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I am submitting herewith a thesis written by Amy Kathleen Heger entitled "My Lips are Sealed: Whistle-blowing as a Function of Collective and Interpersonal Connections to Social Groups." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Experimental Psychology.

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**My Lips are Sealed: Whistle-blowing as a Function of Collective and
Interpersonal Connections to Social Groups**

A Thesis Presented for the
Master of Arts
Degree
The University of Tennessee, Knoxville

Amy Kathleen Heger
December 2014

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Acknowledgements

I want to give a special thanks to my advisor, Dr. Lowell Gaertner. I am exceptionally appreciative of all his help and support throughout the thesis process, from the initial brainstorming and design stages, to data collection and writing advice. I also want to thank my friends and colleagues, Joe Salvatore and Kevin Zabel for their substantial support and invaluable feedback to help make this possible. In addition, I am grateful for my other committee members, Dr. Michael Olson and Dr. Garriy Shteynberg, who were instrumental in helping shape my research idea and experimental design.

Abstract

Persons experience attachment to groups because they (a) share those aspects (characteristics, goals, values) that define the group and/or (b) have close relationships with the group members. Two studies examined whether such *collective* and *interpersonal* connections affect whistle-blowing (reporting ingroup wrongdoing). We hypothesized that collective connection would promote whistle-blowing via concern for the group's welfare and interpersonal connection would inhibit whistle-blowing via fear of lost relationships. In Study 1 (N =127) participants listed up to eight ingroups and, for each, rated their collective connection, interpersonal connection, and likelihood of whistle-blowing. In Study 2, participants (N =153) were prompted to think about an ingroup defined by a factorial crossing of collective connection (weak, strong) and interpersonal connection (weak, strong) and rated their likelihood of whistle-blowing. In both studies, whistle-blowing was negatively related to the interpersonal connection and unrelated to the collective connection. Strong interpersonal connections to group members undermine whistle-blowing and facilitate continued ingroup wrongdoing.

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Chapter 1

Introduction

Group members have access to details about illegal or immoral group practices that outsiders do not (Miceli & Near, 2005; Miethe, 1999). Researchers' hypothesize that approximately one third of U.S. employees have witnessed wrongdoing in their workplace (Rothschild & Miethe, 1999). The proportion of organization members knowledgeable about an organizational wrongdoing varies empirically, with reports anywhere from 14% to 75% due to dissimilar survey methods and samples (Grimsley, 2000; Miceli, Near, & Dworkin, 2013; Miceli, Rehg, Near, & Ryan, 1999). Only if these informed members bring wrongdoing to the attention of the group or an outside authority, will efforts to halt such wrongdoing be taken.

Whistle-blowing is a member's disclosure of illegal or immoral practices of their group to any resource with the potential to stop the wrongdoing (Miceli & Near, 1985). Organizations implement initiatives to encourage whistle-blowing, such as ethics trainings and codes of conduct (Barnett, Cochran & Taylor, 1993). People ordinarily whistle-blow internally first (disclose wrongdoing to authorities within the group; Miceli & Near, 1984). Internal whistle-blowing is preferred because it empowers groups to take corrective action, yet circumvents a reputational crisis and legal sanctions (Miceli & Near, 1985; Near, 1989; Near & Miceli, 1996). Members whistle-blow externally (disclose wrongdoing to authorities outside the group) if no sufficient action is taken following an internal report, or if the member feels the group will not take their report seriously (Westin, 1981). In addition, not all groups have internal resources or authorities

available to address wrongdoing reports. Overall, external whistle-blowing is more effective than internal whistle-blowing, but in turn generates greater retaliation from fellow group members (Dworkin & Baucus, 1998; Near & Miceli, 1986; Rothschild & Miethe, 1999).

Despite organizational efforts, group members frequently refrain from reporting wrongdoing (e.g., Miceli & Near, 1992; Miceli et al., 2013; Miethe, 1999). Continued research is needed because empirical rates of whistle-blowing present a broad range—from 4% of sexual harassment victims in the workplace to 90% of directors of internal auditing who are role-prescribed to blow the whistle (Lee, Heilmann, & Near, 2004; Miceli, Near, & Schwenk, 1991). Inconsistency in reports of whistle-blowing rates is attributable to the piecemeal manner in which the behavior has been examined. Whistle-blowing—a construct originating in business ethics literature—refers to reporting in employment organizations (Near & Jensen, 1983; Near & Miceli, 1985). As such, it is examined in a context-specific manner with many studies conducted and designed in regard to particular professions or work-companies (e.g., auditors, military employees, accountants, IT project managers, US government employees, etc.; Casal & Zalkind, 1995; Keil, Tiwana, Sainsbury, & Sneha, 2010; Lee et al., 2004; Miceli, Near, Rehg, & Van Scotter, 2012; Miceli et al., 1991).

Extant literature lacks exploration of the whistle-blowing process from a broad, systematic group dynamics perspective. The behavior—disclosure of ingroup wrongdoing by a group member—can generalize to several group types, not only those of employment. Indeed, low rates of whistleblowing are not unique to employment settings,

but additionally occur across a variety of groups (e.g., academic classes, fraternities and sororities, sports teams; Allan, 2009; Burton & Near, 1995). A group dynamics approach to whistle-blowing research will expand knowledge of reporting to all types of groups and help resolve inconsistencies in the literature. We wish to examine, in particular, the intragroup process of how people connect to their social groups. The way in which a member derives meaning from their group membership might influence their likelihood to report an ingroup wrongdoing. With a broad group dynamics perspective, we hypothesize and test whether group connections are relevant to the whistle-blowing decision.

Social psychology literature posits that people connect to their social groups in two primary ways: a collective connection and an interpersonal connection. A collective connection is an attachment to a group based on aspects of self (e.g., characteristics, goals, values) that are shared with the group and distinguish the group from other groups. An interpersonal connection is an attachment to a group based on shared interpersonal relationships with individual members of the group (e.g., Brewer & Gardner, 1996; Lickel et al., 2000; Prentice, Miller & Lightdale, 1994). Our studies are the first to investigate whether the two forms of connections influence member willingness to report group wrongdoing.

Group Connections: Interpersonal and Collective

The distinction between a collective connection and an interpersonal connection emerges throughout the history of group processes. The interpersonal connection is

rooted in the dynamic entity framework of group theory (see Wilder & Simon, 1998). Originally in the 1950s and 1960s, groups were envisioned as dynamic entities and interdependence among group members was emphasized as the source of connection (Cartwright & Zander, 1960(68); Lewin, 1948; Rabbie & Horwitz, 1988; Thibaut & Kelley, 1954). Analysis focused on small-group research and understanding the interpersonal ties that made up the unit (e.g., Allport, 1962). A group member that likes and forms close relationships with other group members, can develop an attachment to the group based merely on those relationships. An interpersonal group connection embodies the dynamic entity approach because it advocates that meaningful relationships with fellow group members is a way that people can connect to groups.

The collective connection is rooted in the social identity framework of group theory. Social identity theory and social categorization theory in the 1970s and 1980s supported the new notion that mere categorical distinctions were sufficient to foster identification with a group (Tajfel, Billig, Bundy, & Flament, 1971). Groups were envisioned as social categories and the shared aspects of the group (e.g., characteristics, goals, values) were emphasized as the source of connection (Hogg & Abrams, 1988; Tajfel, 1978; Tajfel & Turner, 1979; Turner 1982; Turner, Hoggs, Oakes, Reicher & Wetherell, 1987). Analysis of groups focused on the shared identity of members (e.g., Tajfel, 1970). Social identity theory explains social category groups, where interaction with all members is neither likely nor necessary for a member to feel connected to the group (Lickel et al., 2000; Wilder & Simon, 1998). A collective group connection embodies the social identity approach because it advocates that shared characteristics of

group members, independent of interaction, is a way that people can connect to groups.

The historical frameworks of group theory validate a dichotomy between an interpersonal and collective group connection. Additionally, this interpersonal-collective distinction pervades numerous models of group processes (Brewer & Gardner, 1996; Deaux & Martin, 2003; Hogg & Hardie, 1991; Jans, Postmes, & Van der Zee, 2011; Jans, Postmes, & Van der Zee, 2012; Karasawa, 1991; Lickel et al., 2000; Postmes, Spears, Lee, & Novak, 2005). However, different scholars use different terminology to describe this conceptually analogous distinction. For example, collective versus interpersonal identities (Brewer & Gardner, 1996), social categories versus intimacy groups (Lickel et al., 2000), deductive versus inductive identity formation (Postmes et al., 2005) and dynamic entities versus social categories (Wilder & Simon, 1998).

Prentice, Miller and Lightdale's (1994) classification of attachment to a group based on common-identity, or the group identity as a whole, or common-bond, the interpersonal relationships among group members, is most similar to our collective connection and interpersonal connection. Few studies to date, however, examine whether common-identity and common-bond group attachment influences other variables. Utz & Sassenberg (2002) found that fairness judgments made by common-bond group members demonstrated more egocentric biases, while common-identity group members were more altruistic. Differential effects of common-bond and common-identity attachment have also been observed with online chat groups (Sassenberg; 2002), gender (Seeley, Gardner, Pennington & Gabriel, 2003) and motives for identity enactment and definition processes (e.g., belonging, distinctiveness, efficacy, meaning, and self-esteem; Easterbrook &

Vignoles, 2012).

The collective and interpersonal connections are theoretically orthogonal allowing both strong or weak levels of interpersonal connection to be paired with strong or weak levels of collective connection to a social group (Prentice et al., 1994; Zhang, Chen, Chen, Liu, & Johnson, 2012). For example, a person's interpersonal connection with their group may be strong, even though their collective connection with the group is weak, that is they value the close relationships with the other group members, even though they do not value the shared aspects that define the group.

Whistle-blowing research that examines organizational commitment is the closest conceptually to a group connection. Organizational commitment, however, focuses solely on an employee's overarching connection to the collective organization and fails to consider a relational connection to their co-workers (for exception see Taylor & Curtis, 2010). While many researchers hypothesize about the relationship between organizational commitment and whistle-blowing (e.g., Kolarska & Aldrich, 1980; Miethe & Rothschild, 1994; Near & Miceli, 1985; Stansbury & Victor, 2008; Street, 1991), empirical investigations are inconclusive (Mesmer-Magnus & Viswesvaran, 2005). The few studies, which operationalize organizational commitment differently, find it is inconsistently related to internal whistle-blowing and unrelated to external whistle-blowing (Miceli et al., 1991; Sims & Keenan, 1998; Somers & Casal, 1994). Testing the relational connection, in addition to a well-defined collective connection, will fill a gap in current literature and provide a more comprehensive analysis of group connection.

Whistle-blowing and the Group Connections

Our studies investigate whether the two group connections differentially influence a member's willingness to report group wrongdoing. Whistle-blowing is infrequent because the costs are steep and the benefits of reporting must outweigh the costs (Keil et al., 2010). The weight given to the costs and benefits of whistle-blowing likely vary as a result of the way a person connects to their group: greater emphasis would be placed on the interpersonal consequences of whistle-blowing for members with strong interpersonal connections and on collective consequences for members with strong collective connections. Our basic proposition is that the two forms of connection might have countervailing effects on whistleblowing. Our predictions are in regard to external whistleblowing, not necessarily internal whistleblowing, because not all groups have a structure that would enable internal whistleblowing.

Collective Connection Hypothesis. Whistle-blowing is commonly discussed in the literature as a prosocial organizational behavior—behavior intended to promote the welfare of the group toward which it is directed (Brief & Motowidlo, 1986; Dozier & Miceli, 1985; Miceli & Near, 1992; Miceli, et al., 2012). Anti-social motivations for whistleblowing (e.g., retribution, profit) are unusual exceptions (Miceli & Near, 1997). Whistle-blowers generally act to help their group and expect measures will be taken to stop the wrongdoing as a result of their report (Brief & Motowidlo, 1986; Dozier & Miceli, 1985; Near & Miceli, 1996). If effective, whistle-blowers yield long-term

collective benefits because group ideals and policies are preserved while unsafe and unethical group practices are eliminated (Miceli & Near, 1992).

We hypothesize that the collective connection might increase whistleblowing via a member's concern for the group's long-term welfare. In addition to the support that whistle-blowing's prosocial associations provide, the normative conflict model of dissent gives reason to predict a positive relationship between a member's collective connection and reporting. Packer and colleagues find that group members with high group identification (comparable to our collective connection) challenge group norms that are harmful to the group's wellbeing to help better the group (Packer, 2007; Packer & Chasteen, 2009).

Additionally, social identity theory posits that people derive and maintain a positive sense of self from their group memberships (Hogg & Abrams, 1988; Tajfel, 1978; Tajfel & Turner, 1979; Turner 1982). For people with high collective connections, group wrongdoing might threaten the shared characteristics, ideals and/or goals that originally made their group membership meaningful. Whistle-blowing could serve to restore the benefits the collective connection (shared aspects of the group) provided. Members with weak collective connections are unconcerned with overarching characteristics of the group and, therefore, are not worried about how wrongdoing might threaten those characteristics (Hogg & Hardie, 1991; Terry & Hogg, 1996).

One viable alternative to our hypothesis is that members with high collective connections might not whistle-blow due to potential for immediate collective harm following a report (e.g., reputational damage, threat to the authority structure of the

group, financial burden, etc.; Baucus & Baucus, 1997; Miceli, et al., 2012; Miethe & Rothschild, 1994; Weinstein, 1979). Conflicting views of loyalty in research imply that although long-term positive outcomes of whistle-blowing are beneficial to the collective, there are also short-term negative outcomes of whistle-blowing that are harmful to the collective (Corvino, 2002; Vandekerckhove & Commers, 2004; Varelius, 2008; Waytz et al., 2013). We include a measure of consideration for future consequences (CFC; a member's stable orientation towards considering immediate versus future consequences) in Study 1 to test whether this individual difference mediates the relationship between the collective connection and willingness to whistle-blow (Strathman, Gleicher, Boninger, & Edwards, 1994). We anticipate that members high in collective connection and high in CFC will be more likely to whistle-blow because they are concerned about the long-term benefits the group experiences, whereas those high in collective connection but low in CFC will be less likely to whistle-blow because they are concerned about the short-term costs the group experiences.

We posit that group members will be more likely to whistle-blow when their collective connection is strong to look out for the group's long-term welfare, and that this effect might be mediated by a participant's consideration for future consequences. Ample theoretical support gives reason to predict that the collective connection increases whistle-blowing.

Interpersonal Connection Hypothesis. A whistle-blower jeopardizes their popularity within the group because reporting frequently produces immediate

unfavorable consequences for the group (e.g., revocation of privileges, fees, reputational damage; Miceli & Near, 1997; Miethe & Rothschild, 1994; Jensen, 1987; Weinstein, 1979). As a result, fellow members may lose trust in the whistle-blower, feel betrayed by them, and/or use them as a scapegoat (King, 1997; Miethe & Rothschild, 1994; Rothschild, Landau, Sullivan, & Keefer, 2012). Retaliation from group members is a highly anticipated cost of whistle-blowing (Keenan & Sims, 1995; Mesmer-Magnus & Viswesvaran, 2005).

Whistle-blowers experience retaliation of varying type and source (Mesmer-Magnus & Viswesvaran, 2005; Miceli & Near, 1996). Particular forms of retaliation, unfortunately, are often not differentiated in whistle-blowing studies. Retaliation is typically operationalized as the number of times a person experienced or was threatened with any form of retaliation or those forms provided from a limited checklist (e.g., Near & Miceli, 1986; Parmerlee, Near, & Jensen, 1982; Rehg, Miceli, Near, & Van Scotter, 2008). Research on the degree and occurrence of interpersonal retaliation, in particular, is scarce (for exception see Cortina & Magley, 2003). Intragroup processes literature, however, supports the assumption whistle-blowing literature makes that reporting wrongdoing harms interpersonal relationships.

We hypothesize that the interpersonal connection might decrease whistleblowing via a member's fear of losing valued relationships with fellow members and the harm that might befall those members. Whistle-blowers are deviant group members because they refuse to follow illicit group norms or a group norm of inaction (Miethe & Rothschild, 1994; Spreitzer & Sonenshein, 2004; Vadera, Pratt, & Mishra, 2013; Vadera, Aguilera, &

Caza, 2009). A deviant member undermines group efforts to achieve and maintain positive group distinctiveness (Abrams, Marques, Bown, & Henson, 2000; Jetten Spears, & Postmes, 2004; Marques, Abrams, Paez, & Martinez-Taboada, 1998; Scheepers, Branscombe, Spears, & Doosje, 2002). As a result, group members ordinarily derogate, reject and distance themselves from deviant group members (Abrams, Marques, Bown, & Dougill, 2002; Marques Abrams, & Serodio, 2001; Marques & Paez, 1994; Marques & Yzerbyt, 1988; Ouwerkerk, Kerr, Gallucci, & van Lange, 2005) Anticipation of this ostracism, due to the deviant position of a whistle-blower, might be especially costly to members with strong interpersonal connections.

Whistle-blowers, despite positive intentions, also encounter negative interpersonal outcomes for being moral rebels (Minson & Monin, 2011). They take a moral stance to halt group wrongdoing that other group members, with the same opportunity, failed to take (Monin, Sawyer, & Marquez, 2008). This stance creates an undesirable social comparison that threatens other group members' self worth; to remove the threat, group members will derogate or banish from the group the moral rebel (Festinger, 1954; Minson & Monin, 2011; Monin et al., 2008; Monin, 2007; Parks & Stone, 2010; Spreitzer & Sonenshein, 2004). Ostracism whistle-blowers experience due to the threat they present other group members' self-worth might be especially costly to members with strong interpersonal connections.

Members that perpetrate group wrongdoing get in trouble when whistle-blowers expose their involvement. Perpetrators might lose their group positions, privileges or membership (Miceli et al., 2013). In addition, legal ramifications are plausible if the

wrongdoing was illegal. A whistle-blower who is friends with perpetrating members risks harming these friends. Members with strong interpersonal connections might refrain from reporting to protect their friends in the group, despite their friends' role in the wrongdoing. People sometimes help others that they feel empathy for at the cost of the collective good (Batson et al., 1995). Members with weak interpersonal connections might not care enough about the perpetrating group members to protect them from the negative consequences whistle-blowing will generate. Overall, the harm whistle-blowers inflict upon perpetrating group members is an additional high-cost risk for members with strong interpersonal connections.

We posit that group members will be less likely to whistle-blow when their interpersonal connection is strong to avoid loss of valued relationships with fellow members and harm that might befall those members. Despite the shortage of empirical investigations of interpersonal relationships in whistle-blowing contexts, theoretical support from intragroup processes literature gives reason to predict that the interpersonal connection decreases whistle-blowing.

Current Research

We tested our hypotheses in two studies. In Study 1, participants listed numerous social groups to which they belonged and rated their collective connection and interpersonal connection to each group as well as their likelihood of whistle-blowing if they discovered the group was engaged in a bad activity. Participants in Study 2 were asked to respond on each of four groups to which they belonged that reflected a factorial

crossing of the collective connection (weak, strong) and interpersonal connection (weak, strong) and to subsequently rate their likelihood of whistle-blowing if each group were to do something bad.

Chapter 2

Study 1

Methods

One hundred and twenty-seven college students (65 males and 62 females) in introductory psychology at the University of Tennessee participated for partial class credit. Sessions consisted of one experimenter and up to 11 participants in a room (*Group* $M=3.94$, $SD=2.93$). Cell phones were silenced and participants refrained from interaction during the session.

An experimenter explained to participants after obtaining their informed consent that they would work independently through a packet of questionnaires. To begin, participants received a single sheet of paper with eight numbered lines and were instructed to list up to eight groups to which they belonged on the lines (e.g., if a member of five groups, participants wrote the group names down on the first five lines and left the remaining three lines blank). Then a paper packet was passed out and the experimenter explained that throughout their completion of the packet they would reference the list of groups.

Independent variable: group connection. Participants first read definitions of the two connections: “*There are two basic components that make groups meaningful and foster a sense of attachment or connection to the group: (1) Collective Connection – this represents your connection to the group because you share the aspects (traits, values, goals, characteristics, or ideals) that define the group and distinguish it from other*

groups. (2) *Interpersonal Connection* – this represents your connection to the group because of your interpersonal relationships with individual members of the group and who they are as unique persons.” Then four short example paragraphs elaborated on the orthogonal nature of the two connections to ensure participants understood the strength of their two connections might vary simultaneously. The following is an example paragraph: “For some groups, you might have a strong *Collective Connection* and a weak *Interpersonal Connection*. That is, you feel attached to the group because you value the shared aspects that define the group even though you do not have or value interpersonal relationships with the individual group-members.” Participants then rated their collective connection and interpersonal connection to each group on a 0 (*very weak connection*) to 10 (*very strong connection*) Likert scale. Ratings for both connections were recorded for one group before moving on to the next group. All groups were evaluated on the two connections, before moving on to additional measures.

Dependent variable: whistle-blowing intentions. Next, we explained that sometimes groups engage in activities that conflict with what members believe to be acceptable and that there are different ways to handle such a situation. The participant is told for each of the groups they listed to “*imagine that you discover that the group is engaged in a very bad activity that you strongly oppose. What is the likelihood that you would react in each of the following three ways? (a) report the bad behavior to an authority within the group to try and stop it (b) report the bad behavior to an authority outside of the group to try and stop it (c) leave the group.*” Participants indicated how

likely they would be to report the behavior internally, report the behavior externally, or leave the given group on a seven-point (*1=not at all likely to 7=very likely*) Likert scale. Participants also recorded membership length in months and years.

Individual difference measures. Previous whistle-blowing research indicates that proactive personality, identity fusion, locus of control, regulatory focus and social desirability are variables that might influence our dependent variable, intention to whistle-blow (Buhrmester, 2013; Chiu, 2003; Curtis & Taylor, 2009; Miceli & Near, 2005; Miceli, et al., 2012). Additional questionnaire items were included at the end of the experimental packet to assess and control for these variables, along with some individual-difference measures that looked at participants' consideration of future consequences, collective self-esteem and demographics. The subsequent scales were included in the following order at the end of the packet: verbal identity fusion scale (Gómez et al., 2011), pictorial identity fusion scale (Swann, Gómez, Seyle, Morales, & Huici, 2009), Consideration of Future Consequences Scale ($\alpha=.80$) (Strathman et al., 1994), The Proactive Personality Scale ($\alpha=.88$) (Bateman & Crant, 1993), Social Desirability Scale-short version (Strahan & Gerbasi, 1972), Collective Self-esteem Scale ($\alpha=.86$) (Luhtanen & Crocker, 1992), Regulatory Focus Questionnaire ($\alpha=.75$) (Higgins et al., 2001), and Internal-External Scale (Rotter, 1966). None of these variables moderated the effects of the two group connections to influence likelihood of external whistle-blowing and therefore, will no longer be discussed.

Results

We excluded the responses of 3 participants who did not follow the instructions (2 female). Gender did not moderate the reported effects of the collective and interpersonal connections in either study, and therefore we do not discuss it further. Participants listed a minimum of 2 groups and a maximum of 8 groups, with the average number of listed groups being 5.60 ($SD = 1.91$). Approximately 25% ($n = 31$) participants listed 8 groups, 10% ($n = 12$) participants listed 7 groups, 19% ($n = 23$) participants listed 6 groups, 18% ($n = 22$) participants listed 5 groups, 11% ($n = 14$) participants listed 4 groups, 11% ($n = 14$) participants listed 3 groups, 6% ($n = 8$) participants listed 2 groups. Across all participants, there were 694 groups listed.

The average length of group membership was 2 years and 3 months ($SD = 2$ years, 10 months). The order in which a group was listed, the number of groups a participant listed, and length of group membership did not interact with the collective and interpersonal connections to predict likelihood of external whistle-blowing. Likewise, the effects of collective and interpersonal connection remained the same when we additionally controlled the effects of order, number of groups, and membership length.

To account for the hierarchically nested structure of the data (i.e., ratings of up to eight groups nested within participants), we tested the two connection hypotheses using multi-level modeling with the PROC MIXED command in SAS 9.3. We person-centered the connection variables (while controlling for the person's mean level; Raudenbush & Bryk, 2002) to look at patterns of within-person change. Before examining the hypothesis-relevant fixed effects, we conducted model comparison tests (with restricted

maximum likelihood estimation and chi-square distributed -2 log-likelihood differences) to identify the most appropriate structure of random effects (i.e., testing inclusion vs. exclusion of random slopes and co-variances).

External whistle-blowing. We regressed external whistleblowing on a factorial crossing of collective connection (person-centered) and interpersonal connection (person-centered), while controlling for each person's mean collective and interpersonal connections. The model estimated random effects for the intercept. Willingness to whistle-blow externally was negatively related to the interpersonal connection, $B = -.12$, $t(541) = -4.76$, $p < .0001$, and confirms our hypothesis that the interpersonal connection decreases whistleblowing. Willingness to whistle-blow externally, however, was unrelated to the collective connection, $B = -.01$, $t(541) = -0.29$, $p = .7681$, and fails to support our hypothesis that the collective connection might increase whistleblowing. Participants' decision to whistle-blow to an external authority was driven by the strength of their interpersonal connection to a group, regardless of their collective connection to that group. The lack of an interaction between the interpersonal connection and collective connection, $B = -.01$, $t(541) = -0.91$, $p = .3645$, suggests that the interpersonal connection acts independent of the collective connection to influence a group member's likelihood of whistle-blowing externally.

Internal whistle-blowing. We also examined how the collective and interpersonal connections influence a group member's likelihood to whistle-blow

internally. Note that caution should be taken in interpretation of the results because not all groups have a clear internal authority figure or formal route to report wrongdoing. We are unable to know what participants considered an internal report, especially in informal groups like friend circles or groups of roommates.

No directional hypotheses were made in regard to internal reporting. To test this we regressed internal whistleblowing on a factorial crossing of collective connection (person-centered) and interpersonal connection (person-centered), while controlling for each person's mean collective and interpersonal connections. The multi-level model estimated random effects for the intercept and interpersonal connection. Willingness to whistle-blow internally was positively related to the interpersonal connection, $B = .09$, $t(118) = 2.73$, $p = .0074$, and positively related to the collective connection, $B = .14$, $t(427) = 4.46$, $p < .0001$. The greater a group member's collective or interpersonal connection to their group the more likely they are to whistle-blow internally. There was no interaction between the collective and interpersonal connections for internal whistleblowing, $B = .02$, $t(427) = 1.47$, $p = 0.1434$.

Discussion

We collected ratings of interpersonal and collective connections to social groups and assessed likelihood of whistle-blowing externally and internally. In particular, participants listed up to eight groups they belonged to and rated their connections and whistle-blowing likelihood for each. In contrast to past research that uses employment or field-specific samples, the current study implemented methodology that enabled

participants to report their likelihood of whistle-blowing in any social group. Study 1 results therefore generalize to all groups and systematically explain a broader intragroup processes perspective of whistle-blowing.

Multi-level modeling analyses evidenced that members who felt connected to a group because of valued relationships with individual group members—a strong interpersonal connection—were less likely to whistle-blow externally. Members who felt connected to a group because of shared aspects that define the group—a strong collective connection—were not any more likely to whistle-blow externally than members that lacked a collective connection. These data suggest that strong interpersonal connections to group members undermine external whistleblowing, while they implicate that the collective connection has no effect. High levels of collective connection and high levels of interpersonal connection both fostered reports of ingroup wrongdoing to internal authority figures, however the construct of internal whistle-blowing lacked clear operationalization for some groups.

The criterion for listing groups was open-ended. The ease in which social groups of strong interpersonal or collective connections come to mind led to an uneven distribution of groups, with more containing stronger connections than weaker connections. We conducted a second study in which we prompted participants to recall groups containing a range of connection strengths to ensure that all group types were well-represented, including those weaker in both connections. Study 2 provided another test of our hypothesis and of the reliability of Study 1's results.

Chapter 3

Study 2

Methods

One hundred and fifty-three undergraduates (69 males, 79 females, 5 unspecified) participated for introductory to psychology class credit at the University of Tennessee. Participants were led to an individual computer room, where they first provided informed consent. The experimenter then explained that they would answer questions about groups they hold actual membership in for a survey. Within the context of a 2 (collective connection: weak, strong) by 2 (interpersonal connection: weak, strong) factorial crossing within subject design, participants answered questions about four real-life groups. The order in which participants responded to each of the four group types was randomized.

At the start of each condition, the two group connections were defined identical to the definitions used in Study 1. Then, participants read about a group category and were prompted to write down the name of a group they belonged to that fit that group description. The next screen requested them to explain why the group they selected fit the given group category description.

Next, participants were asked to imagine that they discovered the group was engaged in a very bad activity that they strongly opposed and subsequently, as in study 1, rated how likely they would be to report the behavior internally, report the behavior externally, or leave that group on a seven-point (*1=not at all likely to 7=very likely*) Likert scale. After rating all three items, the next page provided them space to explain why they rated each item as they did.

The end of each condition contained a manipulation check to ensure that connection strength was manipulated effectively. The definitions of the two connections were restated and participants rated their collective connection and interpersonal connection to the group on a ten-point (*1=very weak* to *10=very strong*) Likert scale.

Results

We excluded entire responses of 4 participants who did not follow the instructions (2 female). Of the 596 groups collected from the remaining 149 participants, we were missing responses in regard to 12 listed groups: 8 instances the computer froze and in 4 instances participants did not respond. Data were collected on a total of 584 groups¹. The study's within-subject design created observations for four groups within one individual. Similar to Study 1, we use multi-level modeling to account for the nested structure of the data. We conducted model comparison tests before examining fixed effects (with restricted maximum likelihood estimation and chi-square distributed -2 log-likelihood differences) to identify the most appropriate structure of random effects.

Manipulation checks. Participants' self-reported ratings of their collective and interpersonal connections indicate that our manipulations were successful. In particular, we first effects-coded the two-leveled (weak, strong) categorical connection variables.

¹ We also ran analyses with 554 groups due to additional excluded responses in regard to 30 groups: 19 responses were in regard to a group to which the participant did not belong, 5 responses did not coincide with a group, 3 responses were in regard to a particular person not a group, 2 responses were from one participant in regard to the same group, and 1 response was in regard to a group that did not match the assigned condition. In any event, conclusions based on p-values and directions of effects are the same with and without these responses.

Then, we regressed ratings of the collective connection on the factorial crossing of collective connection and interpersonal connection. As expected the collective manipulation increased reported collective connection such that participants reported a higher collective connection when thinking about a strong ($M= 8.71$) rather than weak ($M= 3.73$) collective connection group, $F(1,148)= 1077.27, p< .0001$. The interpersonal connection also increased reported collective connection such that participants reported a higher collective connection when thinking about a strong interpersonal connection group, $F(1,148)= 40.42, p< .0001$. Importantly however, the collective connection increased the self-reported collective connection more strongly than did the interpersonal connection, $B= 2.04, t(148)= 18.93, p< .0001$. Furthermore, the strength of connections did not interact to affect the self-reported collective connection, $F(1,148)= 1.31, p=.2542$.

Likewise, we regressed self-reported ratings of interpersonal connection on the factorial crossing of collective connection and interpersonal connection, with estimated random effects for the intercept. As expected the interpersonal manipulation increased reported interpersonal connection such that participants reported a higher interpersonal connection when thinking about a strong ($M= 8.65$) rather than a weak ($M= 3.56$) interpersonal connection group, $F(1,148)= 1082.60, p< .0001$. The collective connection also increased reported interpersonal connection such that participants reported a higher interpersonal connection when thinking about a strong collective connection group, $F(1,148)= 43.74, p< .0001$. Importantly however, the interpersonal connection increased the self-reported interpersonal connection more strongly than did the collective

connection, $B = -2.07$, $t(148) = -19.70$, $p < .0001$. Furthermore, the strength of connection manipulations did not interact to affect the self-reported interpersonal connection, $F(1, 148) = 0.98$, $p = 0.3242$.

External whistle-blowing. The collective and interpersonal connections formed two categorical variables each with two levels: strong and weak. We analyzed external whistleblowing with a 2(collective) x 2(interpersonal) multi-level ANOVA, with estimated random effects for the intercept. Willingness to whistle-blow externally was again negatively related to the interpersonal connection, $F(1, 432) = 6.93$, $p = .0088$, and confirms our hypothesis that the interpersonal connection decreases whistleblowing ($M_{strong} = 3.30$, $M_{weak} = 3.67$). Willingness to whistle-blow externally was unrelated, however, to the collective connection, $F(1, 432) = 0.30$, $p = .5824$, and fails to support our hypothesis that the collective connection might increase whistleblowing ($M_{strong} = 3.52$, $M_{weak} = 3.44$). No interaction occurred between the interpersonal connection and collective connection, $F(1, 432) = 0.01$, $p = .9232$. Study 2 results replicate those of Study 1—a strong interpersonal connection negatively influences likelihood of whistleblowing externally, regardless of the strength of the collective connection.

The average length of group membership was five years and three months ($SD = 5$ years, 9 months). Stronger collective and interpersonal connections predict longer group membership. The length of group membership (person-centered to capture within person differences and controlling for person means) did not interact with the collective connection, $F(1, 281) = 0.09$, $p = .7666$, or the interpersonal connection, $F(1, 281) = 2.08$,

$p=.1503$ to predict likelihood of external whistle-blowing. The effects of the collective and interpersonal connections on external whistle-blowing remained the same when we additionally controlled the effects of membership length.

Table 1. External and Internal Whistleblowing as a Function of Interpersonal and Collective Connection

		<i>Collective</i>	
<i>Interpersonal</i>		Weak	Strong
<i>External</i>			
Weak		3.62	3.70
Strong		3.26	3.33
<i>Internal</i>			
Weak		3.79	4.90
Strong		4.98	5.30

Internal whistle-blowing. We additionally examined the likelihood that participants would whistle-blow internally. Similar to study 1, caution should be taken in interpreting the internal whistle-blowing results because of the unclear nature of what constitutes internal whistle-blowing in groups without designated internal resources. To test this we used a 2(collective) x 2(interpersonal) multi-level ANOVA, with estimated random effects for the intercept. Willingness to whistle-blow internally was positively

related to the collective connection, $F(1,432)= 24.37, p < .0001$ ($M_{strong} = 5.08, M_{weak} = 4.38$) and positively related to the interpersonal connection, $F(1,432)= 34.83, p < .0001$ ($M_{strong} = 5.14, M_{weak} = 4.32$).

The collective connection interacted with the interpersonal connection to predict internal whistle-blowing, $F(1,432)= 7.78, p = 0.0055$. The fixed effects of the collective connection are present when a member's interpersonal connection is weak, $F(1,432)= 29.71, p < .0001$, ($M_{strong} = 5.08, M_{weak} = 4.37$) but disappear when their interpersonal connection is strong, $F(1,432)= 2.30, p = 0.1300$ ($M_{strong} = 5.08, M_{weak} = 4.39$). Group members are more likely to whistle-blow internally, regardless of their collective connection, when they have a strong interpersonal connection. However, when interpersonal connection is weak, a greater collective connection increases a member's likelihood to whistle-blow internally.

Chapter 4

General Discussion

The present research tested if a member's interpersonal connection (i.e., connection to a group because of interpersonal relationships with individual members of the group) and collective connection (i.e., connection to a group because of shared aspects [characteristics, goals, values] that define the group) influenced their likelihood of whistle-blowing. Whistle-blowing harms a person's relationships with fellow members and gets those fellow members involved with the wrongdoing in trouble. We hypothesized that members with strong interpersonal connections will find these outcomes especially aversive and be less likely to whistle-blow. Whistle-blowing also helps groups to restore their integrity and eliminate harm caused by wrongdoing. We hypothesized that members with strong collective connections will find these outcomes especially beneficial and be more likely to whistle-blow.

Two studies evidenced support for the hypothesis that the interpersonal connection decreases a group member's likelihood of whistle-blowing externally. We can infer from this negative association that anticipation of interpersonal costs is a powerful deterrent of whistle-blowing. Results, however, did not support the hypothesis that the collective connection increases a group member's likelihood of whistle-blowing externally; instead it was inconsequential. We can infer from this lack of relationship that anticipation of collective costs and/or benefits holds little influence over whistle-blowing. The interpersonal connection is an instrumental factor in whether people decide to whistle-blow externally, while the collective connection is not.

The Interpersonal Connection and its Possible Mechanisms

Interpersonal aspects of identity are central to our well-being because humans have a fundamental need to belong (Baumeister & Leary, 1995). If this need is not met various negative physical and psychological outcomes occur (for review see Leary, 2010). People react more strongly to threats to their relational self, such as social ostracism, than they do to threats to their collective self because of its motivational primacy. Our self-concept consists of a hierarchy, with the individual self primary, the relational self secondary and collective self least motivating (Gaertner, Sedikides & Graetz, 1999; Gaertner et al., 2012; Gaertner, Sedikides, Vevea & Iuzzini, 2002). It is reasonable to postulate that consideration of how whistle-blowing threatens the relational self trumps consideration of how ingroup wrongdoing threatens the collective self. Failure to find a relationship between organizational commitment and external whistle-blowing in previous studies (e.g., Miceli et al., 1991; Sims & Keenan, 1998; Somers & Casal, 1994) might be due to the lack of investigation of the interpersonal connection—the more meaningful group connection for whistle-blowing.

Groups aim to facilitate whistle-blowing and undermine unethical or unlawful ingroup practices. Contrary to group goals, our data suggest that valued relationships with ingroup members undermine whistle-blowing and facilitate continued unethical or unlawful ingroup practices. Practical implications of the interpersonal connection's influence, and power to hinder reporting, are far-reaching. Groups, especially employers (i.e., the traditional whistle-blowing sample), want their members to build cherished relationships with their co-workers or fellow members because doing so decreases

attrition and increases member involvement (Evan, 1963; Porter & Steers, 1973; Riordan & Griffeth, 1995). Communications and trainings designed to encourage whistle-blowing should work to counter fears of interpersonal costs. Application might entail modification of messages to emphasize how reports of wrongdoing serve to help and protect fellow members, not just the organization and society.

In addition, issues of confidentiality might be indirectly linked to interpersonal retaliation. If external resources can ensure whistle-blowers that their identity is protected, exempting them from social ostracism, it might assuage fears of members with strong interpersonal connections and help increase whistle-blowing (Zhang, Chiu, & Wei, 2008). Our studies did not provide participants with information on whether or not confidentiality of their reports was guaranteed. Future research needs to manipulate this situational factor to see if it is a mechanism behind the interpersonal connection's significance.

Another relevant aspect of the whistle-blowing decision is whether the corrective action taken will lead to reprimanding members that engaged in the wrongdoing. If external resources can ensure whistle-blowers that immunity will be granted to those members involved—exempting a whistle-blower's friends from harm—it might assuage fears of members with strong interpersonal connections and help increase whistle-blowing. Our studies did not provide participants information on whether or not the members that they had valued relationships with were the perpetrators or victims of the wrongdoing. Future research needs to manipulate this situational factor to see if it is a mechanism behind the interpersonal connection's significance as well.

Extension of Current Research

While the objective of our two studies was to provide novel evidence that group connections are relevant to whistle-blowing, another aim was to examine a business ethics phenomenon from a broad intragroup processes lens. Whistle-blowing is relevant to any group type in which wrongdoing is conceivable. Our inclusive approach, beyond employment organizations, permits us to confidently claim that our findings are generalizable. More research on ingroup reports of wrongdoing from a broad group dynamics lens should be undertaken.

Additionally, our research question and methods set out to fill the gaps in past research that ignore the interpersonal connection or orthogonal nature of both connections. A dearth of knowledge about the two connections' concurrent presence exists in intragroup research. Many studies only investigate generic group identification with a single item or measures that capture more collective-oriented connections (e.g., collective self-esteem, group identification, organizational commitment; Brown, Condor, Mathews, Wade, & Williams, 1986; Luhtanen & Crocker, 1992; Mael & Ashforth, 1992). Of the two connections, the interpersonal connection is frequently overlooked. For example, whistle-blowing studies that examine organizational commitment and identity fusion fail to adequately assess an interpersonal connection independently from the collective connection (Buhrmester, 2013; Miceli et al., 1991; Sims & Keenan, 1998; Somers & Casal, 1994).

The present studies acknowledge the simultaneous existence of both group connections via independent ratings of each (Study 1) and via prompts that manipulate

participants to think of one of four combinations of the group connections from the factorial-crossing of 2(collective connection: weak, strong) x 2(interpersonal connection: weak, strong) (Study 2). Research that uses self-report measures of the two connections, similar to our Study 1, tends to recognize their orthogonal nature (e.g., Hogg & Hardie, 1991; Karasawa, 1991; Prentice et al., 1994; Seeley, Gardner, Pennington, & Gabriel, 2003; Zhang, et al., 2012). Conversely, experiments that manipulate the two connections are methodologically insufficient because they create experimental conditions in which the connections are mutually exclusive (e.g., Brewer & Gardner, 1996, experiment 2; Jans et al., 2012; Lee, Adair, Mannix, & Kim, 2012; Postmes et al., 2005; Utz & Sassenberg, 2002). Our Study 2 charts new territory with four conditions, instead of two, to account for a possible interaction between the collective and interpersonal connections—a consideration previous research has failed to make.

Methodological Limitations

A limitation of the current research is our lack of a behavioral test of our hypotheses. Results were based on participant self-reports because, similar to other whistle-blowing investigations, an experimental test of our ideas presented methodological challenges due to ethical restrictions (see Miceli et al., 2013 for discussion). It is difficult to create a minimal-risk design of a wrongdoing lab scenario that is stressful and realistic enough to warrant reporting. To date, only three studies have attempted such designs, and two were lab simulations that lacked manipulation of an independent variable (Bocchiaro, Zimbardo, & Van Lange, 2012; Buhmester, 2013;

Miceli et al., 1991).

Meta-analyses of whistle-blowing literature implicate that intentions to report do not always map directly onto whistle-blowing behaviors. Caution must be taken in interpretation of our results because our outcome variable is likelihood of reporting not actual reporting behavior (Mesmer-Magnus & Viswesvaran, 2005). Another concern when measuring self-reported intentions is social desirability, especially when inquiring about a prosocial behavior such as whistle-blowing (Vadera, Aguilera & Caza, 2009). Regardless, social desirability effects should cause inflated rates of whistle-blowing for all conditions and subsequently not affect our findings. In Study 1 we collected data on participants' social desirability and the analyses show that results do not change when we control for it, interpersonal connection continues to have a negative association with external whistle-blowing, $F(1,541)= 22.75, p<. 0001$, and collective connection no association with external whistle-blowing, $F(1,541)= 0.10, p= .752$.

Future research should develop lab situations where whistle-blowing can be tested as a behavioral outcome to evade post-hoc and social desirability issues that characterize self-report measures. A follow-up study to accompany our current findings could manipulate how members connect to a group in the lab prior to encountering a group wrongdoing.

As previously addressed, there are limitations in our ability to make conclusive statements about participants' likelihood of internal reporting. Due to variability of group types, it is difficult to elucidate what occurred with internal whistle-blowing. However, because p -values were unquestionably significant, we could venture to conclude that data

from groups with interpretable internal authorities would reflect a pattern identical to our two studies.

Data collection of well-operationalized internal reporting could contribute to understanding how the connections influence whistle-blowing. External and internal whistle-blowing are similar processes and those who whistle-blow externally, typically whistle-blow internally first (Dworkin & Baucus, 1998; Miceli & Near, 1984). Since we found opposing trends for internal and external reporting for the interpersonal connection in our studies, the interpersonal connection may be the deciding factor of whether or not a group member ultimately decides to take their internal report on to external authorities.

Summary

In conclusion, this pair of studies tested whether the collective and interpersonal group connections differentially impacted group members' likelihood of whistle-blowing. Studies that investigate the two connections are limited in quantity and quality. We are the first to apply the connections to likelihood of reporting ingroup wrongdoing. In addition, our group dynamics approach brings a much-needed systematic examination of an intragroup process that has all too often been restricted to workplace groups. Our findings will hopefully engender a newfound emphasis on interpersonal outcomes in whistle-blowing research. Understanding the interpersonal connection's prominent role will be informative for efforts to promote whistle-blowing in the future.

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Vita

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