to be

moderately severe and harmful, indicating that the manipulation did not produce a

meaningful distinction in the participants' minds about the sense of urgency across the

two situations. However, both severity and harm perceptions did positively and

significantly predict EWB intentions. The ramifications of the weak performance of the

manipulation will be addressed in the limitation section.

Primary Analyses

Hypothesis One

Hypothesis one stated that participants would be more likely to blow the whistle

when the organization's misconduct was causing current harm than future harm. I ran a

series of independent t-tests to ascertain the mean differences in whistleblowing

likelihood between the two scenarios. Two separate dependent variables (DV's) were

tested: (a) internal whistleblowing intentions (IWB), and (b) external whistleblowing

intentions (EWB). For IWB, the future harm scenario ($M = 3.72$, $SD = 1.05$) was slightly

higher than the current harm scenario ($M = 3.66$, $SD = 1.16$), and the difference was not

significant $t(248) = .46$, $p = .65$, $d = .05$. For EWB, the future harm scenario ($M = 3.40$,

$SD = .98$) was slightly higher than the current harm scenario ($M = 3.34$, $SD = 1.02$);

however, the difference was not significant $t(248) = .44$, $p = .66$, $d = .06$. In summary,

hypothesis one was not supported.

Hypothesis Two

In this hypothesis I proposed that agreeableness would moderate the effect of the timing of harm on whistleblowing likelihood. In the future harm scenario, those who were less agreeable would be more likely to whistleblow than those who were more agreeable. Additionally, in the current harm condition, the magnitude of the effect of agreeableness on whistleblowing likelihood would be smaller than it would be in the future harm condition. The results of the first analysis assessing the moderating role of agreeableness between the two scenarios and IWB responses, there was a significant main effect for agreeableness, but the interaction was not significant ($B_{\text{harm occurrence*agreeableness}} = -.14$, $p = .54$). For EWB, there was no significant main effect and a non-significant interaction effect ($B_{\text{harm occurrence*agreeableness}} = -.07$, $p = .73$). See Table 5 for the comparative outputs of both analyses. These results indicated that hypothesis two could not be supported.

Hypothesis Three

In the final hypothesis of this study I proposed that conscientiousness would moderate the effect of the timing of harm on whistleblowing likelihood. In the future harm scenario, those who were more conscientious would be more likely to whistleblow than those who were less conscientious. Additionally, in the current harm condition, the magnitude of the effect of conscientiousness on whistleblowing likelihood would be smaller than it would be in the future harm condition. For the first analysis of the moderating role of conscientiousness between the vignette scenarios and IWB intentions, a significant main effect was observed for conscientiousness. The interaction effect for this analysis was not significant ($B_{\text{harm occurrence*conscientiousness}} = .04$, $p = .82$). For the EWB

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analysis there was no significant main effect and a non-significant interaction (B_{harm}

$_{occurrence*conscientiousness}$ = -.03, p = .88). See Table 6 for the comparative outputs of both

analyses. Thus, hypothesis three was not supported.

Exploratory Analyses

The following exploratory analyses examined the potential moderating roles of

the remaining 5-factor personality traits in the relationship between the vignette scenarios

and both whistleblowing outcomes. The final two analyses explore the role of news

consumption and political orientation as potential moderators in the same relationship

detailed above.

Extraversion, Open Mindedness, and Negative Emotionality

The first trait evaluated was extraversion (see Table 7). The results indicated a

significant main effect for IWB and a non-significant main effect for EWB. There was a

non-significant interaction for both IWB ($B_{harm\ occurrence*extraversion}$ = .05, p = .80) and EWB

($B_{harm\ occurrence*extraversion}$ = .02, p = .90). Next, open mindedness was assessed (see Table

8), and the results indicated another significant main effect for both IWB and EWB. Both

interactions for IWB ($B_{harm\ occurrence*open\ mindedness}$ = .32, p = .14) and EWB were non-

significant ($B_{harm\ occurrence*open\ mindedness}$ = .01, p = .98. Finally, negative emotionality (see

Table 9) was assessed and showed a similar pattern, with a significant main effect for

IWB but not for EWB. There were also non-significant interactions for IWB (B_{harm}

$_{occurrence*negative\ emotionality}$ = -.06, p = .71), and EWB ($B_{harm\ occurrence*negative\ emotionality}$ = -.09, p

= .54).

News Consumption and Political Orientation

These analyses were re-run with the news consumption and political orientation covariates included to ensure that potential moderation effects were not masked by unaccounted variance in the dependent variable. I began this process checking to see whether either of the proposed covariates was significantly correlated with the whistleblowing outcomes. This condition was met, as there were significant correlations between both covariates and whistleblowing outcomes (see Table 3). For the IWB outcome, was a significant positive correlation with news consumption ($r = .15$, $p = .02$). Significant positive correlations were also found between news consumption and EWB ($r = .24$, $p = .002$), and between political orientation and EWB ($r = .19$, $p < .001$).

Ruling Out Potential Moderators. Next, to establish that news consumption and political orientation did not influence either whistleblowing outcomes, I tested to see if either variable moderated the relationship between the scenario and both IWB and EWB outcomes. This was done to rule out the possibility that either covariate was instead a moderator, in which case the inclusion of the covariate would not be appropriate. First, the moderating role of news consumption (see Table 10) was assessed. Although results suggested a significant main effect for both IWB and EWB, the interaction was non-significant for both IWB ($B_{\text{harm occurrence*news consumption}} = .06$, $p = .21$), and EWB ($B_{\text{harm occurrence*news consumption}} = -.01$, $p = .83$). Second, political orientation (see Table 11) was analyzed and a significant main effect was identified for EWB but not for IWB. The interaction was also non-significant for IWB ($B_{\text{harm occurrence*political orientation}} = .08$, $p = .39$), and EWB ($B_{\text{harm occurrence*political orientation}} = .09$, $p = .28$). Because neither variable was a significant moderator, and both variables were significantly correlated with whistleblowing outcomes, the inclusion of both variables as covariates was justified.

Inclusion of Covariates. The final step in this process was to include the two covariates in the full moderation models for the central hypotheses of this study. This was done to ensure that including these variables as controls within the original models proposed in hypotheses two and three did not make the interaction effects significant. Thus, four additional moderation analyses were conducted with these covariates included. The first two analyses (see Table 12) addressed hypothesis two, and assessed the trait of agreeableness as a moderator, for both IWB and EWB outcomes with both news consumption and political orientation included as covariates. For the IWB outcome analysis, only the news consumption covariate was found to have a significant main effect, but the interaction was not significant. In the EWB analysis, both news consumption and political orientation covariates had significant main effects in the model, but again the interaction was not significant. The next two analyses (see Table 13) assessed hypothesis three, with conscientiousness as a moderator for both whistleblowing outcomes with the two covariates included. In the IWB analysis, neither news consumption nor political orientation had significant main effects, and the interaction was not significant. Finally, in the EWB analysis, both news consumption and political orientation had a significant main effect in the model, but again the interaction was not significant.

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CHAPTER IV

Discussion

The findings of this study underscore the inherent complexity in predicting employee whistleblowing behavior and present some practical and theoretical implications for those who endeavor to further understand these phenomena and improve the systems of support for potential whistleblowers in high risk, corrupt organizations. Broadly, the hypothesized models of the moderating effects of agreeableness and conscientiousness did not produce significant interactions in this study, but this does not necessarily mean that moderation effects do not exist. Instead, these findings indicate that the manipulations used in this study simply did not induce enough variability in participant whistleblowing responses. When modeled agreeableness explained approximately 4% of the variance for IWB and less than 1% of the variance for EWB. Likewise, conscientiousness explained 5% of the variance for IWB and less than 1% of the variance for EWB. Furthermore, positive bivariate correlations were found between in both agreeableness and IWB, and conscientious and IWB. These positive bivariate correlations, and preference for IWB routes, can provide both researchers and organizational leaders with insights into how a potential whistleblower may respond when exposed to organizational misconduct.

In the following sections, the implications for theory and practice gleaned from the significant findings in this study are presented. Broadly, two central themes emerged: (a) the implications of significant bivariate correlations between agreeableness and conscientiousness and internal whistleblowing intentions (IWB), (b) the preference demonstrated by participants for internal reporting routes. Next, the limitations of the

methods used in this study are discussed, followed by potential future research directions.

Finally concluding remarks are provided, which detail recent whistleblowing

developments that occurred during this study and highlight the urgent need to continue to

scientifically investigate whistleblowing-related phenomena.

Implications for Theory and Practice

Personality and Whistleblowing

The first prominent theme of the findings was that both agreeableness and

conscientiousness positively predicted internal whistleblowing intentions. However, this

relationship was only significant for IWB (see Table 3). This demonstrated preference for

internal reporting channels can provide valuable insights into the decision-making

processes of both highly conscientious and highly agreeable individuals. The implications

for these findings across both theory and practice for each trait are discussed in the

following sections.

Agreeableness. Research from Bjørkelo et al. (2010) found that low levels of

agreeableness were positive predictors of whistleblowing behavior. Interestingly, the

findings of this current investigation contravene the Bjørkelo et al. findings, as

individuals with higher agreeableness were more likely to engage in IWB. This finding

contradicts the rationale that less agreeable individuals will be less constricted by group

norms than those who are more agreeable.

This effect may be partially explained by the findings of Özbağ (2016), who

suggested that individuals who are highly agreeable would be concerned with the welfare

of fellow employees. This idea is also supported by research from Ilies et al. (2006), who

identified a positive relationship between highly agreeable employees and organizational

citizenship behaviors. Furthermore, highly agreeable employees may also be more

willing to act to benefit the public as well, as there is a strong connection between

agreeableness and prosocial behavior (Graziano & Eisenberg, 1997). Applied within a

whistleblowing context, agreeable individuals may also consider the potential harm that

an organization may cause to external entities (i.e., customers, the general public). When

evaluating the responses of individuals to helping others in extraordinary situations,

Graziano et al. (2007) found that highly agreeable people were more likely to accept risk

and help strangers in need than those who were less agreeable. This concern for both

fellow employees and broader organizational wellbeing is in alignment with the findings

of this investigation, as participants with high agreeableness scores were more likely to

engage in lower personal risk, IWB routes.

Conscientiousness. The conscientiousness finding was consistent with the work

of Brink et al. (2015) and Bjørkelo et al. (2010), where both studies found significant

effects for conscientiousness. This replication of past findings is noteworthy as it

reinforces the notion that conscientious individuals may serve as bulwarks against

organizational misconduct. For example, highly conscientious employees are less likely

to engage in unsafe workplace behaviors (Beus et al., 2015), and have a lower probability

of being enticed by occupational crime (Van Gelder & De Vries, 2016).

The mechanism that drives conscientious individuals more readily demonstrate

IWB intentions might be partially explained by a sense of dutifulness. Dutifulness

conceptualized as a sub-facet of conscientiousness and is defined as a "strict adherence to

standards of conduct" (Costa et al., 1991; p. 889). Furthermore, as Ceva and Bocchiola

(2020) note, under a deontic view of whistleblowing an employee may view reporting via

an internal channel as an obligatory duty. This further supports the preference for IWB

rather than EWB, as the idea of dutifulness and a desire for compliance with established

procedures, can drive conscientious individuals to use internal channels, regardless of the

severity of the misconduct.

Another explanation for the strong correlation between conscientiousness and

IWB may be partially explained by the reactions of more conscientious individuals to the

manipulation used in this study. One possibility is that an artifact of social desirability

accounts for a portion of the variability observed, as consistent correlations have been

found between conscientiousness and social desirability (Ones et al., 1996). The presence

of social desirability influences may drive participants to respond to hypothetical

scenarios in a more positive, pro-social manner. This effect was identified by Ahmad et

al. (2014) who found that social desirability biases can influence participant responses to

whistleblowing vignettes. The potential for a social desirability bias to influence

participant responses is concerning and may further limit the generalizability of the

conscientiousness findings in this study.

Identifying Potential Whistleblowers. The implications of these findings from

applied perspective can provide those who wish to recruit potential whistleblowers (i.e.,

law enforcement entities, regulatory bodies), with a means of profiling viable candidates.

When considering the utility of using personality trait assessments in this manner, it also

raises questions of the extent to which the full five factor model can predict

whistleblowing intentions. When examined using an exploratory analysis in this study, all

five traits combined explained 9% of the variance in IWB and 6% of the variance in

EWB (see Table 14). These findings underscore the informative power of these

assessments, as part of a broader profile of a potential whistleblower. Juxtaposed with the varying degrees of ambiguity and risk that employees face when exposed to organizational misconduct, the ability to predict even a small degree of variance in future whistleblowing attitudes using stable trait attributes rather than variable situational factors can be a powerful asset. Further, these efforts can also be enhanced by the ability to capture accurate personality assessments from outside an organization, using online environments (Park, et al., 2015). Using such methods could drastically expand the scope of vetting efforts for potential whistleblowers within a given organization from a case by case approach to organization wide screening. This type of approach may be of value to external authorities who wish to identify individuals who are more likely to engage in reporting behaviors than others. If individuals who have a trait-based predisposition to engage in risk mitigation efforts can be identified at the onset of organizational misconduct, then perhaps greater levels of harm may be prevented.

Internal Whistleblowing Preference

The participants in this study demonstrated a preference for internal whistleblowing responses over external whistleblowing. This finding indicates that internal reporting is the preferred route for employees who do not know what to do when faced with wrongdoing. A clear implication of this finding of organizational leaders who wish to promote and encourage internal reporting is that the creation of strong internal reporting systems that safeguard the whistleblower is of utmost importance. Creating effective internal reporting systems not only includes the development of safe reporting channels but the "undertaking of the complex process of developing an organizational culture that is supportive of employee voice" (Berry, 2004; p. 3). Furthermore, from an

organizational risk perspective, providing internal reporting channels for employees can circumvent the potential harm to the organization from an external whistleblowing event (Miceli et al., 2009; Dworkin & Baucus, 1998).

From an employee risk perspective, internal reporting, although still exposing the employee to potential retaliation, may appear to be less of a risk than external reporting. Latan et al. (2018) found that personal cost of reporting (i.e., the perception of potential harm) was a negative of both internal and external whistleblowing behaviors, suggesting that as the level of personal cost perceived the employee increased; the likelihood of reporting decreased. However, they also found that the perception of organizational support moderated this relationship, indicating that a supportive organization can help employees to better accept personal costs and whistleblow.

Because employees often attempt to whistleblow through established internal channels before resorting to external whistleblowing (Mesmer-Magnus & Viswesvaran, 2005; Miceli & Near, 2002); systems of positive organizational support and anonymous internal reporting channels are crucial for organizational leaders who value limiting both the occurrence of misconduct and the risk of external whistleblowing events. Put more bluntly by Watts and Buckley (2017) "organizations that fail to implement or respond appropriately to internal reporting mechanisms are only setting themselves up for an external whistleblowing catastrophe" (p. 681). Consequently, for organizations that value risk mitigation, establishing internal reporting channels is the safest, most pragmatic option.

Counter-Whistleblowing Efforts. A discussion of the benefits of internal reporting channels would be incomplete without a mention of the potential for these

findings to be misused by those in corrupt organizations who seek to suppress and silence whistleblowers. Unfortunately, it is difficult to discuss the merits of championing whistleblowing efforts in today's organizations without also presenting the difficult realities of organizational power and corruption. As Martin and Rifkin (2004) note, leaders who possess a Machiavellian perspective may be able to infer countermeasures against whistleblowers from academic research intended to increase both whistleblowing occurrence and effectiveness. Although the potential to provide corrupt leaders with insights into reducing whistleblowing occurrence is antithetical to the purposes of this current study, it is worthwhile to note several of the countermeasures used by organizations to stop whistleblowers.

First, whereas the use of internal reporting channels provides upstanding organizations with a means of correcting misconduct, Martin and Rifkin (2004) identify the opposite effect for corrupt organizations. They posit that directing a potential whistleblower towards established reporting channels can minimize the potential impact of the whistleblower revelation and can provide a corrupt organization with the ability to quickly shift the incident out of public view. They state that "instead of the struggle being between a truth-speaking employee who is victimized by a powerful employer, the matter is transformed into a dispute seemingly being adjudicated independently and fairly, in which the parties in contention are on something close to an equal footing" (p. 14). Furthermore, they note that for whistleblowers who end up facing organizations in legal proceedings, many cannot meet the high expense associated with sustained legal actions, and in the case that a settlement is reached with the whistleblower, it will be conditioned on a silencing clause. It is also worth noting that the failure to utilize official reporting

channels and instead engage in external whistleblowing can be used by organizations to further degrade the legitimacy of a whistleblower.

This underscores a second approach used by corrupt organizations, which is to attack the whistleblower. As Sawyer, Johnson, and Holub (2010) note, leaders in organizations that are engaged in misconduct yet wish to appear legitimate, will fundamentally need to ensure that whistleblowers appear illegitimate. They also state that, from an organization perspective, an identified whistleblower is likely to report wrongdoing again in the future. This assumption by organizational leaders can then be used as a justification to informally blacklist a whistleblower, resulting in catastrophic effects for the individual's career and well-being. Stark findings from Rothschild (2013) show severe patterns of retaliation against whistleblowers, which were indicated by two-thirds of the whistleblowers in that study. These findings appear to only apply to internal whistleblowers because Rothschild indicated that retaliation against external whistleblowers was much higher. These efforts from leaders to retaliate against whistleblowers also signal negative consequences to the remaining employees, which can limit further subsequent whistleblowing attempts. In a proposed model of organizational silencing behaviors, Morrison and Milliken (2000) note that if negative consequences for a dissenting employee can be observed or inferred by other employees, then a culture of silence can develop within an organization. In such a case, employees across an organization can share a belief that dissenting voices will be targeted and punished.

In summary, whistleblowers are often confronted with an extreme power asymmetry as they work against motivated and well-resourced entities. It is difficult to conceptualize the magnitude of risk assumed by a whistleblower and the near-certainty of

subsequent organizational retaliation. Yet the risk of unchecked organizational power is very real and, without intervention, can result in disastrous consequences for employees. In a case study from Varman and Al-Amoudi (2016) examining the atrocities committed by the Coca-Cola company in rural India, the devastating effects that unchecked organizational power can have on an entire region are obvious, especially when dissenting voices are actively targeted. They detail the extent to which an organization with a high level of power and wealth can establish itself within a vulnerable population, and exert influence across local government, media, and judicial systems. In doing so, the Coca-Cola company was able to operate unchecked, and exploited both worker rights and environmental resources to maximize profit. Furthermore, they were able to reframe and dismiss activist movements as anti-American sentiment. Thus, to avoid the perpetuation of these patterns of organizational injustice, it behooves organizations and society overall in the long-term to incentivize the protection of whistleblowers.

Limitations

Perhaps one of the most troubling, albeit intriguing, implications of this study was the limits of the experimental method employed. The findings of this study echo many of the concerns raised by Yarkoni (2019), who stresses that the potential for the application of experimental findings have limited practicality concerning generalizability. The limitations of the experimental design used in this study quickly surfaced, especially when attempting to provide practical implications for real future whistleblowers from extrapolated participant responses in a controlled environment. Thus, the following discussion is cautiously framed under this constraint of limited generalizability, and potentially better-suited methods for exploring this phenomenon are presented.

The whistleblowing likelihood responses, for both IWB and EWB, were notably non-committal, with the mean response rising just above 3 on a 5-point scale. Contrasting this response with the much higher perceptions of harm and severity across both vignettes raises questions concerning the efficacy of the manipulation itself. Furthermore, the differences in perceptions of harm and severity between scenarios were not significant, nor were the differences either IWB or EWB intentions. To shed light on this discrepancy, I also ran regression analyses between both harm and severity manipulation check questions as the independent variables predicting both IWB and EWB outcomes (see Table 4). Aronson et al. (1990) recommends an internal analysis as a way to explore why a manipulation may not be working as intended. These analyses indicated that the participant perceptions of harm and severity (respectively) only significantly predicted EWB intentions. This suggests that although the role of the manipulation did not function as intended, the participant perceptions of the scenarios of both harm and severity positively predicated likelihood to engage in EWB. However, this is the limit of the inferences that can be made at this point, as there is no way to understand what caused participants to perceive harm and severity as they did, absent an effective manipulation.

Additionally, the manipulation check question used to capture the participant's understanding of the temporal immediacy of the wrongdoing, was likely insufficient, as almost all participants clearly indicated when the wrongdoing in the scenario had already taken place. This disparity between perception and response indicates that participants were either uninterested in engaging authentically or were simply confused about what responses would be most appropriate. In either case, the manipulation used in this study was insufficient to provoke a high degree of variability in the dependent variables. From

the myriad of potential reasons that this manipulation did not work, I have identified two key constraints within the vignette method employed that are likely causes: the difficulty in adequately capturing organizational misconduct, and the limits of creating situational ambiguity. Whereas the broader limitations and remedies for this experimental paradigm are discussed in the following future research section below, these critiques may inform future researchers who wish to craft vignette manipulations that prompt more poignant participant responses.

Capturing Organizational Misconduct with Vignettes

One of the most difficult aspects of crafting the manipulation used in this study was the selection of the organizational misconduct featured in the scenarios. Whereas past whistleblowing studies featuring vignette methods involved the exposure of participants to multiple wrongdoing scenarios (detailed in the Manipulation and Measures <u>section</u>), these approaches did not explore potential moderation effects. To explore the potential moderating effects of personality traits, a single wrongdoing scenario was needed in order to hold all else constant, with only a single variable manipulated to create separate levels of wrongdoing.

Building upon this research, I chose to manipulate the temporal immediacy (Singer et al., 1998; Jones, 1991) of the misconduct intended to elicit varying levels of urgency experienced by participants to whistleblow. Altering the temporal immediacy of the wrongdoing event allowed for the possibility of selecting any type of organizational misconduct. I could then create different levels of urgency by manipulating when the harm of the misconduct would occur. This approach also avoided additional complications that could arise from asking participants to respond to an escalation of

wrongdoing for which more complex legal precedents exist (e.g., presenting

misdemeanor wrongdoing versus felony wrongdoing). I intended to vary only the

temporal immediacy of the misconduct and keep everything else constant in the

scenarios, to preserve the construct validity of the situation. Unfortunately, varying

temporal immediacy was not effective in this study because participants did not perceive

the organizational wrongdoing in the current harm scenario as more severe than in the

future harm scenario. This indicates that the temporal immediacy was not apparent to

participants and that the participants did not interpret the manipulation in the way that I

intended.

Incorporating Situational Ambiguity

The second limitation of this manipulation was the difficulty in crafting scenarios

that featured varying levels of ambiguity. While attempting to replicate the conditions

that actual whistleblowers have faced in the past, I considered several factors that the

participant would need to evaluate. The first factor was when wrongdoing would occur,

as the essence of the manipulation involved varying the degree of temporal immediacy.

This meant that the participants would need to be able to clearly perceive when the

misconduct would occur. Secondly, one of the two scenarios in this study needed to

feature a high degree of ambiguity regarding the extent and timing of harm (i.e., future

harm scenario), while the other scenario was meant to leave participants with little doubt

as to what would occur. The creation of the future harm condition was an attempt to

replicate a level of ambiguity strong enough to allow for the observation of individual

differences in reporting responses (Beaty et al., 2001; Mischel, 1977). Furthermore, this

approach was meant for the lower ambiguity scenario to serve as a control group in which most participants were expected to respond similarly to the wrongdoing event.

The final factor that participants would need to consider was the potential remedies for the wrongdoing described. This posed a unique challenge in this study, as indicating a specific reporting route within the vignette reduces the overall ambiguity of the scenario. Departing from the vignette procedure used by Andon and colleagues (2018) which provided participants in both conditions with an explicit internal reporting option, the vignettes used in this current investigation did not indicate a reporting route. This was an attempt to simulate the confusion of a true whistleblowing event for participants, yet it was not effective. Although the participants did rate the wrongdoing detailed in both scenarios as quite serious, there were notably lackluster responses concerning potential remedies for the wrongdoing. This may indicate that there was too much ambiguity in the scenarios and participants did not know how to respond. Another explanation may be that the participants simply lacked interest in the subject matter of the scenarios and did not feel compelled to respond accurately.

These findings present a quandary for future researchers wanting to simulate a real event using a vignette. Essentially, scenarios that are overly prescriptive and provide a clear "right" choice for participants produce little insight. Conversely, absent direction when faced with ambiguity in a scenario, participants may simply choose moderate whistleblowing responses as was the case in this current study. Furthermore, there is an inherent difficulty in selecting a scenario that will resonate with participants and elicit meaningful, albeit hypothetical, responses. Distinguishing between honest confusion attributable to a highly ambiguous scenario and the potential for participant fatigue and

disinterest further underscores the difficulty of applying this methodology within a

whistleblowing context. These limitations further highlight the need for different

methodological approaches in future studies.

Future Research Directions

Building upon the lessons learned from the limits of the manipulation used in this

study, two distinct approaches emerged that may be able to better capture the internal

psychological processes through which individuals evaluate wrongdoing and choose to

respond. The first approach involves the further application of this experimental design

by shifting from the between-subjects approach used in this study and instead using a

with-in subject approach. This section also includes two brief recommendations for

researchers who choose to pursue study designs featuring whistleblowing vignettes. The

second approach I propose abandons the experiment method completely and instead

employs qualitative methods to assess the behavior of actual whistleblowers. Both of

these approaches are discussed in the sections below.

Within-subjects Approaches

Noting the limitations mentioned above within the vignette method employed in

this study, improvements could be made to the study design in subsequent research by

shifting to a within-subject approach. A focus on within-person responses to different

types of organizational misconduct may help to explain why the manipulation used in the

study did not produce significant mean differences between experimental conditions.

There are several advantages to this approach, such as increased power from fewer

participants, and an internal validity that is not completely dependent on random

assignment (Charness et al., 2012). Applied within a whistleblowing context, this approach allows a further degree of flexibility in selecting types of wrongdoing exposure.

For example, Robinson et al. (2012), used a within-subjects design to expose participants to multiple types of fraud and theft. The authors noted that the benefit of this method was that it featured an increased visibility of the manipulations by allowing the comparison of multiple wrongdoing events to influence participant responses. However, it should be noted that there are limitations to the number of events that a participant can absorb without causing fatigue, and this may inform the future vignette-based research designs (Weber, 1992). This risk may be mitigated through adequate pilot testing. Nevertheless, this method may provide a higher degree of insight into the decision making processes that participants employ when evaluating the seriousness of wrongdoing for a given event. Should subsequent researchers use this approach in lieu of a between-subject design, they may be able to better capture manipulation effects.

Using the Vignette Method for Whistleblowing Studies: Suggestions for Best Practices. There are two key recommendations, informed by the difficulties with the vignettes used in this study, that may be of use to researchers who choose to employ a vignette method in the context of whistleblowing in the future. First, regardless of whether a between-subject or within-subject design is used, it can be worthwhile to consider the potential impact of the misconduct or wrongdoing selected for the scenario and the ranges of responses that the scenario may invoke. When providing recommendations for the creation of effective vignettes, Hughes and Huby (2004) suggest, "vignettes are more likely to be effective when they engage participants' interest, are relevant to people's lives, and appear real" (p. 40). When considering the use of

vignettes within a whistleblowing context, the magnitude of the misconduct selected can drastically influence subsequent reporting intentions. As was demonstrated in this current study, the selection of a type of wrongdoing with similar scope and magnitude of the Cambridge Analytica scandal, while clearly perceived as severe by participants, may have been too unrealistic to be relevant for the average employee. Thus, future research may be better served by using vignettes featuring more routine misconduct such as theft or fraud, with less severe and overwhelming implications for society. This can allow participants to better conceptualize the risk, albeit hypothetical, associated with their preferred whistleblowing responses.

Second, the distinction between internal and external whistleblowing outcomes is an important consideration when developing the vignette. Should a specific route be of interest, the vignette may be crafted to exclude a certain reporting route. For example, if a future researcher is solely focused on external whistleblowing intentions, they may choose to provide a caveat within the vignette stating that internal reporting had already been attempted unsuccessfully. However, there is also a risk associated with this approach, as participants may perceive the scenario as more severe after learning of failed internal reporting attempts. In this study, I choose to allow both reporting options but, as was previously discussed, the preference for internal reporting may have been informed in part by a participant inclination to attempt the internal reporting route first, before engaging in the higher risk, external route. Future research efforts may be better served by explicitly indicating the reporting route available to the participant within the vignette.

Qualitative Approaches

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       The unique nature of the whistleblowing phenomenon presents vast opportunities for researchers wanting to enhance existing behavioral theories under the constraint of high pressure, high-risk situations. Thus, there are several benefits to pursuing non-experimental approaches to explore a low-base rate phenomenon like whistleblowing. Using qualitative or mixed-method approaches can ground the research within the experiences of actual whistleblowing. Thus, any findings, no matter how minuscule, will at the very least be attuned to the reality of the risk assumed by whistleblowers. This approach can benefit policymakers and organizational leaders alike, as mechanisms created to safeguard potential whistleblowers can better aligned to more effectively combat organizational retaliation.

       The extant methods used to assess whistleblowing intentions in non-whistleblower populations are typically limited to survey and vignette approaches (Bjørkelo & Bye, 2014). Although these approaches can provide varying degrees of insight into the reporting intentions of a sample population, they may not be sufficient to transcend the rift that exists between hypothetical scenarios and exposure to actual organizational misconduct. This is noteworthy because there is evidence suggesting that whistleblowing intentions do not necessarily lead to actual whistleblowing behavior (Mesmer-Magnus & Viswesvaran, 2005). In a broader critique of such experimental methodologies, Yarkoni (2019) stresses the limits of generalizability within experimental findings as the valid inferences are limited only to the population tested. This critique is fitting in a whistleblowing context as participants in experimental settings can respond to manipulations and related survey measures without having to consider actual, personal risk. It is also concerning that survey methods may only be allowed in "clean

organizations" (i.e., organizations that have nothing to hide) and that participants with insight into the organizational misconduct manipulated may self-select out, fearing potential identification (Watts & Buckley, 2017; Miceli & Near, 1988).

Using qualitative or mixed-method approaches can amplify the uniqueness of a whistleblowers experience within society. Hill et al. (2005) note that such qualitative approaches, specifically consensual qualitative research, are ideally suited to explore "events that are hidden from public view" (p. 23). Applying such approaches when studying the whistleblowing phenomenon is fitting, as the modus operandi for many corrupt organizations is to silence or suppress the whistleblower. Consequently, methods that can elevate the unique stories of whistleblowers and detail the causal mechanism that drove them to act, may lead to a deeper understanding of the phenomena and allow for new aspects of the whistleblowing experience to emerge.

Another advantage in shifting to the qualitative approach is that conducting in-depth interviews with actual whistleblowers can result in more fully capturing the whistleblowing phenomenon and the numerous factors that can influence a given whistleblower's actions. This method can help researchers to continue building better conceptualizations of the internal and external catalysts that prompt such unique, low-base rate actions. An excellent example of the high degree of specificity and rich detail that can be gained from a qualitative study of real whistleblowers is the work from Kenny et al. (2019) who employed this methodology on a smaller scale to develop elaborate descriptions of the impact of organizational retaliation on whistleblower mental health from a sample of 22 actual whistleblowers. Another excelled example of this process conducted on a much larger scale, is research from Vandekerckhove et al. (2013)

evaluated a sample of one thousand callers to a confidential advice line. This approach

allowed for a wealth of information to be obtained and coded from a wide spectrum of

whistleblowers, providing tangible insights into actual whistleblower demographics,

decision making processes, and perceived organizational responses. These studies

provide a strong, current support for the continued application of non-experimental

designs to capture the unique experiences of whistleblowers.

Conclusion

While conducting this study over the past year, numerous additional

whistleblowing events have occurred. These whistleblowers have emerged both in the US

and around the world and have chosen both intern and external methods of reporting.

These whistleblowers have had an unprecedented level of impact, from the anonymous

intelligence official whose actions led to the impeachment of the US president (Kohn,

Kohn, & Colapinto, 2019), to the Boeing official who raised safety concerns about airline

platform malfunctions that resulted in tragedies across the globe (Gelles, 2020). Most

recently, Dr. Li Wenliang, now deceased, faced retaliation from the Chinese Government

after blowing the whistle on the pandemic COVID-19 virus emergence (Kuo, 2020).

These brave efforts, despite relentless and highly visible institutional backlashes, have

exposed rampant organizational wrongdoing and corruption. Continued research pursuits

to determine methods of better identifying, empowering, and protecting the welfare of

future whistleblowers is not only justified but is of vital necessity for global wellbeing.

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APPENDIX A: Figures

Figure 1

Model of Hypothesized Relationships

Predictor: Harm occurrence from organizational misconduct		Outcomes: Whistleblowing likelihood

Condition 1
- *Misconduct resulting in future harm. (low urgency)*

Condition 2
- *Misconduct resulting in current harm (high urgency)*

Likelihood to report the misconduct through either:
- **Internal whistleblowing**
- **External whistleblowing**

Moderator: Personality of potential whistleblower

- **Agreeableness (high levels will weaken the relationship)**
- **Conscientiousness (high levels will strengthen the relationship)**

Figure 2

Proposed Moderating Role of Agreeableness
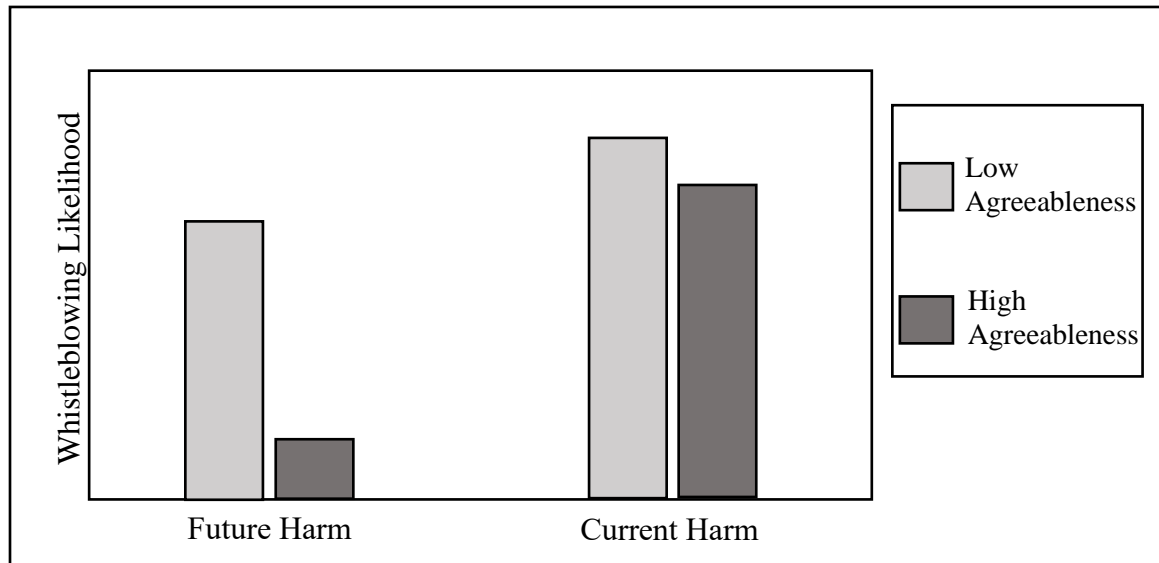
Note. Graph of the proposed moderating role of agreeableness in the effect of the timing of harm on whistleblowing likelihood.

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Figure 3

Proposed Moderating Role of Conscientiousness
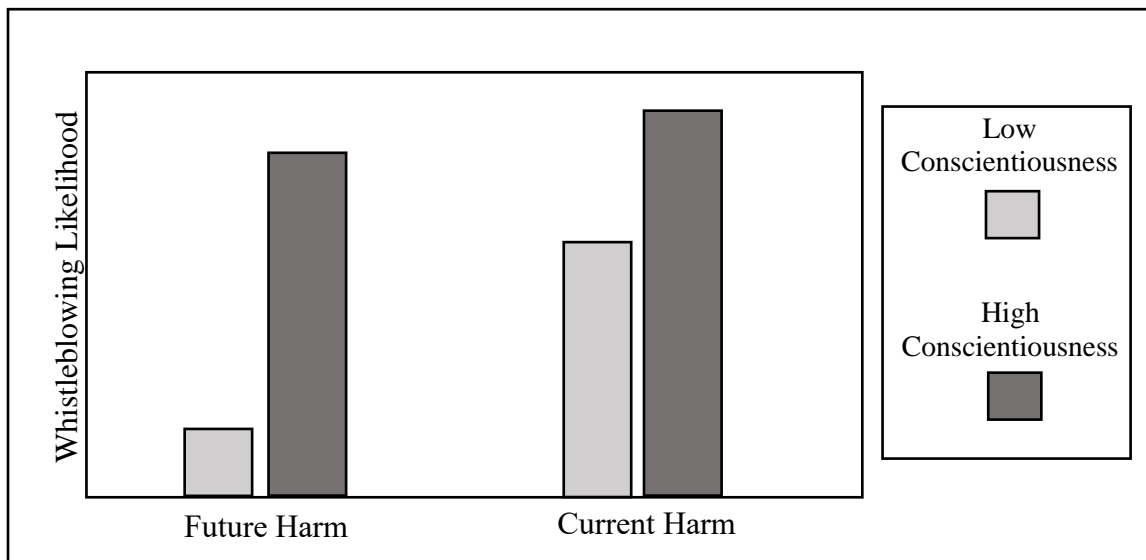
Note. Graph of the proposed moderating role of conscientiousness in the effect of the timing of harm on whistleblowing likelihood.

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APPENDIX B: Tables

Table 1
Overview of measures

Construct (use)	Measure Name (# of items)	Citation for Measure	Scale	Data Preparation
Organizational Misconduct (Manipulation)	Organizational Misconduct Vignettes (2 descriptions)	N/A	N/A	N/A
Manipulation Check (Reading Comprehension)	Observation of Wrongdoing (1 items)	N/A	*Yes/No Forced Choice*	N/A
Manipulation Check (Comprehension)	Observation of Wrongdoing (2 items)	N/A	*10-point sliding scale* 1 (no wrongdoing) to 10 (severe wrongdoing); 1 (no harm) to 10 (high level of harm)	N/A
Personality (Moderator)	Big Five Inventory (60 items)	Soto & John (2017)	*5-point Likert scale* 1 (strongly disagree) to 5 (strongly agree)	Composite Score
Cultural Orientation (Exploratory)	Cultural Orientation Questionnaire (10 items)	Park et al. (2008)	*5-point Likert scale* 1 (strongly disagree) to 5 (strongly agree)	Composite Score
Whistleblowing Attitudes (Outcome)	Whistleblowing Attitudes (14 items)	Park et al. (2008)	*5-point Likert scale* 1 (strongly disagree) to 5 (strongly agree)	Composite Score

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News Consumption (Exploratory)	Media/News Consumption Question (1 item)	N/A	*10-point sliding scale* 1 (does not consume any news) to 10 (daily news consumption)	N/A
Political Orientation (Exploratory)	Political Orientation Question (1 item)	Haidt & Graham (2007)	*7-point Likert scale* 1 (extremely conservative) to 7 (extremely liberal)	
Demographics (Analysis)	(7 items)	N/A	N/A	N/A

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Table 2
Demographic characteristics of participants across all study conditions.

Characteristic	*n*	%
Age		
18-29	109	44.7
30-39	71	29.0
40-49	41	16.8
50-59	18	7.4
60+	5	2.0
Gender		
Male	115	46.0
Female	132	52.8
Prefer Not to Say	3	1.2
Ethnic Heritage		
American Indian or Alaska Native	1	0.4
Asian	17	6.8
Black / African American	14	5.6
Hispanic or Latino/a	26	10.4
White or Caucasian	180	72.0
Multi-Racial	11	4.4
Prefer not to say	1	0.4
Principal Industry of Participant Organization*		
Education	29	11.6
Banking/Finance/Accounting	10	4.0
Medical/Dental/Healthcare	18	7.2
Wholesale/Retail/Distribution	24	9.6
Marketing/Advertising/Entertainment	16	6.4
Business Services/Consultant	14	5.6
Other/Not Listed	96	38.4
Years of Professional Experience		
0-10	172	69.3
11-20	52	21.0
21+	24	9.6
Participant Organizational Size		
0	52	20.8
1-50	90	36.0
51-500	49	19.6
501-2000	18	7.2
2000+	41	16.4

Note. ***** Participant industry affiliations of 4% or higher across all participants were included in this table.

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Table 3

Means, Standard Deviations, Internal Consistencies, and Correlations

Measure	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11
1. Age	33.42	11.24	-										
2. Sex[1]	0.53	0.50	.14*	-									
3. Harm Occurrence[2]	0.50	0.50	.02	-.09	-								
4. Perceived Severity	8.00	2.23	.04	.15*	-.02	-							
5. Perceived Harm	6.64	2.81	.02	.12	-.01	.63**	-						
6. Internal WB	3.69	1.11	.14*	.00	-.03	.09	.03	(.93)					
7. External WB	3.37	1.00	-.05	.04	-.03	.34**	.40**	.01	(.79)				
8. Agreeableness	3.70	0.61	.17**	.11	.06	.12	.08	.19**	.04	(.84)			
9. Conscientiousness	3.55	0.74	.30**	.17**	.03	.10	.10	.23**	.05	.43**	(.90)		
10. News Consumption	6.06	2.83	.20**	.03	-.02	.19**	.18**	.15*	.24**	.01	.17**	-	
11. Political Orientation	4.92	1.55	-.17**	.11	.02	.16*	.21**	-.02	.20**	-.04	-.21**	.14*	-

Note. $N = 250$. [1]Sex is coded 0 = Male, 1 = Female. Three participants preferred not to indicate their gender. [2]Harm occurrence is coded 0 = Future Harm Scenario, 1 = Current Harm Scenario. * $p < .05$ level (2-tailed). ** $p < .01$ level (2-tailed).

Table 4

Preliminary Analysis: Regression Analysis for Perception of Severity and Perception of Harm Predicting both Internal and External Whistleblowing

Variable	Internal Whistleblowing					External Whistleblowing				
	B	*SE*	*t*	*p*	R^2	*B*	*SE*	*t*	*p*	R^2
Model Summary					.009					.16**
Perception of Severity	0.06	0.04	1.41	.16		.08	.03	2.38	.02*	
Perception of Harm	-0.02	0.03	-0.57	.57		.09	.03	3.42	.001**	
Overall *F*		1.08					23.04**			

Note. *N* = 250. *SE* = standard error. * *p* < .05 level (2-tailed). ** *p* < .01 level (2-tailed).

Table 5

Primary Analysis: Regression Analysis Summary for Agreeableness as a Moderator of the Relationship Between Vignette Scenarios and both Internal and External Whistleblowing

	Internal Whistleblowing					External Whistleblowing				
Variable	*B*	*SE*	*t*	*p*	ΔR^2	*B*	*SE*	*t*	*p*	ΔR^2
Model Summary					.04*					.003
Constant	3.69	0.07	53.42	.00		3.37	0.06	53.08	.00	
Harm Occurrence	-0.09	0.14	-0.65	-.36		-0.06	0.12	-0.48	.63	
Agreeableness	0.34	0.11	3.03	.003**		0.07	0.11	0.67	.50	
Harm Occurrence*Agreeableness	-0.14	0.23	-0.61	.54		-0.07	0.21	-0.34	.73	
Overall *F*			3.23*					0.25		

Note. *N* = 250. *SE* = standard error. Harm occurrence is coded 0 = Future Harm and 1 = Current Harm. * *p* < .05 level (2-tailed). ** *p* < .01 level (2-tailed).

Table 6

Primary Analysis: Regression Analysis Summary for Conscientiousness as a Moderator of the Relationship Between Vignette Scenarios and both Internal and External Whistleblowing

	Internal Whistleblowing					External Whistleblowing				
Variable	*B*	*SE*	*t*	*p*	ΔR^2	*B*	*SE*	*t*	*p*	ΔR^2
Model Summary					0.05**					.004
Constant	3.69	0.07	53.86	.00		3.37	0.06	53.16	.00	
Harm Occurrence	-0.07	0.14	-0.56	.57		-0.06	0.13	-0.46	.64	
Conscientiousness	0.34	0.09	3.63	<.001**		0.07	0.09	0.79	.43	
Harm Occurrence*Conscientiousness	0.04	0.19	0.23	.82		-0.03	0.17	-0.15	.88	
Overall *F*			4.49**					0.29		

Note. $N = 250$. *SE* = standard error. Harm occurrence is coded 0 = Future Harm and 1 = Current Harm. * $p < .05$ level (2-tailed). ** $p < .01$ level (2-tailed).

Table 7

Exploratory Analysis: Regression Analysis Summary for Extraversion as a Moderator of the Relationship Between Vignette Scenarios and both Internal and External Whistleblowing

	Internal Whistleblowing					External Whistleblowing				
Variable	*B*	*SE*	*t*	*p*	ΔR^2	*B*	*SE*	*t*	*p*	ΔR^2
Model Summary					.05**					.005
Constant	3.69	0.07	53.86	.00		3.37	0.06	53.19	.00	
Harm Occurrence	-0.07	0.14	-0.55	.58		-0.06	0.13	-0.46	.64	
Extraversion	0.35	0.09	3.65	<.001**		0.09	0.09	0.99	.32	
Harm Occurrence*Extraversion	0.05	0.19	0.25	.80		0.02	0.18	0.13	.90	
Overall *F*			4.53**					0.40		

Note. $N = 250$. *SE* = standard error. Harm occurrence is coded 0 = Future Harm and 1 = Current Harm. * $p < .05$ level (2-tailed). ** $p < .01$ level (2-tailed).

Table 8

Exploratory Analysis: Regression Analysis Summary for Open Mindedness as a Moderator of the Relationship Between Vignette Scenarios and both Internal and External Whistleblowing

Variable	Internal Whistleblowing					External Whistleblowing				
	B	*SE*	*t*	*p*	ΔR^2	*B*	*SE*	*t*	*p*	ΔR^2
Model Summary					.02					.06**
Constant	3.69	0.07	53.12	.00		3.37	0.06	54.74	.00	
Harm Occurrence	-0.05	0.14	-0.36	.72		-0.03	0.12	-0.25	.81	
Open Mindedness	0.20	0.11	1.89	.05*		0.38	0.10	4.01	<.001**	
Harm Occurrence*Open Mindedness	0.32	0.22	1.49	.14		0.01	0.19	0.03	.98	
Overall *F*			2.04					5.42		

Note. $N = 250$. *SE* = standard error. Harm occurrence is coded 0 = Future Harm and 1 = Current Harm. * $p < .05$ level (2-tailed). ** $p < .01$ level (2-tailed).

Table 9

Exploratory Analysis: Regression Analysis Summary for Negative Emotionality as a Moderator of the Relationship Between Vignette Scenarios and both Internal and External Whistleblowing

Variable	Internal Whistleblowing					External Whistleblowing				
	B	*SE*	*t*	*p*	ΔR^2	*B*	*SE*	*t*	*p*	ΔR^2
Model Summary					.05**					.003
Constant	3.69	0.07	53.69	.00		3.37	0.06	53.04	.00	
Harm Occurrence	-0.09	0.14	-0.67	.50		-0.06	0.13	-0.46	.64	
Negative Emotionality (NE)	-0.29	0.08	-3.52	<.001**		-0.03	0.08	-0.43	.67	
Harm Occurrence*NE	-0.06	0.17	-0.37	.71		-0.09	0.15	-0.61	.54	
Overall *F*			4.22**					0.24		

Note. *N* = 250. *SE* = standard error. Harm occurrence is coded 0 = Future Harm and 1 = Current Harm. * *p* < .05 level (2-tailed). ** *p* < .01 level (2-tailed).

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Table 10

Exploratory Analysis: Regression Analysis Summary for News Consumption as a Moderator of the Relationship Between Vignette Scenarios and both Internal and External Whistleblowing

	Internal Whistleblowing					External Whistleblowing				
Variable	*B*	*SE*	*t*	*p*	ΔR^2	*B*	*SE*	*t*	*p*	ΔR^2
Model Summary					.03					.06[**]
Constant	3.68	0.07	52.86	.00		3.37	0.06	54.58	.00	
Harm Occurrence	-0.05	0.14	-0.33	.74		-0.05	0.12	-0.41	.68	
News Consumption	0.06	0.02	2.30	.02[*]		0.08	0.02	3.85	<.001[**]	
Harm Occurrence*News Consumption	0.06	0.05	1.26	.21		-0.01	0.04	-0.22	.83	
Overall *F*			2.33					5.04[**]		

Note. N = 250. *SE* = standard error. Harm occurrence is coded 0 = Future Harm and 1 = Current Harm. * $p < .05$ level (2-tailed). ** $p < .01$ level (2-tailed).

Table 11

Exploratory Analysis: Regression Analysis Summary for Political Orientation as a Moderator of the Relationship Between Vignette Scenario and both Internal and External Whistleblowing

Variable	Internal Whistleblowing					External Whistleblowing				
	B	*SE*	*t*	*p*	ΔR^2	*B*	*SE*	*t*	*p*	ΔR^2
Model Summary					.004					.04**
Constant	3.69	0.07	52.54	.00		3.37	0.06	54.22	.00	
Harm Occurrence	-0.06	0.14	-0.45	.65		-0.06	0.12	-0.51	.61	
Political Orientation	-0.01	0.05	-0.26	.80		0.12	0.04	3.07	.002**	
Harm Occurrence*Political Orientation	0.08	0.09	0.85	.39		0.09	0.08	1.07	.28	
Overall *F*			0.33					3.66**		

Note. N = 250. *SE* = standard error. Harm occurrence is coded 0 = Future Harm and 1 = Current Harm. * *p* < .05 level (2-tailed). ** *p* < .01 level (2-tailed).

Table 12

Exploratory Analysis: Regression Analysis Summary for Agreeableness as a Moderator of the Relationship Between Vignette Scenarios and both Internal and External Whistleblowing, with News Consumption and Political Orientation as Covariates

Variable	Internal Whistleblowing					External Whistleblowing				
	B	*SE*	*t*	*p*	ΔR^2	*B*	*SE*	*t*	*p*	ΔR^2
Model Summary					.05[**]					.09[**]
Constant	3.42	0.26	13.06	.00		2.35	0.23	10.14	.00	
Harm Occurrence	-0.07	0.14	-0.53	.60		-0.06	0.12	-0.50	.62	
Agreeableness	0.33	0.12	2.88	.004[**]		0.06	0.10	0.58	.56	
Harm Occurrence*Agreeableness	-0.13	0.23	-0.55	.58		-0.01	0.20	-0.03	.98	
News Consumption (covariate)	0.06	0.02	2.33	.02[*]		0.08	0.02	3.45	<.001[**]	
Political Orientation (covariate)	-0.02	0.05	-0.37	.71		0.12	0.04	2.85	.004[**]	
Overall *F*			2.83[**]					4.79[**]		

Note. N = 250. *SE* = standard error. Harm occurrence is coded 0 = Future Harm and 1 = Current Harm. * *p* < .05 level (2-tailed). ** *p* < .01 level (2-tailed).

Table 13

Exploratory Analysis: Regression Analysis Summary for Conscientiousness as a Moderator of the Relationship Between Vignette Scenarios and both Internal and External Whistleblowing, with News Consumption and Political Orientation as Covariates

Variable	Internal Whistleblowing					External Whistleblowing				
	B	*SE*	*t*	*p*	ΔR^2	*B*	*SE*	*t*	*p*	ΔR^2
Model Summary					.06**					.09**
Constant	3.35	0.26	12.83	.00		2.33	0.23	10.08	.00	
Harm Occurrence	-0.06	0.14	-0.46	.64		-0.06	0.12	-0.49	.63	
Conscientiousness	0.31	0.10	3.16	.002**		0.07	0.09	0.75	.45	
Harm Occurrence*Conscientiousness	0.04	0.19	0.22	.83		-0.02	0.17	-0.15	.88	
News Consumption (covariate)	0.04	0.03	1.65	.10		0.07	0.02	3.23	.001**	
Political Orientation (covariate)	0.02	0.05	0.35	.73		0.12	0.04	2.94	.004**	
Overall *F*			3.14**					4.85**		

Note. $N = 250$. *SE* = standard error. Harm occurrence is coded 0 = Future Harm and 1 = Current Harm. * $p < .05$ level (2-tailed). ** $p < .01$ level (2-tailed).

Table 14

Exploratory Analysis: Regression Analysis for all Big Five Traits Predicting both Internal and External Whistleblowing

Variable	Internal Whistleblowing					External Whistleblowing				
	B	SE	t	p	R^2	B	SE	t	p	R^2
Model Summary					.09**					.06*
Agreeableness	0.12	0.13	0.97	.33		-0.05	0.12	-0.39	.69	
Conscientiousness	0.14	0.11	1.27	.21		0.01	0.10	0.12	.90	
Extraversion	0.19	0.11	1.77	.08		0.002	0.10	0.02	.98	
Open Mindedness	0.10	0.11	0.87	.39		0.39	0.10	3.86	<.001**	
Negative Emotionality	-0.13	0.10	-1.28	.20		-0.02	0.09	-0.21	.83	
Overall F			4.78**					3.25*		

Note. $N = 250$. SE = standard error. * $p < .05$ level (2-tailed). ** $p < .01$ level (2-tailed).

APPENDIX C: Measures

Construct	Measurement/ Questionnaire Name	Citation for Measure	# of Items in the Measure
Organizational Wrongdoing	Organizational Wrongdoing Vignettes	Developed for this study	2 descriptions
Manipulation Check	Observation of Wrongdoing	Developed for this study	3 items
Whistleblowing Likelihood	Whistleblowing Attitudes and Cultural Orientation Questionnaire	Park, Blenkinsopp, Oktem, & Omurgonulsen (2008)	14 items
Cultural Orientation	Whistleblowing Attitudes and Cultural Orientation Questionnaire	Park, Blenkinsopp, Oktem, & Omurgonulsen (2008)	10 items
Personality	Big Five Inventory (BFI-2)	Soto & John (2017)	60 items
News Consumption	Media/News Consumption Question	Developed for this study	1 item
Political Orientation	Political Orientation Question	Haidt & Graham (2007)	1 item
Demographics	N/A	N/A	7 items

Vignettes

*Please note that each participant will only be assigned one vignette

Directions: Please read the following scenario carefully and respond to the questions below.

Vignette #1
You have worked as data analyst for a large social media company for the past two years. One evening before leaving for the day, you find a memo left in a printer tray. The memo describes an upcoming transfer of private user information between your company and a foreign research group that your company has worked with in the past.

The memo also suggests that the foreign research group wants to use this information to make political advertisements to influence the outcome of the 2020 election cycle. **You note that the transfer of information will occur in one week.**

Vignette #2
You have worked as data analyst for a large social media company for the past two years. One evening before leaving for the day, you find a memo left in a printer tray. The memo describes a transfer of private user information between your company and a foreign research group that your company has worked with in the past.

The memo also suggests that the foreign research group wants to use this information to make political advertisements to influence the outcome of the 2020 election cycle. **You note that the transfer of information occurred one week ago.**

Comprehension Check (after each vignette)

Item			
1	Has your company transferred the user information yet?	Yes	No

Manipulation Check (after each vignette; note that a 1-10 point sliding bar is provided for each question)

Item		No wrongdoing									Severe wrongdoing
1	Please indicate the extent to which you feel that the wrongdoing described in the scenario was severe.	1	2	3	4	5	6	7	8	9	10

Item		No harm									High level of harm
1	Please indicate the extent to which you feel that there is current harm to people in the scenario.	1	2	3	4	5	6	7	8	9	10

Scales

Personality – Big Five (Soto & John, 2017)

Directions: Please read each statement carefully and indicate the extent of your agreement with it.

Item		Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
1	I am someone who is outgoing, sociable.	1	2	3	4	5
2	I am someone who is compassionate, has a soft heart.	1	2	3	4	5
3	I am someone who tends to be disorganized.	1	2	3	4	5
4	I am someone who is relaxed, handles stress well.	1	2	3	4	5
5	I am someone who has few artistic interests.	1	2	3	4	5
6	I am someone who has an assertive personality.	1	2	3	4	5
7	I am someone who is respectful, treats others with respect.	1	2	3	4	5
8	I am someone who tends to be lazy.	1	2	3	4	5
9	I am someone who stays optimistic after experiencing a setback.	1	2	3	4	5
10	I am someone who is curious about many different things.	1	2	3	4	5
11	I am someone who rarely feels excited or eager.	1	2	3	4	5
12	I am someone who tends to find fault with others.	1	2	3	4	5

13	I am someone who is dependable, steady.	1	2	3	4	5
14	I am someone who Is moody, has up and down mood swings.	1	2	3	4	5
15	I am someone who is inventive, finds clever ways to do things.	1	2	3	4	5
16	I am someone who tends to be quiet.	1	2	3	4	5
17	I am someone who feels little sympathy for others.	1	2	3	4	5
18	I am someone who is systematic, likes to keep things in order.	1	2	3	4	5
19	I am someone who can be tense.	1	2	3	4	5
20	I am someone who is fascinated by art, music, or literature.	1	2	3	4	5
21	I am someone who is dominant, acts as a leader.	1	2	3	4	5
22	I am someone who starts arguments with others.	1	2	3	4	5
23	I am someone who has difficulty getting started on tasks.	1	2	3	4	5
24	I am someone who feels secure, comfortable with self.	1	2	3	4	5
25	I am someone who avoids intellectual, philosophical discussions.	1	2	3	4	5

26	I am someone who is less active than other people.	1	2	3	4	5
27	I am someone who has a forgiving nature.	1	2	3	4	5
28	I am someone who can be somewhat careless.	1	2	3	4	5
29	I am someone who is emotionally stable, not easily upset.	1	2	3	4	5
30	I am someone who has little creativity.	1	2	3	4	5
31	I am someone who Is sometimes shy, introverted.	1	2	3	4	5
32	I am someone who is helpful and unselfish with others.	1	2	3	4	5
33	I am someone who keeps things neat and tidy.	1	2	3	4	5
34	I am someone who worries a lot.	1	2	3	4	5
35	I am someone who values art and beauty.	1	2	3	4	5
36	I am someone who finds it hard to influence people.	1	2	3	4	5
37	I am someone who is sometimes rude to others.	1	2	3	4	5
38	I am someone who is efficient, gets things done.	1	2	3	4	5
39	I am someone who often feels sad.	1	2	3	4	5
40	I am someone who is complex, a deep thinker.	1	2	3	4	5
41	I am someone who is full of energy.	1	2	3	4	5

42	I am someone who is suspicious of others' intentions.	1	2	3	4	5
43	I am someone who is reliable, can always be counted on.	1	2	3	4	5
44	I am someone who keeps their emotions under control.	1	2	3	4	5
45	I am someone who has difficulty imagining things.	1	2	3	4	5
46	I am someone who is talkative.	1	2	3	4	5
47	I am someone who can be cold and uncaring.	1	2	3	4	5
48	I am someone who leaves a mess, doesn't clean up.	1	2	3	4	5
49	I am someone who rarely feels anxious or afraid.	1	2	3	4	5
50	I am someone who thinks poetry and plays are boring.	1	2	3	4	5
51	I am someone who prefers to have others take charge.	1	2	3	4	5
52	I am someone who is polite, courteous to others.	1	2	3	4	5
53	I am someone who is persistent, works until the task is finished.	1	2	3	4	5
54	I am someone who tends to feel depressed, blue.	1	2	3	4	5
55	I am someone who has little interest in abstract Ideas.	1	2	3	4	5

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56	I am someone who shows a lot of enthusiasm.	1	2	3	4	5
57	I am someone who assumes the best about people.	1	2	3	4	5
58	I am someone who sometimes behaves irresponsibly.	1	2	3	4	5
59	I am someone who is temperamental, gets emotional easily.	1	2	3	4	5
60	I am someone who is original, comes up with new ideas.	1	2	3	4	5

News/Media Consumption **(note that a 1-10 point sliding bar is provided for this question)**

Directions: Please indicate your level of news consumption.

Item		I do not follow any news reporting									I follow news reporting on a daily basis
1	Please indicate the extent to which you follow national and political news reporting.	1	2	3	4	5	6	7	8	9	10	

Political Orientation Question - Haidt & Graham (2007)

Directions: Please indicate your political orientation.

Extremely Conservative	Conservative	Somewhat Conservative	Moderate	Somewhat Liberal	Liberal	Extremely Liberal
1	2	3	4	5	6	7

Demographics

Directions: What is your age?

Directions: What is your sex?
Male
Female
Prefer Not to Say

Directions: What best represents your racial or ethnic heritage?
American Indian or Alaska Native
Asian
Black / African American
Hispanic or Latino/a
Native Hawaiian or Other Pacific Islander
White or Caucasian
Multi-Racial
Other
Prefer not to say

Directions: What is the principal industry of your organization? (Drop Down Menu)
Education
Banking/Finance/Accounting
Insurance/Real Estate/Legal
Federal Government (including military)
State/Local Government
Medical/Dental/Healthcare
Transportation/Utilities
Construction/Architecture/Engineering
Manufacturing/Process Industries
Online Retailer
Aerospace
Wholesale/Retail/Distribution
Research/Development Lab
Marketing/Advertising/Entertainment
Business Services/Consultant
Other/Not Listed

Directions: How many years of professional experience do you have?

Directions: Including yourself, how many people are employed at your organization in all locations? (Drop Down Menu)
1-50
51-500

501-2000
2000+
Don't know

Directions: Approximately what is your household income?
$0 - $9,999
$10,000 - $19,999
$20,000 - $29,999
$30,000 - $39,999
$40,000 - $49,999
$50,000 - $59,999
$60,000 - $69,999
$70,000 - $79,999
$80,000 - $89,999
$90,000 - $99,999
$100,000 - $149,999
$150,000 or more
Prefer not to say