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Whistleblowing and Group Affiliation: The Role of Group Cohesion and the Locus of the Wrongdoer in Reporting Decisions*

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ABSTRACT

Conventional accounts describe whistleblowing as prosocial behavior, where whistleblowers are largely driven by a desire to help or improve their organization. Yet individuals are not only members of their organization; they also belong to internal social groups that affect behavior and influence decision-making. In this paper, we focus on these intra-organizational dynamics and theorize two ways in which group affiliations are likely to affect whistleblowing. When a wrongdoer is affiliated with a potential whistleblower's group, higher group cohesion decreases the likelihood of blowing the whistle, due to potential whistleblowers' greater loyalties toward group members and a desire to protect the reputation of the group. When a wrongdoer is not affiliated with a potential whistleblower's group, higher group cohesion increases the likelihood of blowing the whistle, as potential whistleblowers feel they have the support of fellow group members, lessening fears of retaliation. Using unique data on actual and hypothetical whistleblowing among US federal employees in 24 departments and agencies coupled with a vignette experiment, we find support for our arguments. By showing how group affiliations inform whistleblowing decisions, we reveal how variation in social structure leads to heterogeneity in responses to wrongdoing. Together, these results reveal trade-offs in the detection of misconduct and help explain why wrongdoing in organizations may be so difficult to eradicate.

Wrongdoing is endemic to organizations (Greve, Palmer, & Pozner, 2010; Palmer, 2012; Palmer, Smith-Crowe, & Greenwood, 2016). Across the US economy, it is estimated that 13 percent of US firms engage in fraud, costing an estimated $180 to $360 billion annually (Dyck, Morse, & Zingales, 2013). Within individual firms, it is estimated that companies lose five percent of their annual revenues to employee fraud despite internal anti-fraud policies and control systems (Association of Certified Fraud Examiners, 2018). Yet the monitoring and detection of such behaviors is challenging, and the primary means of catching misconduct is through employee whistleblowing (Dyck, Morse, & Zingales, 2010; Pierce, Snow, & McAfee, 2015). Whistleblowing is critical because employees tend to have far better information about wrongdoing than regulatory agencies or even authorities within the organization, and such reports can help to halt or deter malfeasance (Ashforth & Anand, 2003; Miethe & Rothschild, 1994). Understanding the drivers of whistleblowing can therefore inform organizational interventions to weed out wrongdoing.

The prevailing view of whistleblowing is that it represents prosocial behavior, meaning that whistleblowing is motivated by a desire to help or improve others while still taking into account the costs and benefits facing the individual (Donkin, Smith, & Brown, 2008; Dozier & Miceli, 1985; Lewis, Brown, & Moberly, 2014; Miceli, Near, & Dworkin, 2008; Taylor & Curtis, 2018). Since its original formulation in 1985 (Dozier & Miceli, 1985), "for more than 20 years, researchers have viewed whistleblowing as a prosocial behavior" (Miceli et al., 2008: 35), and the prosocial model is "arguably the most influential theoretical framework in the analysis of whistleblowing" (Roberts, 2014: 208). Commonly referred to as the Prosocial Organizational Behavior Model, prosocial behavior in this context is almost exclusively viewed as being intended to benefit the organization (Donkin et al., 2008; Lewis et al., 2014). From this perspective, the key levers for increasing whistleblowing are to reduce the costs individuals face in reporting—such as the likelihood of retaliation—and to increase their desire or willingness to benefit the organization.

What this perspective largely neglects is the fact that individuals are not only members of their organization; they also belong to internal social groups that may form along various dimensions, such as workgroups, demographics, rank, or geography. These social groups—nested within the larger

organization—also affect behavior and influence decision-making (Anvari et al., 2019). Indeed, organization members generally identify with and form stronger commitments to groups within the organization than to the organization as a whole (Lawler, 1992; Mueller & Lawler, 1999; Van Knippenberg & Van Schie, 2000), and groups can serve as the more salient social unit (Riketta & Dick, 2005). Consequently, groups have been found to have a stronger influence than organizations on the behavior of employees (Levine & Moreland, 2006; Vandenberghe, Bentein, & Stinglhamber, 2004). Given the relevance of social groups, we argue that their influence is important to account for in a theory of whistleblowing. In contrast to the conventional prosocial account, organizational members may not only consider the organization but also take into account their group memberships when deciding whether to report wrongdoing, and they may be more concerned with the implications of whistleblowing for their particular groups than for the organization as a whole. Accounting for groups therefore has the potential to provide new insight into whistleblowing, which can inspire new interventions to detect and prevent wrongdoing.

In this study, we theorize two ways in which social groups are likely to influence whistleblowing. First, because groups are not coextensive with the organization, their influence may differ depending on the locus of the wrongdoer, i.e., whether or not the wrongdoer is affiliated with the same group as someone with knowledge of the wrongdoing (a potential whistleblower). Second, the extent to which groups influence decision-making likely depends on the extent to which members experience positive affect and attachment toward other members of their group, i.e., how cohesive the group is. We argue that it is the interaction between these two factors—the locus of the wrongdoer and group cohesion—that determines organizational members' willingness to blow the whistle. When wrongdoing is observed inside of the group, higher levels of cohesion will be associated with *lower* levels of whistleblowing, as individuals seek to shield other group members from harm. Conversely, when wrongdoing is observed outside of the group, higher levels of cohesion will be associated with *greater* levels of reporting, as whistleblowers feel more comfortable coming forward knowing that their group members are likely to support them and help shield them from retaliation.

We investigate this theory using unique data from the 2010 Merit Principles Survey, which contains information on whistleblowing for 42,020 federal employees across 24 departments and agencies. Importantly, this survey allows us to test our theory in two ways: by examining retrospective behavior for the subset of respondents who previously had knowledge of wrongdoing, and by analyzing prospective whistleblowing intentions using the full sample of respondents. We further replicate our findings and demonstrate their external validity by conducting a vignette experiment using a separate sample of online respondents. By using multiple methods, we are able to corroborate all results and mitigate any biases that may inhere to any particular method.

This work contributes to the whistleblowing literature by extending prosocial explanations and theorizing that the role of intra-organizational groups is critical to understanding whistleblowing. Social groups vary greatly within organizations, and accounting for such group level variation generates novel predictions about heterogeneity in whistleblowing decisions. Doing so highlights the importance of internal groups and expands on research on the role of interpersonal loyalties in preventing whistleblowing (Anvari et. al., 2019; Pershing, 2003; Waytz, Dungan, & Young, 2013). Our research helps to reorient whistleblowing research away from the view of organizations as holistic entities and demonstrates the importance of systematically considering social structure in whistleblowing decisions.

Importantly, this work also has practical implications. By demonstrating how groups can simultaneously promote and suppress whistleblowing, we reveal a challenge facing organizations and clarify one reason why wrongdoing may be so difficult to detect and eradicate. Managers and organizational leaders seeking to uncover wrongdoing must consider situations where people will be reticent to blow the whistle due to the relational dynamics within the organization. Interventions solely based on individual or organizational-level factors are unlikely to be sufficient for encouraging employees to come forward and provide valuable information about wrongdoing.

DEFINING WHISTLEBLOWING

Whistleblowing is commonly defined as "the disclosure by organizational 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: 4). This definition means that both the party responsible for the wrongdoing and the whistleblower are (or were previously) employed by the same organization. Further, the wrongdoing does not need to be illegal or particularly severe in order for its reporting to be considered whistleblowing; whistleblowing represents the reporting of any behavior that violates policies or other standards of conduct, such as arbitrary firing, bullying and the misallocation of resources (Miceli et al., 2008). Finally, the disclosure must be reported to individuals with the authority to address it, such as managers or human resources officers inside the organization, or monitoring agencies outside of the organization, such as the Federal Bureau of Investigation (FBI). As such, informally disclosing the wrongdoing to friends or colleagues who do not have the authority to investigate, adjudicate or punish the alleged behavior would not constitute whistleblowing.

The vast majority of whistleblowing is reported internally, meaning to individuals or resources within the organization (Donkin et al., 2008; Jeon, 2017; Miceli et al., 2008). Although famous cases of whistleblowing sometimes involve employees going to external authorities such as the FBI, such actions are rare and generally occur only after a whistleblower has unsuccessfully reported internally (Jeon, 2017; Miceli & Near, 1992; Rehg, Miceli, Near, & Van Scotter, 2008). Given this pattern of internal reporting, whistleblowing is commonly conceptualized as seeking to improve the organization rather than embarrass or expose it, either by stopping behavior that is directly harmful (e.g., embezzlement or the misallocation of resources) or that deleteriously impacts the climate in which people work (e.g., harassment or discrimination). This conceptualization has contributed to the characterization of whistleblowing as *prosocial* in nature, which has dominated theoretical developments since its initial formulation in 1985 (Dozier & Miceli, 1985; Gundlach, Douglas, & Martinko, 2003; Miceli et al., 2008) and it is now a "presumption shared by most whistleblowing research" (Lewis et al., 2014: 5). The prosocial perspective means that whistleblowers seek to improve and benefit others, while still being attuned to personal incentives such as the likelihood of suffering retaliation (Dozier & Miceli, 1985; Miceli et al., 2008; Taylor & Curtis, 2018). Accordingly, whistleblowing is conceptualized as helping behavior (Brief & Motowidlo, 1986) and the larger collective to which the prosocial behavior is directed is almost exclusively considered

to be the organization as a whole (Donkin et al., 2008; Lewis et al., 2014). Thus, whistleblowing is seen as an attempt to improve the organization's practices or policies or protect it from harm; whistleblowing is "an act of loyalty, rather than disloyalty to an employer" (Lewis, Brown, & Moberly, 2014:6).

What the prosocial perspective of whistleblowing largely neglects is the fact that organizations are not monolithic. Individuals can also be prosocial towards or influenced by various individuals and groups *within* the organization, not just the organization as a whole (Anvari et. al., 2019). In fact, research has shown that groups tend to elicit stronger commitments (Lawler, 1992; Mueller & Lawler, 1999; Van Knippenberg & Van Schie, 2000) and have a stronger influence on the behavior of employees (Levine & Moreland, 2006; Vandenberghe et al., 2004) than the organization itself. Extending conventional prosocial accounts, organizational members may instead weigh their decision for both the group and the organization, and in some circumstances, they may be more concerned with the implications of whistleblowing for their particular group than for the organization as a whole.

Supporting this view are several studies which demonstrate how relational factors internal to the organization can affect whistleblowing. Interpersonal and emotional closeness (Curphy et al., 1998; King, 1997), friendship (Hess, Treviño, Chen, & Cross, 2019), and loyalty (Waytz et al., 2013) have been found to reduce willingness to blow the whistle. A study of Naval Academy midshipmen found that 30 percent did not report witnessed honor code violations due to peer loyalty (Pershing, 2003), and police officers have been known to conceal the corruption and brutality of other officers (Skolnick, 2002). While showing that social relations can indeed influence whistleblowing, these studies generally only focus on the ways in which they suppress whistleblowing without considering the ways in which social structure might instead promote the reporting of wrongdoing. Additionally, these studies largely do not specify *where* in the organization such dynamics are most likely to occur, i.e., under what conditions interpersonal loyalties tend to emerge.

Developing a more comprehensive account of whistleblowing therefore requires systematically theorizing about the ways in which social structure within organizations—particularly the ways in which individuals identify and associate with one another—can both suppress and promote whistleblowing. Given

the importance of groups within organizations, this suggests a focus on group dynamics and group affiliations, and the role they play in structuring responses to wrongdoing.

GROUP AFFILIATION AND WHISTLEBLOWING

A variety of social groups exist within organizations. These can be formal in nature, where individuals are assigned to workgroups or teams (Champoux, 2011); or informal, where individuals associate with one another more independently, often around shared hobbies or interests (Feld, 1981). Although individuals can belong to multiple groups, organizational attributes often play a key role in which groups are most salient. For example, groups organized by geography may be salient in a multinational organization, groups by shared rank may be salient in a hierarchical organization, groups by shared technical expertise may be salient in a technological firm, and groups by shared ethnicity may be salient in organizations with substantial minority populations. In many organizations, the workgroup is the most salient group to which individuals belong (Riketta & Dick, 2005). Regardless of what joins them together and how they form, members of groups tend to have more social interaction with other members than with individuals outside of the group (Levine & Moreland, 2006), leading to the development of dense networks of relationships (Feld, 1981) and shared group identity (Tajfel, 1979).

Importantly, group affiliation affects behavior and influences decision-making. Organizational members have been found to identify with and form stronger commitments to groups within the organization than to the organization as a whole (Lawler, 1992; Mueller & Lawler, 1999; Van Knippenberg & Van Schie, 2000), and groups often serve as the more salient social unit (Riketta & Dick, 2005). Indeed, groups have been found to develop their own norms of behavior in which they socialize members, which may even conflict with or take precedence over organizational norms (Feldman, 1981). Consequently, groups tend to have a stronger influence than organizations on the behavior of employees (Levine & Moreland, 2006; Vandenberghe et al., 2004), suggesting that group dynamics are likely an important determinant of whistleblowing behavior (Anvari et al., 2019).

As social groups are not coextensive with the organization, wrongdoers and potential whistleblowers may share a common group affiliation or they may belong to different groups. Given the

importance of group affiliation, those with knowledge of the wrongdoing will likely respond differently depending on whether the wrongdoer is or is not a member of their group. A long tradition of research in social psychology shows that individuals tend to treat group members differently from non-group members (Brewer, 1999; Tajfel, Billig, Bundy, & Flament, 1971). Furthermore, group members hold one another accountable to group-specific norms, but do not tend to hold non-group members to the same standards (Åkerström, 1988). Together, this suggests that understanding the role of groups in whistleblowing requires separately theorizing the determinants of whistleblowing when the wrongdoer is a member of a potential whistleblower's group versus being outside of it.

Whistleblowing Inside of the Group

The decision to blow the whistle on someone inside the group is likely influenced by group dynamics, i.e., how group members relate to and get along with one another. Some groups are characterized by cooperation and positive sentiment, while others may be more divisive and conflictual. The concept of *cohesion* captures the extent to which groups maintain positive internal dynamics among their members and is "a general indicator of synergistic group interaction—or process" (Barrick, Neubert, Mount, & Stewart, 1998: 382). Group cohesion captures both member behaviors towards one another—such as helping and cooperation—and intragroup attitudes—such as trust and liking (Lawler, Thye, & Yoon, 2000). In particular, cohesion distinguishes between groups that have high member commitment, positive affect, and deference toward the group; and groups that do not share these traits (McPherson & Smith-Lovin, 2002; Vandenberghe et al., 2004).

Given this distinction, groups that experience high cohesion are most likely to develop strong intragroup norms of behavior, helping to align their members (Ashforth & Anand, 2003; Trevino & Victor, 1992). High cohesion is associated with elevated levels of trust and loyalty, as positive interactions facilitate commitment to the group and a desire to support the interests of other members (Lawler & Yoon, 1996). Under these circumstances, individuals should be particularly reticent to blow the whistle on other group members, as high cohesion can lead members to view reporting as a betrayal (Ashforth & Anand, 2003; Cook, Hardin, & Levi, 2005; Miethe & Rothschild, 1994). One common norm that develops in cohesive

groups—often referred to as an anti-snitching norm—is the obligation to maintain loyalty to members of the group and not turn someone in for questionable behavior (Akerstrom, 1991; Mayer, Nurmohamed, Treviño, Shapiro, & Schminke, 2013; Whitman & Davis, 2007). The more cohesive the group, the stronger such norms are likely to be (Akerstrom, 1991; Ashforth & Anand, 2003; McPherson & Smith-Lovin, 2002).

Even if the wrongdoing is quite harmful to the organization, maintaining loyalty to a cohesive group may take precedence. Group identification is generally stronger than organizational identification (Van Knippenberg & Van Schie, 2000), and individuals typically form stronger commitments to their nested group than to the larger organization (Lawler, 1992; Mueller & Lawler, 1999). Consequently, we expect individuals to favor protecting transgressive group members over whistleblowing, and such behavior should be particularly likely when group cohesion is high. There are several examples of peer loyalty suppressing the willingness to report (e.g., Morrison & Milliken, 2000; Pershing, 2003; Waytz et al., 2013); we contend that such behavior is most likely when the potential whistleblower and wrongdoer are affiliated with the same highly cohesive group.

Conversely, when the two parties are both members of a less cohesive group, whistleblowing is more likely to occur. For one, norms are less likely to develop in non-cohesive groups (Coleman, 1990; Ellickson, 1991), which includes norms regarding the protection or non-reporting of fellow group members. The lack of such norms likely makes potential whistleblowers more willing to report wrongdoers within the same group. Furthermore, organizational units lacking cohesion are likely to have more conflict, less satisfaction, less trust and less liking (de Jong, Curşeu, & Leenders, 2014; Morrison, 2008). These tensions have been found to manifest as rivalries or sabotage of other group members (Charness, Masclet, & Villeval, 2014). Such group dynamics would be consistent with observations that reporting wrongdoing can be a means of getting another person in trouble or as an act of revenge (Culiberg & Mihelič, 2017; Miceli & Near, 1997). According to Miethe (1999: 86), “There is no doubt that whistleblowing for some employees provides a rather nefarious means of personal slander.” Thus, while high group cohesion may suppress whistleblowing, low group cohesion may be particularly conducive to it. This leads to the first hypothesis:

Hypothesis 1. Higher group cohesion *reduces* the tendency of individuals to blow the whistle on wrongdoing committed by someone inside of their group.

Importantly, we expect this hypothesis to hold true so long as at least one perpetrator of the wrongdoing is a member of the potential whistleblower's group, and the potential whistleblower is aware of that group member's involvement. Oftentimes wrongdoing is not an isolated activity, but is rather a coordinated action involving more than one individual (Aven, 2015; Palmer & Yenkey, 2015). In other words, situations can arise where an individual is aware of multiple wrongdoers who are collectively inside and outside of a group. In such cases, we anticipate that the above arguments will hold, as the shared group affiliation with one wrongdoer will likely take precedence over the affiliations of the other perpetrators. The greater the cohesion of the group, the less likely an individual is to report another group member, even if the perpetrator is coordinating with non-group members.

Whistleblowing Outside of the Group

When wrongdoing is committed by someone outside of the potential whistleblower's group, group loyalties are unlikely to play a significant role, as no one in the group is implicated in the wrongdoing. Intragroup norms do not apply to non-members (Akerstrom, 1988). Reporting a wrongdoer outside of the group should therefore not arouse the same group pressures to not report that are likely to emerge when both parties share the same cohesive group.

However, this does not mean that the group does not play a significant role in whistleblowing decisions under these circumstances. One of the biggest fears that potential whistleblowers have, and one of the ways in which whistleblowers can experience negative consequences, is through retaliation, which involves undesirable action taken against the whistleblower that is in direct response to whistleblowing (Lee, Heilmann, & Near, 2004; Miceli et al., 2008; Rehg, 1998). Retaliation can take a variety of forms, including harassment, name-calling, threats, ostracism, negative performance reviews, exclusion from important projects or meetings, and demotion (Cortina & Magley, 2003). Fear of retaliation often dissuades individuals from blowing the whistle (Wainberg & Perreault, 2016).

Belonging to a cohesive group, however, likely helps to allay or reduce these concerns when the wrongdoing is perpetrated by someone outside of the group. Fellow group members are likely to support a group member who comes forward to blow the whistle, giving the whistleblower the benefit of the doubt, backing up her credibility, and protesting any adverse responses. In this way, an individual from a cohesive group who blows the whistle against someone outside of the group is less likely to feel isolated—as many whistleblowers do (Dworkin & Baucus, 1998; Nyreröd & Spagnolo, 2021)—but instead feel socially supported. Consequently, such individuals are more likely to blow the whistle when they are aware of wrongdoing by someone outside of the group, as whistleblowers feel more comfortable coming forward knowing their group members are likely to support them and help shield them from retaliation.

Supporting this argument is evidence that social support does in fact reduce retaliation against whistleblowers (Rehg et al., 2008), in particular reducing informal retaliation, such as harassment and ostracism (Rehg, 1998). This relationship helps to explain why group cohesion increases feelings of psychological safety (Huff et al., 2017)—the belief that one will not be hurt, embarrassed or criticized for speaking up (Edmondson, 2004)—which in turn is positively related to employee voice (Kong, Liu, & Weng, 2020; LePine & Van Dyne, 1998; Liang, Farh, & Farh, 2012). Importantly, supportive peer relations do not affect perceptions of the voice climate in the larger organization (Liang & Tang, 2010), reinforcing their localized effect. Together, this explains why those who are not on the social fringe are more likely to blow the whistle (Miethe & Rothschild, 1994).

Beyond cohesive groups providing support for whistleblowing outside of the group, cohesive groups may also increase antagonism toward members of other groups, as cohesion increases the sense of differentiation and favorability of the in-group over the out-group (Brewer, 1999; Tajfel et al., 1971). Cohesive groups tend to show more intergroup bias (Gaertner & Schopler, 1998; Petersen, Dietz, & Frey, 2004), which may be explained by motivations to achieve and maintain an advantaged position for their group (LeVine & Campbell, 1972), and tend to perceive out-group immorality as a threat to the group (Brambilla, Sacchi, Pagliaro, & Ellemers, 2013). Although inter-group antagonism may be somewhat

mitigated by the fact that all groups belong to the same organization, to the extent that such biases do exist, they are likely strongest among members of cohesive groups.

By contrast, when wrongdoing is perpetrated by someone outside of a non-cohesive group, the above reasoning would not apply. Members of non-cohesive groups are unlikely to feel supported and protected by other group members, leading to reduced feelings of psychological safety and increased expectations of retaliation. Such individuals are more likely to feel insecure and unsupported if they were to blow the whistle and hence are likely less willing to report wrongdoing. Members of non-cohesive groups are also less likely to be swayed by in-group favoritism and out-group biases, as they are already potentially dealing with conflict and competition internally. Together, the lack of social support from group members and reduced intergroup competition suggest that members of non-cohesive groups with knowledge of wrongdoing perpetrated by someone outside of the group are more likely to stay silent and not blow the whistle. This leads to the second hypothesis:

> Hypothesis 2. Higher group cohesion *increases* the tendency of individuals to blow the whistle on wrongdoing committed by someone outside of their group.

Put together, the two hypotheses posit an interaction between group cohesion and the locus of the wrongdoer: higher group cohesion reduces the reporting of wrongdoers inside of the group, while increasing the reporting of wrongdoers outside of the group. This theory, however, makes no claims regarding main effects. Because cohesion can have opposite effects depending on the locus of the wrongdoer, and the locus of the wrongdoer can have opposite effects depending on cohesion, we do not expect either to have an independent effect on whistleblowing.

METHODS

A variety of methods are typically used to study whistleblowing, each of which have their benefits and drawbacks (Miceli et al., 2008). Some researchers use cross-sectional survey data, where individuals within organizations are typically asked about their prior experience with observing and reporting wrongdoing (e.g., Dungan et al., 2019; Rothschild & Miethe, 1999). This work benefits from the real-world context in which it is situated; individuals describe their decisions in a consequential environment where

there are serious and meaningful implications of their actions. At the same time, such methods may be subject to recall biases and sample biases; for the latter, individuals must perceive behavior as wrongdoing in order to have the opportunity to blow the whistle, and this interpretation may be influenced by various organizational, interpersonal and individual factors. Other researchers use experimental methods, including scenario-based survey experiments and laboratory experiments (e.g., King, 1997; Sims & Keenan, 1998). The benefit of this type of work is that it allows for direct manipulation of the independent variables of interest and is not subject to the potential biases affecting survey research. The downside is social desirability bias (Smith & Ellingson, 2002) and the potential lack of external validity (Mesmer-Magnus & Viswesvaran, 2005); regarding the latter, it is very difficult to simulate the full complexity of the whistleblowing decision with all its attendant implications for career, relationships and personal wellbeing. Despite well-established issues for any one particular method, a meta-analysis (Mesmer-Magnus & Viswesvaran, 2005) and review article (Bjørkelo & Bye, 2014) were only able to identify three studies that have used multiple methods in their research design.

In this paper, we make use of multiple methods in order to corroborate all findings and avoid having to depend on one particular set of results. The data used for Study 1 come from a survey instrument deployed to a sample of U.S. federal employees. In the first analysis of Study 1, we evaluate our hypotheses on a sub-sample of government workers who witnessed wrongdoing and decided whether or not to report; in the second analysis, we evaluate responses regarding hypothetical whistleblowing intentions using all respondents. In Study 2, we conducted a vignette experiment using a different sample. The strength of the sub-sample analysis from Study 1 is that it represents actual whistleblowing decisions made by individuals faced with the choice of whether or not to report observed wrongdoing. The strength of the second analysis from Study 1 is that it includes the full sample while grounding whistleblowing intentions in the respondents' real workplace settings. Finally, the strength of the vignette experiment in Study 2 is that it provides more causal evidence, along with establishing the broader generalizability of the findings. Together, these different methods provide a far more robust test of our theory than any would alone.

STUDY 1: WHISTLEBLOWING SURVEY

We proceed by first focusing on the analysis of the whistleblowing survey, as this forms the core of the analysis. We use the 2010 Merit Principles Survey (MPS) which was distributed to full-time United States government employees and asked extensive questions about both observed and hypothetical wrongdoing. The MPS includes a subsample of employees who observed wrongdoing, allowing us to test our theory for real incidents of wrongdoing and decisions to report. In addition, the MPS asked respondents about reporting intentions of hypothetical wrongdoing, which allows us to evaluate our theoretical arguments for the full sample of respondents and not just those who witnessed wrongdoing.

The MPS is a voluntary and anonymous survey administered periodically by the US Merit Systems Protection Board to promote an effective federal workforce free of prohibited personnel practices. Although the survey has been collected periodically since 1979, the particular questions and modules vary. We use the 2010 edition of the MPS because that is the latest version to include a module on whistleblowing. In addition to the whistleblowing questions, the 2010 survey asks about a rich assortment of topics including demographics, employee engagement and motivation, prohibited personnel practices, disabilities, leadership, unions, telework, workplace violence, and professional affiliations. Regarding the questions relevant to this study (i.e., demographics, employee engagement, and whistleblowing), the order they are asked starts with demographics and employee engagement, followed by hypothetical and finally behavioral whistleblowing. This order is beneficial, as thinking about behavioral whistleblowing could prime individuals to think differently about hypothetical whistleblowing if it were asked earlier. The data from the survey is publicly available and the authors were not involved in the data collection.

This survey allows us to focus on a particular type of group common across organizations: the workgroup. In many—but not all—organizations, workgroups represent the most salient social unit (Levine & Moreland, 2006; Riketta & Dick, 2005) and a salient source of identity (Lawler, 1992; Van Knippenberg & Van Schie, 2000). Individuals often spend the majority of their time working with or interacting with members of their workgroup. Given their importance and the fact that workgroups pervade most modern

organizations (Ashforth & Johnson, 2014), we view workgroups as a particularly relevant and valid way to test our theory.

Using stratified random sampling, the survey was distributed—primarily via email—to 71,970 full-time federal employees across 61 sub-agencies within 24 agencies. This sample was drawn from the Office of Personnel Management federal workforce records from a population comprising approximately 98 percent of the permanent, full-time federal workforce. The sampling plan required that some groups be oversampled—particularly supervisors and certain sub-agencies—to ensure statistically reliable results. Of the 43,162 returned surveys, 42,020 were deemed complete and valid, yielding an overall response rate of 58 percent. Post-stratification weights based on the population of employees government-wide were calculated by the Merit Systems Protection Board to ensure the representativeness of the responses and are applied to all reported analyses (MSPB, 2012).

MPS SAMPLES

We first evaluate our argument on the subsample of respondents who had knowledge of wrongdoing within their department or agency but did not necessarily report it. Subsequently, we use the full sample—specifically, the responses concerning hypothetical misconduct—to provide a second test of the theory. As the survey asked similar questions concerning both behavioral and hypothetical reporting, we conduct similar analyses for the behavioral subsample and the hypothetical full sample.

Behavioral Whistleblowing (MPS Sub-sample)

To evaluate behavioral whistleblowing, we examined respondents who answered yes to the following question: "During the last 12 months, did you personally observe or obtain direct evidence of one or more illegal or wasteful activities involving your agency?" Approximately nine percent of the respondents in the sample reported yes. Although wasteful activities might not seem to rise to the same level of wrongdoing as illegal behavior, the misallocation of resources has been included in definitions of whistleblowing and studies of whistleblowing for decades (e.g., Dungan et al., 2019; Near & Miceli, 1985; Rehg et al., 2008). Furthermore, the Office of Government Ethics treats waste as an ethical violation in its Standards of Conduct that apply to all US government employees (*Executive Order Number 11222*, 1965).

Given that we are concerned with whistleblowing within organizations and the definition of whistleblowing as behavior under the control of employers (Near and Miceli 1985), we excluded 201 observations (5 percent of those who had knowledge of wrongdoing) in which the respondent indicated that the wrongdoing took place outside of the government. We include wrongdoing within the respondent's agency and within other agencies—the rationale for the latter being that the government serves as a supra-organization—and exclude wrongdoing by contractors, as agency authorities are less able to respond to such behavior. Excluding contractors also provides symmetry with the hypothetical measures. However, our results are not sensitive to the inclusion or exclusion of contractors or wrongdoers outside of the respondent's agency but within the federal government.

Respondents who were aware of wrongdoing within their agencies were asked a series of yes-or-no questions regarding whom they told. Options were non-exclusive and include telling family, friends, co-workers, immediate supervisors, higher-level supervisors, agency officials, the Agency Inspector General, the Office of Special Counsel, the Government Accountability Office, law enforcement, the news media, a union representative, a Congressional staff member, an advocacy group outside the government, or other. In alignment with standard definitions of whistleblowing, we consider someone to have blown the whistle only if she reported the information to someone with the authority to take action (Near & Miceli, 1985); we therefore consider individuals to have *not* reported if they did not tell anyone or only told family or friends. Following Dungan, Young, and Waytz (2019), we drop 13 percent of observations involving witnesses who only told co-workers or "other" about the wrongdoing, as we cannot determine whether those informed individuals had authority to act on the information. Regardless, including those observations as instances of not reporting in an alternative sample leads to similar results.

After dropping observations with missing values, our final sample contains 2,901 federal employees who had knowledge of wrongdoing by another government employee and whom we can clearly distinguish as having blown the whistle or as having not reported at all.

Hypothetical Whistleblowing (MPS Full Sample)

For the analysis of hypothetical whistleblowing, we include all survey respondents who answered the questions about whether or not they would blow the whistle against various types of perpetrators should the occasion arise. Specifically, the survey asked six questions that start with the phrase, "How likely would you be to blow the whistle when the wrongdoer is [one item from a list of types]." Of particular interest are two options: "A coworker (in your workgroup)" and "A Federal employee outside your workgroup." These questions clearly distinguish between wrongdoers inside and outside of the group, allowing us to evaluate our theory for hypothetical scenarios. Furthermore, these questions align with the behavioral sample, which distinguishes between wrongdoing involving a group member and wrongdoing involving someone outside of the group but within the Federal government. Because each respondent answered both questions, this approach can be viewed as a variant of a within-subject research design without confounds regarding either the likelihood of observing the wrongdoing or observers of wrongdoing sorting into particular workgroups.

To evaluate employees' willingness to report a hypothetical wrongdoing, we examine deviations from each individual's baseline propensity to report (see details below). To do so, we examine all six hypothetical questions about willingness to report different types of individuals. Eighty percent of the respondents answered the hypothetical whistleblowing questions, giving us a sample size of 33,755.

VARIABLES

Dependent Variables

Reported Wrongdoing. For the behavioral whistleblowing analysis, our dependent variable is a binary indicator of whether or not an employee with knowledge of wrongdoing blew the whistle. It equals 1 if the employee reported the wrongdoing to any of the aforementioned authorities and 0 otherwise. For the hypothetical sample, respondents were asked six questions about their willingness to report different types of wrongdoers: an employee within the workgroup, a Federal employee outside of the workgroup, a supervisor, a higher-level supervisor, a contractor or vendor, and a political appointee. All six questions were answered on a five-point scale ranging from "very unlikely" to "very likely" and were standardized within respondent using intra-individual z-scores to account for biased response styles (Fischer & Milfont, 2010). The first two questions are of particular interest to our study. The first variable, *reported wrongdoer*

(*inside*), indicates the willingness to report someone inside the workgroup above and beyond a person's overall propensity to report. *Reported wrongdoer* (*outside*) reflects the willingness to report someone outside the workgroup. For those who did not vary in their responses to any of the six hypothetical questions, the standard deviation of their responses is zero, and we therefore code these values as zero.

Independent Variables

Wrongdoer Location (Inside). Given our theory, we are interested in whether a perpetrator was within the observer's workgroup or outside of the workgroup. This is a dichotomous variable set to 1 when the wrongdoing was committed by a member of the respondent's workgroup and 0 otherwise. It is important to note that four percent of respondents indicated that the wrongdoing occurred both inside *and* outside of their workgroup, suggesting coordinated action between multiple co-offenders. As described earlier, we classify these instances as intra-workgroup wrongdoing. However, in later models we add controls for whether an act of wrongdoing was both internal and external to the workgroup. No indicator of the locus of the wrongdoer is included in the hypothetical analysis, as employees were asked to separately imagine the wrongdoing being committed by workgroup members and non-workgroup members.

Workgroup Cohesion. To measure group cohesion, we rely on a survey item that captures both the behavioral and attitudinal dimensions of how well the work unit functions collectively. The survey item states: "A spirit of cooperation and teamwork exists in my work unit." The MPS uses the terms "work unit" and "workgroup" interchangeably and defines a work unit as "the immediate group of employees headed by your direct supervisor." This survey item corresponds with Seashore's (1954) definition of group cohesion as "team spirit" and "teamwork." Notedly, single item measures of group-related constructs, particularly psychological closeness, group cohesion, and shared social identity, have been demonstrated to be both reliable and valid (Cummings & Cross, 2003; Postmes, Haslam, & Jans, 2013). Respondents rated their agreement on a five-point scale ranging from "strongly disagree" to "strongly agree"; we center these responses at zero. Hence, this question measures individual perceptions of workgroup cohesion and is not a group-level indicator. This is beneficial; what should matter for reporting is how the potential whistleblower perceives group dynamics, regardless of whether other group members would agree.

Control Variables

Race and ethnicity. To control for race and ethnicity, we use indicators for respondents being Asian, Black, Hispanic, and Native American (with White as the reference category).

Education. We include indicators for No College, Some College, and Advanced Degree (with Bachelor's Degree as the reference category), as isolated studies have found higher education to predict whistleblowing (Near & Miceli, 1996). A meta-analysis, however, found no effect (Mesmer-Magnus & Viswesvaran, 2005).

Job Tenure. This variable records the length of time the respondent has worked as a federal civil service employee. The survey offered 11 options: under 1 year, 1–3 years, 4–7 years, 8–11 years, 12–15 years, 16–19 years, 20–23 years, 24–27 years, 28–31 years, 32–35 years, and more than 35 years. Longer tenure tends to be associated with a greater likelihood of whistleblowing (Mesmer-Magnus & Viswesvaran, 2005).

Pay Scale. The way in which the respondent is paid provides insight into how her employment is categorized. Respondents indicated whether their pay system is "General Schedule," "Wage Grade," "Executive (Senior Executive Service)," or "Other." As only 0.4 percent of the respondents indicated "Executive," we combine "Other" and "Executive", and use "General Schedule" as the reference category.

Supervisor. This variable indicates whether or not a respondent has formal supervisory responsibilities. Those with supervisory roles tend to be more likely to blow the whistle (Near & Miceli, 1996).

Sub-agency fixed effects. It is plausible that the employees in different sub-agencies and agencies have different propensities to report wrongdoing and these tendencies are correlated with our independent variables. We therefore include fixed effects at the sub-agency level. Using the 61 sub-agencies for our fixed effects allows us to better control for each respondent's environment.

It is important to note that the survey did not ask respondents to report their gender, so we are not able to account for it in the analysis. While some studies of gender in whistleblowing offer mixed results (Near and Miceli, 1996), a meta-analysis finds that women are slightly more likely to blow the whistle (Mesmer-Magnus & Viswesvaran, 2005). Although this could lead to omitted variable bias, this is likely not a concern for two reasons: the results are not sensitive to a variety of model specifications, and the inclusion of sub-agency fixed effects means that variation in gender across agencies would not influence the results.

ANALYSIS

To analyze the effect of wrongdoer location and group cohesion on behavioral whistleblowing, we use logistic regression, in which the outcome takes a value of 1 if the respondent reported the wrongdoing. Due to established issues with interpreting interaction effects in nonlinear models with categorical dependent variables (Ai & Norton, 2003), we also conducted the same analyses using linear probability models and the results are the same. Because the dependent variable for the hypothetical analysis is continuous, we use generalized linear models. In all models, standard errors are clustered at the sub-agency level.

RESULTS FOR STUDY 1

Table 1 displays the descriptive statistics for both the behavioral (Panel A) and hypothetical (Panel B) whistleblowing samples. In both samples, the typical respondent was white, college educated, and salaried and had been a federal civil service employee for approximately 15 years. About a third of the respondents were supervisors. Fifty-one percent of the observed wrongdoing involved a member of the workgroup. Of those with knowledge of wrongdoing, 54 percent reported it. This is in line with past findings that about half of those who observe misconduct report it (Miceli et al., 1999; Miethe, 1999).

[Table 1 here]

Table 2 presents the whistleblowing analysis for the sample of employees who were aware of wrongdoing within their agency (Models 1-3) and the employees who responded to the hypothetical scenarios (Models 4-9). Models 1-3 show the logistic regression estimates for *reported wrongdoing* in the behavioral sample and include the interaction for *wrongdoer location* and *workgroup cohesion.* Models 4-9 present generalized linear estimates for the hypothetical sample predicting *reported wrongdoing* for inside the workgroup (Models 4-6) and outside of it (Models 7-9). Because respondents answered a separate question for each location in the hypothetical sample, we cannot include *wrongdoer location* or the interaction in Models 4-9; instead, we focus on *workgroup cohesion* and anticipate its effect to be negative when the wrongdoer is inside the group and positive when the wrongdoer is outside the group.

[Table 2 here]

Model 1 includes only our key independent variables—*wrongdoer location* and *workgroup cohesion*. In this base model specification, the interaction is negative and statistically significant ($\beta = -0.310, p < 0.001$), indicating that *workgroup cohesion* has opposite effects on *behavioral whistleblowing* depending on whether the wrongdoer is inside or outside the potential whistleblower's workgroup. As we argue, the effect for greater *workgroup cohesion* is negative for reporting internal misconduct but positive for misconduct observed outside the workgroup. Model 2 adds sub-agency fixed effects, while Model 3 adds employee demographic variables. Across these three models, the interaction term remains largely unchanged in magnitude and statistical significance, providing support for our contention that whistleblowing is contingent upon the locus of the wrongdoer and the cohesion of the group.

Figure 1 graphically shows the results from Model 1 of Table 2 and the predicted probabilities of *reported wrongdoing* for the various levels of *workgroup cohesion*. As our theory predicts, as *workgroup cohesion* shifts from its lowest to its highest value, the probability of reporting wrongdoers within the workgroup decreases from 61 percent to 48 percent while the probability of reporting wrongdoers outside the workgroup increases from 42 percent to 59 percent. Differences in *reported wrongdoing* inside versus outside the group are significant at all values of *workgroup cohesion* except where the two lines cross. Figure 2 also displays the number of observations at each value, represented by the size of the circles, and demonstrates that our results are not driven by low sample sizes for certain combinations of the interaction term. These results for the behavioral sample support the two hypotheses: the likelihood of reporting wrongdoers inside the workgroup decreases with greater workgroup cohesion, while the likelihood of reporting wrongdoers outside the workgroup increases with greater workgroup cohesion.

[Figure 1 here]

Table 2 Models 4 through 9 present generalized linear estimates for reporting a hypothetical wrongdoing. Models 4 to 6 evaluate *reported wrongdoing* committed by a member of the respondent's workgroup. In Models 4 to 6, the coefficient of *workgroup cohesion* is significant and negative (e.g., in

Model 4: $\beta = -0.017,\ p < .001$), showing that respondents are less willing to report fellow workgroup members as *workgroup cohesion* increases. Models 5 to 9 demonstrate the opposite effect for *workgroup cohesion* on *reported wrongdoing* when the wrongdoing is perpetrated by someone outside of the workgroup. The greater the *workgroup cohesion*, the more willing respondents are to report hypothetical wrongdoing when the wrongdoer is imagined as being outside of their workgroup (see Model 7: $\beta = 0.020,$ $p < .001$). Together, Models 4 to 9 show the divergent effects of *workgroup cohesion* on *reported wrongdoing* when the wrongdoer is inside versus outside the employee's workgroup, as predicted by our theory. Despite using different samples from the MPS and different methods, both the behavioral and hypothetical results support the hypotheses.

BEHAVIORAL WHISTLEBLOWING (MPS SUB-SAMPLE) ADDITIONAL ANALYSES

Wrongdoing Characteristics

It is possible that the results from the behavioral sample might be driven by employees observing different types of wrongdoing inside versus outside the workgroup or observing different types of wrongdoing at different levels of group cohesion. To account for these potential confounds, we control for characteristics of the wrongdoing: the damage incurred, its frequency, and the type of wrongdoing.

Regarding the damage of the wrongdoing, the survey asks, "If a dollar value can be placed on this activity, what was the amount involved?" Responses include: less than $100, $100 to $999, $1,000 to $4,999, $5,000 to $100,000, and more than $100,000. 39 percent of respondents did not know the cost of the wrongdoing, which we capture with an additional indicator. For those who estimated the damage, the median answer was that it cost the organization between $5,000 and $100,000. For frequency of the wrongdoing, respondents were given the options "once or rarely," "occasionally," and "frequently." The frequency most often reported was "occasionally." We also include an additional variable coded 1 when a respondent was uncertain about the frequency. The type of wrongdoing is indicated by a survey question asking respondents to categorize the wrongdoing among 10 options. These options include "Stealing Federal funds;" "Stealing Federal property;" "Accepting bribes or kickbacks;" "Waste caused by ineligible people receiving funds, goods, or services;" "Waste caused by unnecessary or deficient goods or services;" "Use of

an official position for personal benefit;" "Waste caused by a badly managed program;" "Unfair advantage in the selection of a contractor, consultant, or vendor;" "Tolerating a situation or practice which poses a substantial and specific danger to public health or safety;" and "Other serious violation of law or regulation." To account for this variety, we include dummy variables for each option.

We present the results of the additional analyses in Table 3. Model 1 indicates that greater *wrongdoing damage* and higher *wrongdoing frequency* increase the likelihood of whistleblowing, in line with previous research findings (Miceli, Near, & Dworkin, 2008; Near & Miceli, 1996). Model 1 also includes *multiple location* as an indicator of multiple wrongdoers collectively inside and outside of the workgroup, as such coordinated wrongdoing may be fundamentally different from individual wrongdoers affiliated with a single workgroup. Model 2 adds controls for the type of wrongdoing. Across both models, the inclusion of additional variables does not alter our main findings. Even with the inclusion of all the aforementioned controls, the interaction term of *workgroup cohesion* and *wrongdoer location* remains largely unchanged.

[Table 3 here]

Workgroup Response to Whistleblowing

Because wrongdoing was observed prior to the survey, while the question about workgroup cohesion referred to when the survey was taken, it is possible that reverse causality might affect the results. In other words, it is plausible that employees who reported someone within their workgroup were subsequently more likely to experience a reduction in workgroup cohesion. If this is the case, reporting may lead to lower workgroup cohesion, rather than—as we have proposed—vice versa.

We therefore examined the survey's six questions about the reactions of whistleblowers' colleagues after the reporting occurred; namely, how true was it that "My coworkers were unhappy with me for having reported the problem," "My supervisor was unhappy with me for having reported the problem," "I was given credit by my management for having reported the problem," "Someone above my supervisor was unhappy with me for having reported the problem," "I was threatened with reprisal for having reported the

problem," and "I received an actual reprisal for having reported the problem." Affirmative answers to any of these six questions could have impacted workgroup cohesion *after* the respondent blew the whistle. We therefore reevaluate the likelihood of *behavioral whistleblowing* by omitting observations in which the respondent answered affirmatively to at least one of these questions. We omit these observations, rather than controlling for them, because reprisals were conditional upon whistleblowing, our dependent variable. In other words, employees could only experience a reprisal to whistleblowing if they had already blown the whistle. Model 3 in Table 3 shows our results, which remain consistent with previous models. While this cannot completely address issues of reverse causality, it does help allay concerns that social reprisal may be driving the reported effects.

Whistleblower Anonymity

Model 4 in Table 3 investigates the effects of anonymity on whistleblowing. Survey respondents were asked: "If you DID report this activity, were you identified as the source of the report?" Those who answered "no" should not have found their relationships with other workgroup members affected by their (anonymous) actions. Similar to the analysis of reprisals, the outcome of whistleblowing is an antecedent of anonymity, and the latter is therefore not appropriate to include in the model. Thus, Model 4 restricts the sample to those who remained anonymous and, again, the results remain substantively unchanged. This further helps to allay concerns about reverse causality.

HYPOTHETICAL WHISTLEBLOWING (MPS FULL SAMPLE) ADDITIONAL ANALYSES

In the case of the hypothetical sample, it is possible that respondents to the hypothetical whistleblowing questions were influenced by their past experiences with whistleblowing. For example, those who had previously observed wrongdoing may have answered the hypothetical whistleblowing questions differently than those who had not previously observed wrongdoing. Similarly, those who previously reported wrongdoing may have been shaped by that experience and the response that it engendered. Hence, we control for those who previously saw or reported wrongdoing for the hypothetical sample in Table 4, along with whether or not they blew the whistle. Models 1 and 3 include indicators of

whether a respondent previously knew of wrongdoing inside their workgroup or outside their workgroup, while Models 2 and 4 additionally control for whether the respondent reported the behavior.

[Table 4 here]

After controlling for past experiences with observing wrongdoing and whistleblowing, the results hold: as cohesion increases, respondents are less likely to report wrongdoers within their workgroup and more likely to report wrongdoers outside of it. Interestingly, past experience with reporting wrongdoing does affect how respondents answered the hypothetical questions; having previously reported wrongdoers inside the workgroup is associated with a greater intention to report wrongdoers inside the workgroup, while having previously reported wrongdoers outside the workgroup is associated with a greater intention to report wrongdoers outside the workgroup.

MULTILEVEL MODELS WITH SUB-AGENCY CHARACTERISTICS

Although including fixed effects at the sub-agency level mitigates concerns about subagency-level observed and unobserved variables that might confound our results, such controls can mask sub-agency characteristics that may affect whistleblowing decisions. For example, some sub-agencies may have a greater prevalence of wrongdoing, which may normalize the behavior and depress reporting. To explore such possibilities and to provide a further robustness check of our results, we conduct multilevel models of behavioral and hypothetical whistleblowing. The description of this analysis and the results can be seen in Appendix A.

STUDY 2: WHISTLEBLOWING VIGNETTE EXPERIMENT

To further test our theory, we conducted a vignette experiment that evaluates whistleblowing intentions by directly manipulating group cohesion and the locus of the wrongdoer on a sample not limited to government employees. We conducted this experiment for two primary reasons. First, although the behavioral and hypothetical analysis in Study 1 each helps to account for the other's shortcomings, they both evaluate responses from the same survey of Federal employees. Conducting an experiment on a different population can help to alleviate concerns that the theory only applies to government workers. Second, the analyses in Study 1 are subject to the criticism that we only use a single item to measure

workgroup cohesion. To account for these issues, we designed a vignette experiment to provide an additional test of our hypotheses and to provide more causal evidence in support of our theory.

Experimental Design

To test our theory, we designed a two-by-two between-subject factorial experiment which varied workgroup cohesion (high and low) and the locus of the wrongdoer (inside or outside the respondent's team). Subjects were randomly assigned to one of four conditions where they read a vignette that first described the dynamics of their work team, followed by an incident of wrongdoing committed by either a fellow team member or someone outside of the team. The vignettes used for the study can be seen in Appendix B. The study was pre-registered on AsPredicted.org and is accessible at https://aspredicted.org/42Z_KP7.

Participants were recruited through an advertisement to take part in a "Workplace Study" posted on Amazon Mechanical Turk (MTurk), where the participant would "read a workplace scenario and respond to questions about it." The study was limited to fully employed individuals who were 18 years or older in order to ensure that participants had experience in organizational settings where wrongdoing and whistleblowing might occur. We also took precautions to only permit individuals located in the United States from unique IP addresses to take part in the survey, as provided by the Cloudresearch (formerly TurkPrime) platform (Litman, Robinson, & Abberbock, 2017).

320 participants were recruited to take part in the study. We selected this sample size because 300 participants is recommended to power our type of survey design at the 90 percent level (Brysbaert, 2019), which we inflated to 320 to account for any individuals who failed the key manipulation check of correctly identifying the locus of the wrongdoer. Running the study resulted in 323 complete responses, as three additional individuals took the survey but failed to enter the appropriate completion code at the end (i.e., 320 individuals fully completed the task on MTurk, while 323 completed the survey). After excluding 29 who incorrectly identified the locus of the wrongdoer, our final sample is 294.

Within this sample, 50.77 percent of respondents are female, with an average age of 39.94 (SD = 10.56). 79.26 percent of respondents identify as white. Participants encompass a variety of industries, with

the most common being “Professional, scientific or technical services” (14.55 percent), “Health care or social assistance” (13.93 percent), “Educational services” (12.38 percent), and “Finance or insurance” (10.84 percent). At least two participants belonged to each of the 20 industries provided.

Procedure

After reading the vignette, participants indicated on a 7-point scale ranging from “Extremely unlikely” to “Extremely likely” their intention to report the behavior to the appropriate authorities. Next, participants indicated the extent to which they viewed the workgroup described in the vignette as cohesive. We use the 4-item Cohesion Scale developed by Postmes et. al. (2008) and validated by Lakens and Stel (2011) to assess the extent to which the manipulation successfully varied cohesion. The scale involves rating the following items on a five-point scale: “I feel the people in this group are a unit,” “I think the people in this group can act in unison,” “I experience a feeling of togetherness between the individuals in this group,” and “I feel the people in this group are as one.” Next, participants answered the key manipulation check question: was the perpetrator in the vignette “a member of your team or not a member of your team?” Finally, respondents answered a series of demographic questions regarding their gender, age, race and ethnicity, education, salary, and industry.

RESULTS FOR STUDY 2

We first evaluate the group cohesion manipulation using the 4-item Cohesion Scale. The left panel of Figure 2 shows the means of each of the four items in the scale for those in the low cohesion condition compared with those in the high cohesion condition. All four of the items are greater than four for the high cohesion conditions, while all four of the items are less than two for the low cohesion conditions. The right panel shows the combined scale ($\alpha = 0.97$) with confidence intervals. The stark difference between the two groups ($p < 0.001$) indicates that the vignettes indeed capture differences in cohesion.

[Figure 2 here]

The key prediction is the presence of an interaction between group cohesion and locus of the wrongdoer. The results of a two-way analysis of variance (ANOVA) indicate that the interaction is highly significant ($F(1,293) = 17.18$, $p < .001$), while the main effects of cohesion ($F(1,293) = 0.054$, $p = .46$) and

wrongdoer location ($F(1,293) = 0.93$, $p = .34$) are not. Furthermore, the interaction effect is in the expected direction; participants were more likely to report wrongdoers inside the team when their group was not cohesive, while participants were more likely to report wrongdoers outside of the team when their group was cohesive. These results are displayed graphically in Figure 3. Although the error bars slightly overlap for wrongdoing outside of the group, error bars can visually overlap despite the means being significantly different (Bella et. al., 2005; Krzywinski & Altman, 2013); that is the case in Figure 3, where the difference in workgroup cohesion is indeed significant both inside of the group ($p < .001$) and outside of the group ($p = .025$).

[Figure 3 here]

Together, the results of the experiment support the two hypotheses and provide an out-of-sample confirmation of the behavioral and hypothetical findings described earlier. The theory applies, not just to Federal employees, but to workers more generally. The results additionally go beyond the survey data by providing causal evidence that the manipulations of the locus of the wrongdoer and group cohesion directly affect whistleblowing intentions.

DISCUSSION AND CONCLUSION

In this paper, we demonstrated the role of the group in systematically influencing whistleblowing decisions, as group membership makes salient the distinction between wrongdoers inside versus outside of a potential whistleblower's group. Using comprehensive data on behavioral and hypothetical whistleblowing along with a vignette experiment, we show that, while group cohesion decreases the likelihood of blowing the whistle when wrongdoers are inside of the group, cohesion increases the likelihood of whistleblowing when wrongdoers are outside of the group. We attribute the former effect to the strong loyalties that develop inside of cohesive groups, leading group members to protect and shield each other from scrutiny and punishment. We attribute the latter effect to individuals feeling more comfortable coming forward knowing that other group members are likely to support and shield them from retaliation. Contrary to prevailing views of whistleblowing, individuals are strongly influenced by group dynamics within the organization, perhaps more so than by concerns about the organization itself. Furthermore, this work extends upon and

develops recent work in the misconduct literature on the importance of intra-organizational boundaries (Mohliver, 2019; Palmer & Feldman, 2018; Palmer & Yenkey, 2015; Stroube, 2021).

This work presents a challenge to organizations and managers seeking to stop and prevent wrongdoing. While group cohesion may lead to whistleblowing in one part of the organization (i.e., outside of the group), it simultaneously leads employees to shield wrongdoers in another part of the organization (i.e., inside of the group). Managerial blind spots may therefore be difficult to avoid, which can potentially help to explain a growing recognition that wrongdoing is a normal part of organizational behavior (Palmer et al., 2016). This issue is especially salient considering that organizations are becoming increasingly decentralized and organized around team-based structures (Wombacher & Felfe, 2017), which may exacerbate these dynamics. The results suggest that interventions around organizational or individual factors are insufficient and call for a new focus on group dynamics in promoting whistleblowing. For example, the results suggest that organizations should be cognizant of group cleavages and cohesive groups should not be isolated from the broader organization. By increasing contact between cohesive groups, the chances of someone observing misconduct and being willing to report it may increase dramatically.

Despite our novel approach, the results are not necessarily inconsistent with prosocial behavior. Rather than contradicting prosocial accounts, they challenge the assumption that prosocial behavior in the domain of whistleblowing must be directed toward the organization as a whole. Prosocial behavior can be oriented towards any individual or group outside of the actor (Brief & Motowidlo, 1986), and *not* blowing the whistle on members of cohesive groups could alternatively be viewed as a prosocial act toward the group. Furthermore, group cohesion and commitment can "spill over" to the organization (Mueller & Lawler, 1999; Thye & Yoon, 2015), which may lead to organizational citizenship behaviors (Vandenberghe et al., 2004). In this way, group dynamics may directly impact individuals' propensity to help or improve the organization, which suggests that group cohesion may serve as an unrecognized antecedent of prosocial whistleblowing. If true, such spillovers may represent an additional reason why members of cohesive groups are willing to report wrongdoers outside of their group.

Although we did not predict main effects for the locus of the wrongdoer in our theory, they nevertheless merit a brief discussion. While there are no main effects in Study 2, that is not the case in Study 1. In Study 1's models without the interaction term on the behavioral sample (available upon request), *wrongdoer location (inside)* has a positive and significant effect, suggesting that individuals are more likely to report wrongdoers within their group. One possible explanation for this discrepancy is the methodological differences in field settings versus experimental studies. Alternatively, perhaps in certain contexts—such as the federal government—the greater likelihood of members in non-cohesive groups to report wrongdoing by other group members may drive an overall positive effect of internal reporting. Further exploration across a variety of contexts would help to establish this result and clarify the contextual factors that may cause it.

Despite corroborating our results in multiple ways, our analyses have limitations. For one, although it is known that individuals' morality and perceptions of wrongdoing can be influenced by social dynamics and group membership (Moore & Gino, 2013), we are unable to assess whether individuals have different interpretations of what behaviors constitute wrongdoing in our sample. As whistleblowing is only possible after behavior has been interpreted as wrongdoing (Miceli et al., 2008), we cannot disentangle perceptions of wrongdoing in our results. We expect, however, that individuals are least likely to interpret behavior as wrongdoing—even if it contravenes company policy—when it is perpetrated by other members of a cohesive group. These are the circumstances under which individuals tend to be least willing to bring harm to one another and most tolerant of misbehavior (Gino, Ayal, & Ariely, 2009). If this is the case, we may in fact be underestimating the true number of behaviors in violation of company policies that go unreported in cohesive groups. Future research could help to establish whether perceptions of wrongdoing indeed reinforce the theory developed in this paper.

In addition, given that whistleblowing by definition entails reporting wrongdoing, in our studies we cannot observe informal policing within workgroups. For example, members of cohesive groups may informally enforce and sanction other group members—perhaps due to greater feelings of psychological safety (Edmondson, 1999)—which may lead to the same effective outcome (i.e., controlling or stopping the

wrongdoing) without resorting to more formal channels. Accounting for the different forms of response to wrongdoing and how they might vary both within and across group boundaries suggests a fruitful area for whistleblowing research.

Our analysis also relies on the assumption that workgroups serve as focal groups within the organizations we evaluate and are therefore relevant for understanding group dynamics. Although workgroups tend to be highly salient within organizations (Riketta & Dick, 2005), individuals often belong to multiple groups. A more comprehensive theory would account for overlapping group memberships, the nestedness of groups (e.g., workgroup versus departmental affiliations), and the varying commitments that people maintain to different entities. Furthermore, workgroups constitute a particular type of group whose composition is typically mandated by senior members of the organization. Although we expect our results to hold for voluntary groups, future research will be necessary to explore such dynamics.

Finally, although we control for the type of wrongdoing in Study 1, we are not able to distinguish which acts of wrongdoing involve victims, such as harassment or discrimination, and which only harm the organization. Exploring such dimensions would help to enrich and further develop the theory, as the presence of a victim—and particularly whether that victim is affiliated with the potential whistleblower's group—may affect patterns of whistleblowing. Similarly, we are also not able to identify acts of wrongdoing that can be considered pro-organizational (i.e., carried out on behalf of the organization) (Umphress & Bingham, 2011). Such a distinction could also add richness to the theory and provides another promising direction for future research.

Despite these limitations, the results we establish are quite robust. Our data source for the behavioral and hypothetical analysis constitutes one of the largest and most comprehensive surveys on whistleblowing to date and is, to our knowledge, the only survey that allows for the investigation of both behavioral whistleblowing and whistleblowing intentions simultaneously. The vignette experiment provides more direct causal evidence along with using a different sample that provides external validity. In addition

to our hope that these findings spur additional research into the role of groups in whistleblowing, we also hope that this work leads to an increase in the use of multiple methodologies in whistleblowing research.

REFERENCES

Ai, C., & Norton, E. C. 2003. Interaction terms in logit and probit models. ***Economics Letters***, 80(1): 123–129.

Akerstrom, M. 1991. ***Betrayal and betrayers: The sociology of treachery***. Routledge.

Åkerström, M. 1988. The social construction of snitches. ***Deviant Behavior***, 9(2): 155–167.

Anvari, F., Wenzel, M., Woodyatt, L., & Haslam, S. A. 2019. The social psychology of whistleblowing: An integrated model. ***Organizational Psychology Review***, 9(1): 41–67.

Ashforth, B. E., & Anand, V. 2003. The normalization of corruption in organizations. ***Research in Organizational Behavior***, 25: 1–52.

Ashforth, B. E., & Johnson, S. A. 2014. Which hat to wear? The relative salience of multiple identities in organizational contexts. In M. A. Hogg & D. J. Terry (Eds.), ***Social identity processes in organizational contexts***: 45–62. Psychology Press.

Association of Certified Fraud Examiners. 2018. Global study on occupational fraud and abuse. ***Report to the Nations***, vol. 10.

Aven, B. 2015. The Paradox of Corrupt Networks : An Analysis of Organizational Crime at Enron. ***Organization Science***, 26(4): 980–996.

Barrick, M. R., Neubert, M. J., Mount, M. K., & Stewart, G. L. 1998. Relating member ability and personality to work-team processes and team effectiveness. ***Journal of Applied Psychology***, 83(3): 377–391.

Bella, S., Fidler, F., Williams, J., & Cumming, G. 2005. Researchers misunderstand confidence intervals and standard error bars. ***Psychological Methods***, 10(4). https://doi.org/10.1037/1082-989X.10.4.389.

Bjørkelo, B., & Bye, H. H. 2014. On the appropriateness of research design: Intended and actual whistleblowing. In A. J. Brown, D. Lewis, R. Moberly, & W. Vandekerckhove (Eds.), ***International Handbook on Whistleblowing Research***. Edward Elgar Publishing. https://doi.org/10.4337/9781781006795.00013.

Brambilla, M., Sacchi, S., Pagliaro, S., & Ellemers, N. 2013. Morality and intergroup relations: Threats to safety and group image predict the desire to interact with outgroup and ingroup members. ***Journal of Experimental Social Psychology***, 49(5): 811–821.

Brewer, M. B. 1999. The psychology of prejudice: Ingroup love or outgroup hate? ***Journal of Social Issues***, 55(3): 429–444.

Brief, A. P., & Motowidlo, S. J. 1986. Prosocial organizational behaviors. ***The Academy of Management Review***, 11(4): 710–725.

Brysbaert, M. 2019. How many participants do we have to include in properly powered experiments? A tutorial of power analysis with reference tables. ***Journal of Cognition***, 2(1). https://doi.org/10.5334/joc.72.

Champoux, J. E. 2011. Organizational Behavior : Integrating Individuals, Groups and Organizations. ***Routledge***.

Charness, G., Masclet, D., & Villeval, M. C. 2014. The dark side of competition for status. ***Management Science***, 60(1): 38–55.

Coleman, J. S. 1990. ***Foundations of Social Theory.*** Harvard University Press. https://doi.org/10.2307/2579680.

Cook, K. S., Hardin, R., & Levi, M. 2005. ***Cooperation without Trust?*** Russell Sage Foundation.

Cortina, L. M., & Magley, V. J. 2003. Raising Voice, Risking Retaliation: Events Following Interpersonal Mistreatment in the Workplace. ***Journal of Occupational Health Psychology***, 8(4): 247–265.

Culiberg, B., & Mihelič, K. K. 2017. The Evolution of Whistleblowing Studies: A Critical Review and Research Agenda. ***Journal of Business Ethics***, 146(4): 787–803.

Cummings, J. N., & Cross, R. 2003. Structural properties of work groups and their consequences for performance. ***Social Networks***, 25(3): 197–210.

Curphy, G. J., Gibson, F. W., Macomber, G., Calhoun, C. J., Wilbanks, L. A., et al. 1998. Situational

factors affecting peer reporting intentions at the U.S. Air Force Academy: A scenario-based investigation. ***Military Psychology***, 10(1): 27–43.
de Jong, J. P., Curşeu, P. L., & Leenders, R. T. A. J. 2014. When do bad apples not spoil the barrel? Negative relationships in teams, team performance, and buffering mechanisms. ***Journal of Applied Psychology***, 99(3): 514–522.
Donkin, M., Smith, R., & Brown, A. J. 2008. How do officials report? Internal and external whistleblowing. ***Whistleblowing in the Australian Public Sector: Enhancing the theory and practice of internal witness management in public sector organisations***. https://doi.org/10.22459/waps.09/2008.04.
Dozier, J. B., & Miceli, M. P. 1985. Potential Predictors of Whistle-Blowing. A Prosocial Behavior Perspective. ***Academy of Management Review***, 10(4): 823–836.
Dungan, J. A., Young, L., & Waytz, A. 2019. The power of moral concerns in predicting whistleblowing decisions. ***Journal of Experimental Social Psychology***, 85.
Dworkin, T. M., & Baucus, M. S. 1998. Internal vs. external whistleblowers: A comparison of whistleblowering processes. ***Journal of Business Ethics***, 17(12): 1281–1298.
Dyck, A., Morse, A., & Zingales, L. 2010. Who blows the whistle on corporate fraud? ***The Journal of Finance***, 65(6): 2213–2253.
Dyck, I. J. A., Morse, A., & Zingales, L. 2013. How Pervasive is Corporate Fraud? ***SSRN Electronic Journal***. https://doi.org/10.2139/ssrn.2222608.
Edmondson, A. 1999. Psychological safety and learning behavior in work teams. ***Administrative Science Quarterly***. https://doi.org/10.2307/2666999.
Edmondson, A. C. 2004. Psychological safety, trust, and learning in organizations: A Group-level lens. In R. M. Kramer & K. S. Cook (Eds.), ***Trust and Distrust in Organizations : Dilemmas and Approaches***. Russell Sage Foundation.
Ellickson, R. C. 1991. ***Order Without Law***, vol. 68. Harvard University Press. https://doi.org/10.2307/1600401.
Executive Order Number 11222. 1965. : 36.
Feld, S. L. 1981. The Focused Organization of Social Ties. ***American Journal of Sociology***, 86(5): 1015–1035.
Feldman, D. C. 1981. The Multiple Socialization of Organization Members. ***The Academy of Management Review***, 6(2): 309.
Fischer, R., & L. Milfont, T. 2010. Standardization in psychological research. ***International Journal of Psychological Research***, 3(1): 88–96.
Gaertner, L., & Schopler, J. 1998. Perceived ingroup entitativity and intergroup bias: An interconnection of self and others. ***European Journal of Social Psychology***, 28(6): 963–980.
Gino, F., Ayal, S., & Ariely, D. 2009. Contagion and differentiation in unethical behavior: The effect of one bad apple on the barrel. ***Psychological Science***, 20(3). https://doi.org/10.1111/j.1467-9280.2009.02306.x.
Greve, H. R., Palmer, D. A., & Pozner, J. 2010. Organizations Gone Wild: The Causes, Processes, and Consequences of Organizational Misconduct. ***The Academy of Management Annals***, 4(1): 53–107.
Gundlach, M. J., Douglas, S. C., & Martinko, M. J. 2003. The decision to blow the whistle: A social information processing framework. ***Academy of Management Review***, 28(1): 107–123.
Hess, M. F., Treviño, L. K., Chen, A., & Cross, R. 2019. Beyond silence or compliance: The complexities of reporting a friend for misconduct. ***Business Ethics***, 28(4): 546–562.
Huff, T., Orr, S., Appelbaum, N., Lockeman, K., Hogan, C., et al. 2017. ***The Dynamics of Power and Psychological Safety on Team Cohesion During Interprofessional Simulation-Based Education***.
Jeon, S. H. 2017. Where to report wrongdoings? Exploring the determinants of internal versus external whistleblowing. ***International Review of Public Administration***. https://doi.org/10.1080/12294659.2017.1315235.
King, G. 1997, October 1. The effects of interpersonal closeness and issue seriousness on blowing the whistle. ***Journal of Business Communication***.

Kong, F., Liu, P., & Weng, J. 2020. How and when group cohesiosn influences employee voice: A conservation of resources perspective. ***Journal of Managerial Psychology***, 35(3): 142–154.
Krzywinski, M., & Altman, N. 2013. Error bars: the meaning of error bars is often misinterpreted, as is the statistical significance of their overlap. ***Nature Methods***.
Lakens, D., & Stel, M. 2011. If they move in sync, they must feel in sync: Movement synchrony leads to attributions of rapport and entitativity. ***Social Cognition***, 29(1): 1–14.
Lawler, E. J. 1992. Affective Attachments to Nested Groups: A Choice-Process Theory. ***American Sociological Review***, 57(3): 327–339.
Lawler, E. J., Thye, S. R., & Yoon, J. 2000. Emotion and group cohesion in productive exchange. ***American Journal of Sociology***, 10(3): 616–657.
Lawler, E. J., & Yoon, J. 1996. Commitment in exchange relations: Test of a theory of relational cohesion. ***American Sociological Review***, 61(1): 89–108.
Lee, J. Y., Heilmann, S. G., & Near, J. P. 2004. Blowing the whistle on sexual harassment: Test of a model of predictors and outcomes. ***Human Relations***. https://doi.org/10.1177/0018726704043273.
LePine, J. A., & Van Dyne, L. 1998. Predicting voice behavior in work groups. ***Journal of Applied Psychology***, 83(6): 853–868.
Levine, J. M., & Moreland, R. L. 2006. Socialization in organizations and work groups. In M. E. Turner (Ed.), ***Small Groups: Key Readings***: 469–498. Mahwah, NJ: Lawrence Eribaum Associates Publishers.
LeVine, R. A., & Campbell, D. T. 1972. ***Ethnocentrism, Theories of Conflict, Ethnic Attitudes, and Group Behavior***. Wiley.
Lewis, D., Brown, A. J., & Moberly, R. 2014. Whistleblowing, its importance and the state of the research. In Alexander Jonathan Brown, D. Lewis, R. Moberly, & W. Vandekerckhove (Eds.), ***International Handbook on Whistleblowing Research***. Edward Elgar Publishing. https://doi.org/10.4337/9781781006795.00007.
Liang, J., Farh, C. I. C., & Farh, J. L. 2012. Psychological antecedents of promotive and prohibitive Voice: A two-wave examination. ***Academy of Management Journal***, 55(1): 71–92.
Liang, J., & Tang, J. 2010. A multi-level study on employee voice: Evidence from a chain of retail stores. ***Frontiers of Business Research in China***, 4(4): 541–561.
Litman, L., Robinson, J., & Abberbock, T. 2017. TurkPrime.com: A versatile crowdsourcing data acquisition platform for the behavioral sciences. ***Behavior Research Methods***, 49(2): 433–442.
Mayer, D. M., Nurmohamed, S., Treviño, L. K., Shapiro, D. L., & Schminke, M. 2013. Encouraging employees to report unethical conduct internally: It takes a village. ***Organizational Behavior and Human Decision Processes***, 121(1): 89–103.
McPherson, M., & Smith-Lovin, L. 2002. Cohesion and Membership Duration: Linking Groups, Relations and Individuals an Ecology of Affiliation. ***Advances in Group Processes***, 19: 1–36.
Mesmer-Magnus, J. R., & Viswesvaran, C. 2005. Whistleblowing in organizations: An examination of correlates of whistleblowing intentions, actions, and retaliation. ***Journal of Business Ethics***, 62(3): 277–297.
Miceli, M. P., & Near, J. P. 1992. ***Blowing the whistle: The organizational and legal implications for companies and employees***. Lexington Books.
Miceli, M. P., & Near, J. P. 1997. Whistle-blowing as antisocial behavior. In R. A. Giacalone & J. Greenberg (Eds.), ***Antisocial Behavior in Organizations***. SAGE Publications.
Miceli, M. P., Near, J. P., & Dworkin, T. M. 2008. ***Whistle-blowing in Organizations***. Psychology Press. https://doi.org/10.4324/9780203809495.
Miceli, M. P., Rehg, M., Near, J. P., & Ryan, K. C. 1999. Can laws protect whistle-blowers? ***Work and Occupations***, 26(1): 129–151.
Miethe, T. D. 1999. ***Whistleblowing at work: Tough choices in exposing fraud, waste, and abuse on the job***. Boulder: Westview Press.
Miethe, T. D., & Rothschild, J. 1994. Whistleblowing and the control of organizational misconduct. ***Sociological Inquiry***, 64(3): 322–347.

Mohliver, A. C. 2019. How misconduct spreads: Auditors' role in the diffusion of stock-option backdating. ***Administrative Science Quarterly***, 64(2): 310–336.
Moore, C., & Gino, F. 2013. Ethically adrift: How others pull our moral compass from true North, and how we can fix it. ***Research in Organizational Behavior***. https://doi.org/10.1016/j.riob.2013.08.001.
Morrison, E. W., & Milliken, F. J. 2000. Organizational Silence : A Barrier to Change and Development in a Pluralistic World. ***Academy of Management Review***, 25(4): 706–725.
Morrison, R. 2008. Negative relationships in the workplace: Associations with organisational commitment, cohesion, job satisfaction and intention to turnover. ***Journal of Management and Organization***, 14(4): 330.
Mueller, C. W., & Lawler, E. J. 1999. Commitment to nested organizational units: Some basic principles and preliminary findings. ***Social Psychology Quarterly***, 62(4): 325–346.
Near, J. P., & Miceli, M. P. 1985. Organizational dissidence: The case of whistle-blowing. ***The Journal of Business Ethics***, 4(1): 153–172.
Near, J. P., & Miceli, M. P. 1996. Whistle-blowing: Myth and reality. ***Journal of Management***, 22(3): 507–526.
Nyreröd, T., & Spagnolo, G. 2021. Myths and numbers on whistleblower rewards. ***Regulation and Governance***, 15(1): 82–97.
Palmer, D. A. 2012. ***Normal Organizational Wrongdoing: A Critical Analysis of Theories of Misconduct in and by Organizations***. https://doi.org/10.1093/acprof:oso/9780199573592.001.0001.
Palmer, D. A., Smith-Crowe, K., & Greenwood, R. (Eds.). 2016. ***Organizational Wrongdoing: Key Perspectives and New Directions***. Cambridge University Press.
Palmer, D., & Feldman, V. 2018. ***Comprehending the incomprehensible: Organization theory and child sexual abuse in organizations***. Cambridge University Press.
Palmer, D., & Yenkey, C. B. 2015. Drugs, sweat, and gears: An organizational analysis of performance-enhancing drug use in the 2010 tour de France. ***Social Forces***, 94(2): 891–922.
Pershing, J. L. 2003. To snitch or not to snitch? Applying the concept of neutralization techniques to the enforcement of occupational misconduct. ***Sociological Perspectives***, 46(2): 149–178.
Petersen, L. E., Dietz, J., & Frey, D. 2004. The effects of intragroup interaction and cohesion on intergoup bias. ***Group Processes and Intergroup Relations***, 7(2): 107–118.
Pierce, L., Snow, D. C., & McAfee, A. 2015. Cleaning house: The impact of information technology monitoring on employee theft and productivity. ***Management Science***, 61(10): 2299–2319.
Postmes, T., Brooke, D., & Jetten, J. 2008. ***Social identity formation and team performance***.
Postmes, T., Haslam, S. A., & Jans, L. 2013. A single-item measure of social identification: Reliability, validity, and utility. ***British Journal of Social Psychology***, 52(4): 597–617.
Rehg, M. T. 1998. ***An examination of the retaliation process against whistleblowers: A study of federal government employees***. Indiana University.
Rehg, M. T., Miceli, M. P., Near, J. P., & Van Scotter, J. R. 2008. Antecedents and outcomes of retaliation against whistleblowers: Gender differences and power relationships. ***Organization Science***. https://doi.org/10.1287/orsc.1070.0310.
Riketta, M., & Dick, R. Van. 2005. Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. ***Journal of Vocational Behavior***, 67(3): 490–510.
Roberts, P. 2014. Motivations for whistleblowing: Personal, private and public interests. ***International Handbook on Whistleblowing Research***: 207–229.
Rothschild, J., & Miethe, T. D. 1999. Whistle-Blower Disclosures and Management Retaliation. ***Work and Occupations***, 26(1): 107–128.
Seashore, S. E. 1954. ***Group cohesiveness in the industrial work group***. University of Michigan.
Sims, R. L., & Keenan, J. P. 1998. Predictors of external whistleblowing: Organizational and intrapersonal variables. ***Journal of Business Ethics***, 17(4): 411–421.
Skolnick, J. 2002. Corruption and the blue code of silence. ***Police Practice and Research***, 3(1): 7–19.

Smith, D. B., & Ellingson, J. E. 2002. Substance versus style: A new look at social desirability in motivating contexts. ***Journal of Applied Psychology***, 87(2): 211–219.
Stroube, B. K. 2021. Using allegations to understand selection bias in organizations: Misconduct in the Chicago Police Department. ***Organizational Behavior and Human Decision Processes***. https://doi.org/10.1016/j.obhdp.2020.03.003.
Tajfel, H. 1979. Individuals and groups in social psychology. ***British Journal of Social and Clinical Psychology***, 18(2): 183–190.
Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. 1971. Social categorization and intergroup behaviour. ***European Journal of Social Psychology***, 1(2): 149–178.
Taylor, E. Z., & Curtis, M. B. 2018. Mentoring: A Path to Prosocial Behavior. ***Journal of Business Ethics***, 152(4): 1133–1148.
Thye, S. R., & Yoon, J. 2015. Building organizational commitment in nested groups: Theory and new evidence from South Korea. ***Sociological Focus***, 48(3): 249–270.
Trevino, L. K., & Victor, B. 1992. Peer reporting of unethical behavior: A social context perspective. ***Academy of Management Journal***, 35(1): 38–64.
Umphress, E. E., & Bingham, J. B. 2011. When employees do bad things for good reasons: Examining unethical pro-organizational behaviors. ***Organization Science***, 22(3). https://doi.org/10.1287/orsc.1100.0559.
US Merit Systems Protection Board. 2012. ***Federal Employee Engagement: the Motivating Potential of Job Characteristics and Rewards***.
Van Knippenberg, D., & Van Schie, E. C. M. 2000. Foci and correlates of organizational identification. ***Journal of Occupational and Organizational Psychology***, 73(2): 137–147.
Vandenberghe, C., Bentein, K., & Stinglhamber, F. 2004. Affective commitment to the organization, supervisor, and work group: Antecedents and outcomes. ***Journal of Vocational Behavior***, 64(1): 47–71.
Wainberg, J., & Perreault, S. 2016. Whistleblowing in audit firms: Do explicit protections from retaliation activate implicit threats of reprisal? ***Behavioral Research in Accounting***, 28(1): 83–93.
Waytz, A., Dungan, J., & Young, L. 2013. The whistleblower's dilemma and the fairness-loyalty tradeoff. ***Journal of Experimental Social Psychology***, 49(6): 1027–1033.
Whitman, J. L., & Davis, R. C. 2007. ***Snitches Get Stitches: Youth, Gangs, and Witness Intimidation in Massachusetts***. Washington, DC: National Center for Victims of Crime.
Wombacher, J. C., & Felfe, J. 2017. Dual commitment in the organization: Effects of the interplay of team and organizational commitment on employee citizenship behavior, efficacy beliefs, and turnover intentions. ***Journal of Vocational Behavior***, 102: 1–14.

FIGURES

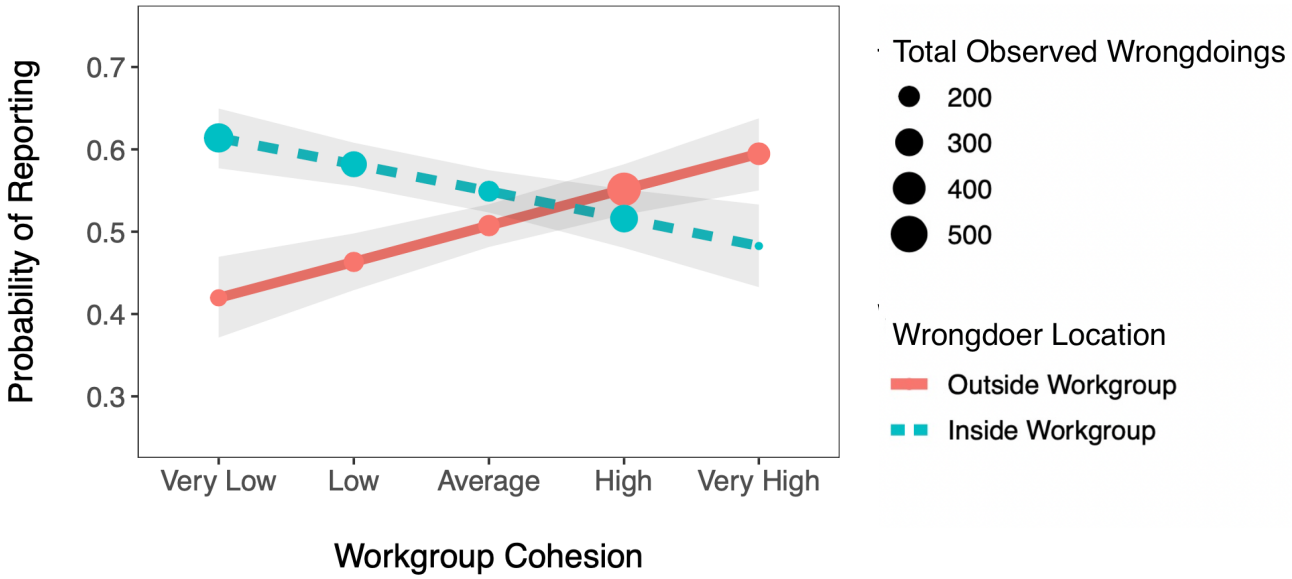

Figure 1. *Workgroup Cohesion* and *Wrongdoer Location* as Predictors of Reporting from Study 1. Based on estimates in Table 2, Model 1. Points are sized to the number of observations (N = 2,901).

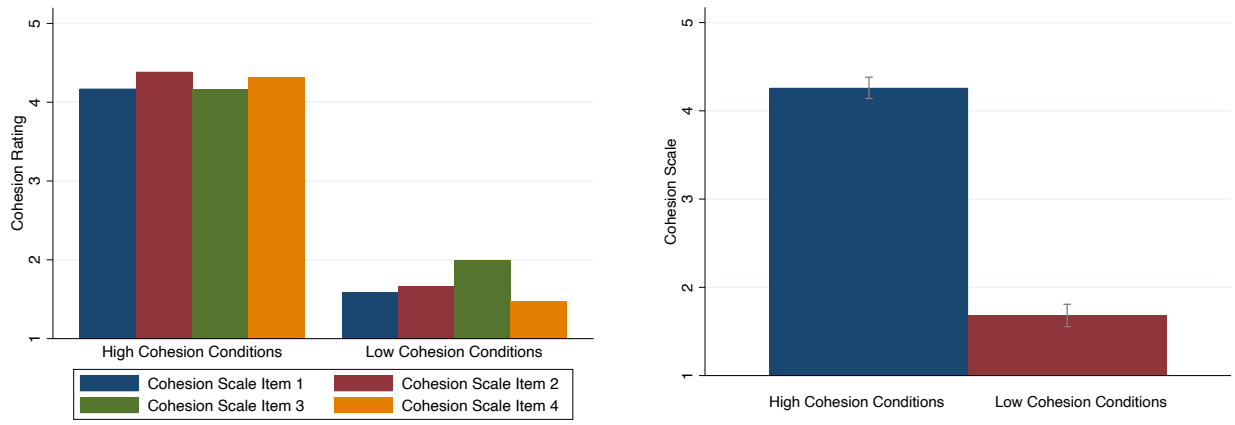

Figure 2. Cohesion Scale by High and Low Cohesion Conditions in Study 2. The left panel displays the Cohesion Scale's individual items, and the right panel presents the aggregate Cohesion Scale.

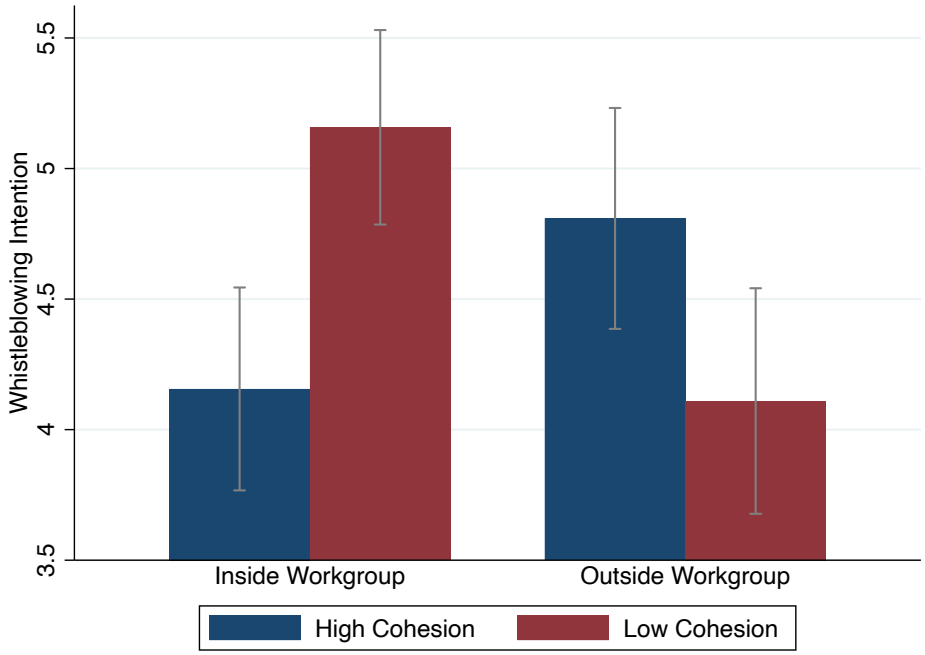

Figure 3. Effect of Cohesion and Locus of the Wrongdoer on Whistleblowing Intentions in Study 2. Although the error bars slightly overlap for wrongdoers outside of the group in this visualization, the means are statistically significantly different both inside of the group ($p < .001$) and outside of the group ($p = .025$).

TABLES

Table 1. Summary Statistics for Behavioral and Hypothetical Samples

Panel A: Descriptive Statistics for Behavioral Sample (N = 2,901)

Statistic	Mean	St. Dev.	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) Reported Wrongdoing	0.543	0.498	0	1																
(2) Wrongdoer Location (Inside)	0.508	0.5	0	1	0.073															
(3) Workgroup Cohesion	-0.016	1.36	-2	2	0.022	-0.255														
(4) Asian	0.042	0.201	0	1	-0.008	-0.01	0.01													
(5) Black	0.134	0.341	0	1	-0.031	0.031	-0.064	-0.022												
(6) Hispanic	0.071	0.256	0	1	0.002	0.043	-0.027	-0.011	-0.057											
(7) Native American	0.07	0.255	0	1	0.008	-0.027	-0.003	0.03	-0.009	0.019										
(8) White	0.792	0.406	0	1	0.026	0.001	0.062	-0.299	-0.698	0.019	-0.242									
(9) No College	0.04	0.195	0	1	-0.037	-0.023	-0.042	-0.025	-0.007	0.006	0.000	0.004								
(10) Some College	0.293	0.455	0	1	0.023	0.092	-0.113	-0.037	0.025	0.068	0.112	-0.048	-0.131							
(11) Bachelors Degree	0.345	0.475	0	1	-0.019	-0.029	0.051	-0.018	0.000	-0.047	-0.065	0.032	-0.147	-0.467						
(12) Advanced Degree	0.323	0.468	0	1	0.012	-0.05	0.076	0.065	-0.021	-0.021	-0.042	0.012	-0.14	-0.444	-0.501					
(13) Tenure	6.081	2.641	1	11	0.016	-0.085	0.038	-0.025	0.03	-0.027	0.013	-0.01	0.06	0.027	0.043	-0.095				
(14) Supervisor	0.341	0.474	0	1	0.09	-0.16	0.225	0.005	-0.035	-0.031	0.022	0.015	-0.038	-0.098	0.005	0.106	0.184			
(15) Pay System (Wage Grade)	0.078	0.268	0	1	0.002	0.03	-0.032	-0.022	-0.035	-0.005	0.032	0.015	0.126	0.179	-0.096	-0.129	-0.1	-0.056		
(16) Pay System (General Schedule)	0.79	0.407	0	1	0.004	0.002	0.002	-0.002	0.046	-0.003	-0.021	-0.051	-0.082	-0.12	0.089	0.061	0.042	-0.069	-0.563	
(17) Pay System (Other)	0.132	0.339	0	1	-0.007	-0.027	0.023	0.02	-0.028	0.007	0.001	0.05	-0.001	0.004	-0.031	0.028	0.028	0.127	-0.113	-0.758

Panel B: Descriptive Statistics for Hypothetical Sample (N = 33,755)

Statistic	Mean	St. Dev.	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) Reported Wrongdoing (Inside)	3.926	1.016	1	5																
(2) Reported Wrongdoing (Outside)	4.092	0.959	1	5	0.711															
(3) Workgroup Cohesion	0.736	1.12	-2	2	0.084	0.112														
(4) Asian	0.051	0.22	0	1	-0.029	-0.042	0.004													
(5) Black	0.153	0.36	0	1	0.034	0.004	-0.048	-0.069												
(6) Hispanic	0.079	0.27	0	1	0.043	0.028	-0.014	-0.037	-0.077											
(7) Native American	0.048	0.213	0	1	0.015	-0.003	-0.049	-0.021	-0.027	0.014										
(8) White	0.759	0.428	0	1	-0.017	0.026	0.056	-0.352	-0.723	-0.001	-0.223									
(9) No College	0.062	0.242	0	1	0.026	0.003	-0.003	-0.034	0.031	0.018	0.022	-0.031								
(10) Some College	0.274	0.446	0	1	0.055	0.035	-0.07	-0.045	0.075	0.054	0.094	-0.088	-0.159							
(11) Bachelors Degree	0.368	0.482	0	1	-0.025	-0.016	0.025	0.013	-0.040	-0.009	-0.045	0.053	-0.197	-0.469						
(12) Advanced Degree	0.295	0.456	0	1	-0.041	-0.019	0.044	0.048	-0.047	-0.052	-0.056	0.046	-0.167	-0.398	-0.494					
(13) Tenure	5.837	2.714	1	11	-0.011	-0.016	0.034	-0.068	0.055	-0.043	0.003	-0.017	0.077	0.071	-0.002	-0.109				
(14) Supervisor	0.346	0.476	0	1	0.080	0.083	0.164	-0.033	-0.056	-0.022	-0.005	0.066	-0.047	-0.060	0.013	0.071	0.239			
(15) Pay System (Wage Grade)	0.085	0.28	0	1	0.032	0.009	-0.021	0.000	-0.007	0.025	0.044	-0.023	0.111	0.128	-0.073	-0.107	-0.113	-0.056		
(16) Pay System (General Schedule)	0.793	0.405	0	1	-0.022	-0.020	-0.01	0.001	0.022	-0.001	-0.005	-0.013	-0.063	-0.087	0.059	0.056	0.030	-0.071	-0.599	
(17) Pay System (Other)	0.121	0.327	0	1	0.000	0.017	0.03	-0.002	-0.021	-0.021	-0.032	0.036	-0.016	-0.002	-0.011	0.022	0.059	0.135	-0.114	-0.728

Table 2. Logistic and GLM Estimates for Likelihood of Reporting a Wrongdoing (Behavioral and Hypothetical Samples)

	Behavioral Sample			Hypothetical Sample					
				(Inside)	(Inside)	(Inside)	(Outside)	(Outside)	(Outside)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Wrongdoer Location (Inside)	0.168*	0.191*	0.243***						
	(0.072)	(0.075)	(0.071)						
Workgroup Cohesion	0.177**	0.172**	0.149*	-0.017***	-0.016***	-0.017***	0.020***	0.018**	0.016**
	(0.058)	(0.066)	(0.064)	(0.004)	(0.004)	(0.003)	(0.006)	(0.006)	(0.006)
Wrongdoer Location (Inside)	-0.310***	-0.303***	-0.283***						
* Workgroup Cohesion	(0.066)	(0.073)	(0.071)						
Hispanic			0.291			0.039			-0.018
			(0.26)			(0.022)			(0.015)
Native American			0.085			0.03			0.004
			(0.463)			(0.042)			(0.029)
Asian			-0.212			0.052**			-0.055*
			(0.286)			(0.019)			(0.024)
Black			-0.339*			0.033**			-0.051***
			(0.168)			(0.013)			(0.011)
No College			0.235			0.065***			-0.033*
			(0.322)			(0.018)			(0.016)
Some College			0.17			0.015			-0.028
			(0.195)			(0.015)			(0.015)
Advanced Degree			0.252			0.02			-0.001
			(0.239)			(0.018)			(0.012)
Tenure			-0.021			-0.004			-0.006
			(0.016)			(0.002)			(0.003)
Pay System (Wage Grade)			-0.334			0.0002			-0.056***
			(0.224)			(0.048)			(0.016)
Pay System (Other)			-0.145			-0.001			-0.006
			(0.185)			(0.035)			(0.015)
Supervisor			0.485***			0.037**			0.019
			(0.105)			(0.014)			(0.015)
Constant	0.03	0.046	0.322	-0.093***	-0.142***	-0.083**	0.074***	0.098***	0.138***
	(0.093)	(0.031)	(0.29)	(0.01)	(0.002)	(0.028)	(0.012)	(0.003)	(0.021)
Sub-Agency Fixed Effects	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Observations	2901	2901	2901	33755	33755	33755	33755	33755	33755
Log Likelihood	-1934.687	-1900.742	-1874.543	-42905.079	-42798.457	-42753.031	-41345.123	-41278.969	-41198.91

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$; two-tailed tests. Standard errors are clustered at the Sub-Agency.

Table 3. Logistic Estimates for Likelihood of Reporting a Wrongdoing with Wrongdoing and Reprisal Characteristics (Behavioral Sample)

	Behavioral Sample			
	Full Sample	Full Sample	No Consequences	Anonymous
	(1)	(2)	(3)	(4)
Wrongdoer Location (Inside)	0.175	0.174*	0.070	-0.032
	(0.095)	(0.087)	(0.101)	(0.101)
Workgroup Cohesion	0.186**	0.207***	0.242***	0.231***
	(0.060)	(0.053)	(0.052)	(0.056)
Wrongdoer Location (Inside)	-0.265***	-0.285***	-0.267***	-0.294***
* Workgroup Cohesion	(0.070)	(0.082)	(0.076)	(0.063)
Hispanic	0.287	0.245	0.122	0.069
	(0.224)	(0.212)	(0.305)	(0.332)
Native American	0.022	-0.030	-0.231	-0.483
	(0.399)	(0.418)	(0.452)	(0.424)
Asian	-0.072	-0.018	0.168	0.067
	(0.285)	(0.277)	(0.271)	(0.223)
Black	-0.277	-0.300*	-0.563**	-0.584***
	(0.152)	(0.139)	(0.175)	(0.162)
No College	0.276	0.105	0.290	0.534
	(0.374)	(0.428)	(0.454)	(0.432)
Some College	0.223	0.214	0.218	0.285
	(0.191)	(0.206)	(0.216)	(0.218)
Advanced Degree	0.227	0.269	0.204	0.217
	(0.217)	(0.249)	(0.183)	(0.198)
Tenure	-0.033*	-0.027	-0.034*	-0.040
	(0.015)	(0.014)	(0.017)	(0.032)
Pay System (Wage Grade)	-0.246	-0.223	-0.119	-0.087
	(0.234)	(0.260)	(0.320)	(0.335)
Pay System (Other)	-0.144	-0.152	-0.047	-0.084
	(0.179)	(0.214)	(0.336)	(0.354)
Supervisor	0.511***	0.535***	0.529***	0.506***
	(0.108)	(0.115)	(0.098)	(0.134)
Multiple Locations	0.120	0.092	-0.087	-0.175
	(0.234)	(0.241)	(0.286)	(0.270)
Wrongdoing Damage	0.137*	0.281***	0.209*	0.158**
	(0.056)	(0.065)	(0.083)	(0.058)
Wrongdoing Frequency	0.440***	0.446***	0.372***	0.334**
	(0.065)	(0.087)	(0.077)	(0.117)

Table Continued…

Table 3. Logistic Estimates for Likelihood of Reporting a Wrongdoing with Wrongdoing and Reprisal Characteristics (Behavioral Sample) *(continued)*

Wrongdoing Damage (Unknown)	0.580*	1.164**	0.942	0.729*
	(0.295)	(0.379)	(0.485)	(0.366)
Wrongdoing Frequency (Unknown)	0.333*	0.356*	0.298	0.306
	(0.169)	(0.171)	(0.243)	(0.368)
Constant	-1.322***	-0.580	-0.520	-0.521
	(0.359)	(0.887)	(0.997)	(0.958)
Wrongdoing Type Control	No	Yes	Yes	Yes
Sub-Agency Fixed Effects	Yes	Yes	Yes	Yes
Observations	2881	2881	2337	2030
Log Likelihood	-1809.372	-1757.207	-1463.122	-1222.818

Table 4. GLM Estimates for Likelihood of Reporting a Wrongdoing with Previous Wrongdoing Experience (Hypothetical Sample)

	Hypothetical Sample			
	(Inside)	(Inside)	(Outside)	(Outside)
	(1)	(2)	(3)	(4)
Workgroup Cohesion	-0.017***	-0.017***	0.018**	0.018**
	(0.003)	(0.003)	(0.006)	(0.006)
Hispanic	0.038	0.038	-0.017	-0.018
	(0.023)	(0.023)	(0.015)	(0.015)
Native American	0.032	0.033	0.001	-0.001
	(0.040)	(0.040)	(0.029)	(0.029)
Asian	0.051**	0.051**	-0.054*	-0.056*
	(0.018)	(0.018)	(0.024)	(0.024)
Black	0.032*	0.033*	-0.051***	-0.052***
	(0.013)	(0.013)	(0.011)	(0.011)
No College	0.064***	0.065***	-0.032*	-0.032*
	(0.017)	(0.017)	(0.016)	(0.016)
Some College	0.014	0.014	-0.028	-0.028
	(0.014)	(0.014)	(0.015)	(0.014)
Advanced Degree	0.020	0.019	-0.001	-0.002
	(0.018)	(0.017)	(0.012)	(0.012)
Tenure	-0.004	-0.004	-0.006*	-0.007*
	(0.002)	(0.002)	(0.003)	(0.003)
Pay System (Wage Grade)	0.001	0.001	-0.050***	-0.050***
	(0.024)	(0.024)	(0.009)	(0.009)
Pay System (Other)	0.0002	-0.0003	0.006	0.006
	(0.035)	(0.035)	(0.015)	(0.015)
Supervisor	0.038**	0.038**	0.020	0.020
	(0.014)	(0.014)	(0.015)	(0.015)
Saw Wrongdoing (Inside)	0.030	-0.010	0.035	0.076*
	(0.041)	(0.033)	(0.020)	(0.037)
Saw Wrongdoing (Outside)	-0.071***	-0.088**	0.022	-0.027
	(0.019)	(0.028)	(0.018)	(0.028)
Reported Wrongdoing (Inside)		0.086*		-0.096
		(0.036)		(0.064)
Reported Wrongdoing (Outside)		0.035		0.112*
		(0.048)		(0.047)
Constant	-0.145***	-0.145***	0.162***	0.162***
	(0.016)	(0.016)	(0.021)	(0.021)
Sub-Agency Fixed Effects	Yes	Yes	Yes	Yes
Observations	33755	33755	33755	33755
Log Likelihood	-42737.484	-42730.33	-41193.708	-41178.6

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$; two-tailed tests. Standard errors are clustered at the Sub-Agency.

APPENDIX

Appendix A. Multilevel Models with Sub-Agency Characteristics

For the multilevel analysis, we create four distinct sub-agency variables that may affect behavioral and hypothetical whistleblowing. The first is the size of the sub-agency, which is approximated by the number of survey respondents from each sub-agency. The second is the average size of the workgroup within each sub-agency, which is estimated by the number of respondents within each sub-agency divided by the number of supervisors. The third is the number of respondents who indicated having observed wrongdoing within each sub-agency, which approximates the prevalence—and possible normalization—of wrongdoing. Finally, the fourth is the number of respondents who indicated having reported wrongdoing within each sub-agency, which approximates the prevalence—and possible normalization—of whistleblowing. Surprisingly, the correlation between the latter two variables is 0.95, indicating that the prevalence of whistleblowing is relatively invariant across sub-agencies with the same level of wrongdoing. Given this multicollinearity, the prevalence of whistleblowing by sub-agency is omitted from the models.

Table A1. Logistic and GLM Multilevel Models for Likelihood of Reporting a Wrongdoing with Sub-Agency Characteristics (Behavioral and Hypothetical Samples)

	Behavioral Sample		Hypothetical Sample			
			(Inside)	(Inside)	(Outside)	(Outside)
	(1)	(2)	(3)	(4)	(5)	(6)
Wrongdoer Location (Inside)	0.197*	0.096				
	(0.083)	(0.094)				
Workgroup Cohesion	0.172***	0.241***	-0.017***	-0.018***	0.016***	0.018***
	(0.046)	(0.049)	(0.003)	(0.003)	(0.003)	(0.003)
Wrongdoer Location (Inside) * Workgroup Cohesion	-0.314***	-0.324***				
	(0.061)	(0.065)				
Hispanic	0.343	0.307	0.038***	0.036**	-0.017	-0.017
	(0.176)	(0.185)	(0.011)	(0.011)	(0.011)	(0.011)
Native American	0.154	0.041	0.045**	0.047**	-0.006	-0.010
	(0.161)	(0.170)	(0.017)	(0.017)	(0.016)	(0.016)
Asian	-0.226	0.006	0.052***	0.052***	-0.055***	-0.056***
	(0.191)	(0.199)	(0.013)	(0.013)	(0.012)	(0.012)
Black	-0.380**	-0.332**	0.033***	0.032***	-0.050***	-0.050***
	(0.119)	(0.127)	(0.009)	(0.009)	(0.008)	(0.008)
No College	0.334	0.222	0.066***	0.065***	-0.035**	-0.034**
	(0.192)	(0.206)	(0.012)	(0.012)	(0.012)	(0.012)
Some College	0.212*	0.273**	0.015*	0.014	-0.029***	-0.029***
	(0.098)	(0.104)	(0.008)	(0.008)	(0.007)	(0.007)
Advanced Degree	0.300**	0.324**	0.021*	0.021*	-0.001	-0.002
	(0.115)	(0.121)	(0.008)	(0.008)	(0.008)	(0.008)
Tenure	-0.029	-0.034*	-0.004***	-0.004***	-0.006***	-0.006***
	(0.015)	(0.016)	(0.001)	(0.001)	(0.001)	(0.001)
Pay System (Wage Grade)	-0.321**	-0.220	0.001	0.001	-0.051***	-0.051***
	(0.121)	(0.127)	(0.010)	(0.010)	(0.009)	(0.009)
Pay System (Other)	-0.190	-0.225	-0.003	-0.005	0.004	0.004
	(0.114)	(0.119)	(0.010)	(0.010)	(0.009)	(0.009)
Supervisor	0.512***	0.564***	0.038***	0.038***	0.019*	0.019*
	(0.134)	(0.140)	(0.009)	(0.009)	(0.009)	(0.009)
Multiple Locations		0.153				
		(0.158)				
Wrongdoing Damage		0.285***				
		(0.064)				
Wrongdoing Frequency		0.470***				
		(0.064)				

Table Continued…

Logistic and GLM Multilevel Models for Likelihood of Reporting a Wrongdoing with Sub-Agency Characteristics (Behavioral and Hypothetical Samples) *(continued)*

	(1)	(2)	(3)	(4)	(5)	(6)
Wrongdoing Damage (Unknown)		1.155***				
		(0.279)				
Wrongdoing Frequency (Unknown)		0.400*				
		(0.198)				
Saw Wrongdoing (Inside)				-0.011		0.076***
				(0.018)		(0.017)
Saw Wrongdoing (Outside)				-0.089***		-0.026
				(0.018)		(0.017)
Reported Wrongdoing (Inside)				0.088***		-0.096***
				(0.026)		(0.025)
Reported Wrongdoing (Outside)				0.033		0.111***
				(0.026)		(0.025)
Size (Sub-Agency)	-0.075	-0.111	0.030**	0.030**	0.011	0.012
	(0.089)	(0.093)	(0.011)	(0.011)	(0.008)	(0.008)
Workgroup Size (Sub-Agency)	-0.294	-0.226	0.006	0.006	0.013	0.014
	(0.153)	(0.158)	(0.009)	(0.009)	(0.008)	(0.008)
Observed Wrongdoing (Sub-Agency)	-0.021	0.023	-0.024*	-0.025*	-0.004	-0.004
	(0.096)	(0.100)	(0.011)	(0.011)	(0.009)	(0.009)
Constant	-0.053	-0.756	-0.093***	-0.090***	0.140***	0.138***
	(0.146)	(0.426)	(0.011)	(0.011)	(0.010)	(0.010)
Wrongdoing Type Control	No	Yes	No	No	No	No
Sub-Agency Fixed Effects	No	No	No	No	No	No
Observations	2881	2881	33755	33755	33755	33755
Log Likelihood	-1783.53	-1682.73	-42864.68	-41298.60	-42853.37	-41290.78

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$; two-tailed tests.

Appendix B. Whistleblowing Experiment Vignettes

Condition: High Cohesion, Inside Workgroup
Imagine that you are on a product team at a medium-sized company. You like the work you do and you get along **EXTREMELY WELL** with the other members of your team. Your team is very cooperative and everyone helps each other out. You know you can depend on your teammates if you have a problem and you also enjoy hanging out together outside of work.

One day you notice Jaime, **A MEMBER OF YOUR TEAM**, packing expensive product samples into his bag at the end of the day to take home. Taking product samples home and keeping them for personal use is a violation of company policy. You have taken several training sessions that are very clear about this. No one else sees him put the samples in his bag.

Condition: High Cohesion, Outside Workgroup
Imagine that you are on a product team at a medium-sized company. You like the work you do and you get along **EXTREMELY WELL** with the other members of your team. Your team is very cooperative and everyone helps each other out. You know you can depend on your teammates if you have a problem and you also enjoy hanging out together outside of work.

One day you notice Jaime, **A MEMBER OF A DIFFERENT TEAM**, packing expensive product samples into his bag at the end of the day to take home. You don't know Jaime very well, as you don't work with him and you rarely see him around the office. Taking product samples home and keeping them for personal use is a violation of company policy. You have taken several training sessions that are very clear about this. No one else sees him put the samples in his bag.

Condition: Low Cohesion, Inside Workgroup
Imagine that you are on a product team at a medium-sized company. Although you like the work you do, you **DO NOT** get along with the other members of your team. This is unfortunate because a lot of your tasks require you to coordinate with other team members. However, your team members are competitive, unfriendly, and gossip behind your back. Working with them is highly unpleasant. Some days you hate the thought of going into work.

One day you notice Jaime, **A MEMBER OF YOUR TEAM**, packing expensive product samples into his bag at the end of the day to take home. Taking product samples home and keeping them for personal use is a violation of company policy. You have taken several training sessions that are very clear about this. No one else sees him put the samples in his bag.

Condition: Low Cohesion, Outside Workgroup
Imagine that you are on a product team at a medium-sized company. Although you like the work you do, you **DO NOT** get along with the other members of your team. This is unfortunate because a lot of your tasks require you to coordinate with other team members. However, your team members are competitive, unfriendly, and gossip behind your back. Working with them is highly unpleasant. Some days you hate the thought of going into work.

One day you notice Jaime, **A MEMBER OF A DIFFERENT TEAM**, packing expensive product samples into his bag at the end of the day to take home. You don't know Jaime very well, as you don't work with him and you rarely see him around the office. Taking product samples home and keeping them for personal use is a violation of company policy. You have taken several training sessions that are very clear about this. No one else sees him put the samples in his bag.